

# HEAVY DUTY CONNECTORS





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**Rolling Stock**

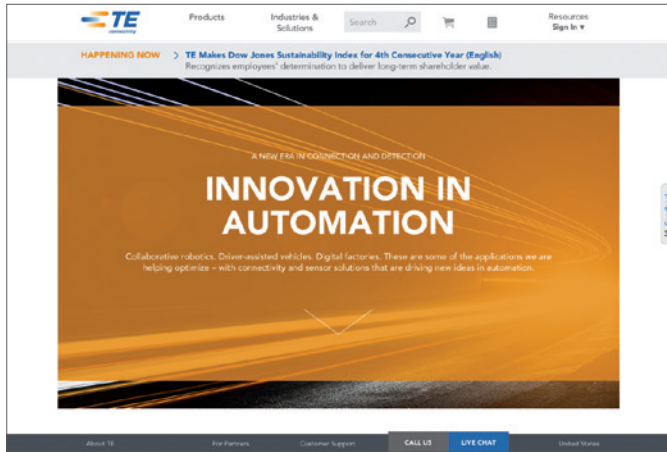


**Machinery**



**Factory Automation**

The broad range of Heavy Duty Connectors (HDC) are designed for reliably performing under the most demanding operating and harsh environmental conditions. With a tested salt spray and corrosion resistance of over 1000 hours and an IP 69 K rating, these connectors are suited for various applications in industrial environments. Thanks to their modular system, TE's Heavy Duty Connectors offer power, signal and data transmission in one connector.



### TE Connectivity Online

The TE Connectivity website is an innovative and interactive source for application information, product updates and technical solutions. Our step-by-step software makes our website intuitive and user-friendly to better serve you! Please contact us at: [te.com](http://te.com)

### Product Information Centers

You've got questions? TE's Product Information Centers (PIC) will help you get answers. Contact a technical product information specialist.

- Email us
- Call us
- Chat with us

Please go to [te.com/help](http://te.com/help) for more information.

### Internet

[te.com](http://te.com)

## Restriction on the Use of Hazardous Substances (RoHS)

At TE Connectivity (TE), we are ready to support your RoHS requirements. We have assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

### ROHS COMPLIANT

Part numbers in this catalog are RoHS Compliant, unless marked otherwise.

These products comply with European Union Directive 2002/95/EC as amended 1 January 2006 that restricts the use of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE in certain electricelectronic products sold into the EU as of 1 July 2006.

**Note:** For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly “Out of Scope” of the RoHS Directive such as hand tools and other non-electrical accessories.

### NON-ROHS COMPLIANT

These part numbers are identified with a “◆” symbol. These products do not comply with the material restrictions of the European Union Directive 2002/95/EC.

### 5 OF 6 COMPLIANT

A “●” symbol identifies these part numbers. These products do not fully comply with the European Union Directive 2002/95/EC because they contain lead in solderable interfaces (they do not contain any of the other five restricted substances above allowable limits). However, these products may be suitable for use in RoHS applications where there is an application-based exception for lead in solders, such as the server, storage, or networking infrastructure exemption.

**Note:** Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced below.

### GETTING THE INFORMATION YOU NEED

Our comprehensive on-line RoHS Customer Support Center provides a forum to answer your questions and support your RoHS needs. A RoHS FAQ (Frequently Asked Questions) is available with links to more detailed information. You can also submit RoHS questions and receive a response within 24 hours during a normal work week. The Support Center also provides:

- Cross-Reference from Non-compliant to Compliant Products
- Ability to browse RoHS Compliant Products in our on-line catalog:  
[te.com/customersupport/productcoinpliance](http://te.com/customersupport/productcoinpliance)
- More detailed information regarding the definitions used above

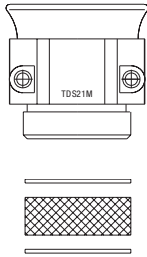
So whatever your questions when it comes to RoHS, we've got the answers at [www.te.com/leadfree](http://www.te.com/leadfree)

RoHS  
Customer  
Support  
Center 

## General overview of heavy duty connectors

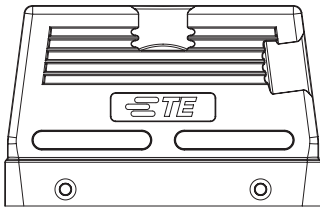
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General features</b>                        | TE's HDC product series is designed for data, signal and power connections in harsh environments. The modular connector design provides a high degree of flexibility so solutions can be customized for different applications such as machinery, robotics, railway, wind energy and conventional energy generation and distribution.                                                                                                                                                                                                                                                                                 |
| <b>Inserts</b>                                 | HDC products consist of three key elements: inserts, contacts and hoods and housings. The inserts and contacts are modular and assembled together to provide electrical performance offering crimp-, screw- and spring-clamp termination technology.                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Enclosures</b>                              | The hoods and housings are made of powder coated die cast aluminum alloy or of thermoplastic and are protecting the connector inserts against the ingress of dust or water according to the degree of protection IP 65, IP 68 and IP 69 K. Cable glands in different versions or DIN-rail mounts are completing the connector-solutions as accessories.                                                                                                                                                                                                                                                               |
| <b>Customized design</b>                       | For customer's special requirement, we can provide customized design. Please contact us.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Specifications, Standards and Approvals</b> | <p>1. Specifications<br/> DIN VDE 0110 Concerning clearance and creepage distances<br/> DIN VDE 0627 Connectors and plug devices</p> <p>2. Standards<br/> DIN EN 175 301-801<br/> DIN EN 60664-1<br/> DIN EN 61 984<br/> IEC 60 529</p> <p>3. Approvals</p> <p>     </p> |

## Connector components



### CABLE FITTING

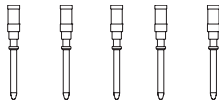
Special cable fittings for protection up to IP69K and for electro-magnetic compatibility available



### HOOD

Standard and corrosion-resistant connector hoods:

- low and high construction
- 4 different locking systems
- different cable entries and directions:
  - M Thread
  - PG Thread

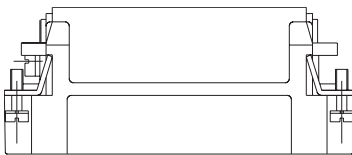


### CONTACTS

Silver or gold plated

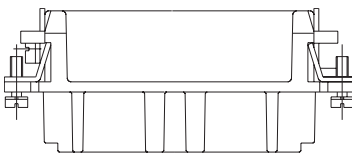
Solid machined contacts with screw, spring or crimp termination

Stamped and formed contacts



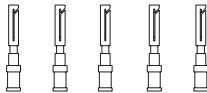
### MALE INSERT

Screw, Spring clamp or crimp terminal



### FEMALE INSERT

Screw, Spring clamp or crimp terminal



### HOOD AND HOUSING

Standard and corrosion-resistant bottom-entry, surface-mounted and cable-to-cable hoods:

- low and high construction (bottom-entry and cable-to-cable hood) with/without cover
- 4 different locking systems



## Terminal types

### Screw dimensions and tightening torque for screw terminals

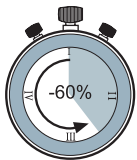
| Wire gauge (mm <sup>2</sup> )       | 1.5 | 2.5 | 4.0  | 6.0 | 10  | 16  |
|-------------------------------------|-----|-----|------|-----|-----|-----|
| Screw thread                        | M3  | M3  | M3.5 | M4  | M4  | M6  |
| Test moment of torque (Nm)          | 0.5 | 0.5 | 0.8  | 1.2 | 1.2 | 1.2 |
| Min. pull-out for stranded wire (N) | 40  | 50  | 60   | 80  | 90  | 100 |

### Spring terminal

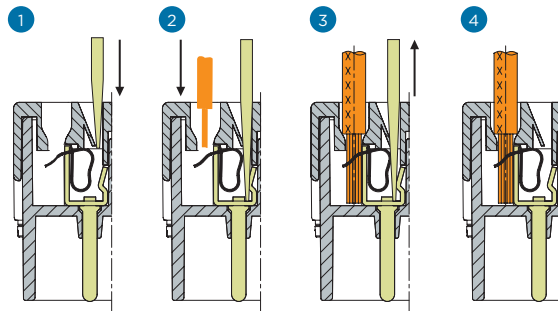
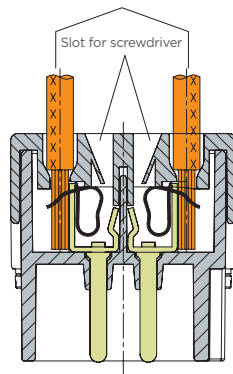
No special tools



60% faster



One conductor per termination



3.5x0.5mm

Screwdriver width: 3.5x0.5mm

### SCREW TERMINAL

The screw terminal is the most common type of connection. Ratings are based on VDE 0609/EN 60 999. Please refer to the table at the left for the tightening torque.

The series HE, HSB, HAVE are equipped with a wire protection, thus the use of ferrules is not necessary. The series HA is not equipped with wire protection and ferrules must be used.

### SPRING TERMINAL

The spring terminal offers a vibration proof termination for solid and stranded wires with cross sections ranging from 0.14 mm<sup>2</sup> to 2.5 mm<sup>2</sup> (AWG 26-14).

Easy operation of the spring terminal with a screw driver, which is inserted in the same direction of the cable opening.

Internationally approved by UL, CSA, VDE.

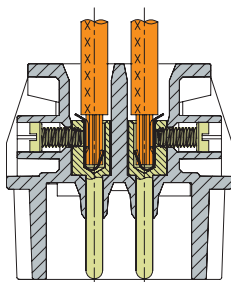
### CRIMP TERMINATION

A proper crimp connection is gastight, therefore corrosion free and represents a cold weld of the parts being connected. Wires to be connected must be matched with the correct size of crimp contacts. The crimp termination represents a highly reliable vibration proof connection with low contact resistance and highest contact density which can be applied with manual and automatic crimping tools.

## Terminal types

### SCREW TERMINAL

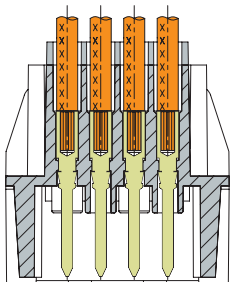
HA series  
HE, HVE series  
HSB series  
HK series  
HWK series  
HEAV series



| Inserts        | Max. wire gauge |     | Stripping length<br>L (mm) |
|----------------|-----------------|-----|----------------------------|
|                | mm <sup>2</sup> | AWG |                            |
| HA-003, HA-004 | 2.5             | 14  | 4.5                        |
| HA, HEAV       | 2.5             | 14  | 7.5                        |
| HE, HVE        | 2.5             | 14  | 7.5                        |
| HSB            | 6.0             | 10  | 7.5                        |
| HK, HWK        | 35.0            | 2.0 | 10.5                       |

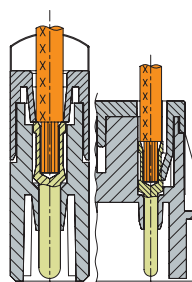
### CRIMP TERMINAL

HD series  
HDD series



| Inserts  | Max. wire gauge |     | Stripping length<br>L (mm) |
|----------|-----------------|-----|----------------------------|
|          | mm <sup>2</sup> | AWG |                            |
| HD       | 0.5             | 20  | 8.0                        |
| HDD      | 0.75            | 18  | 8.0                        |
| HMN(10A) | 1.0             | 18  | 8.0                        |
| HQ(10A)  | 1.5             | 16  | 8.0                        |
| HK(10A)  | 2.5             | 14  | 6.2                        |

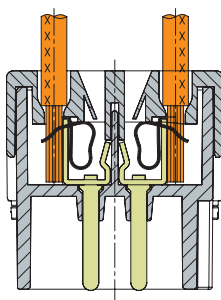
HAC, HEC series  
HEEE, HEE series  
HMN(16A/40A) series  
HQ(16A/40A) series  
HK(16A/40A) series



| Inserts      | Max. wire gauge |     | Stripping length L (mm) |     |
|--------------|-----------------|-----|-------------------------|-----|
|              | mm <sup>2</sup> | AWG | 16A                     | 40A |
| HAC          | 0.5             | 20  | 7.5                     | -   |
| HEC          | 0.75            | 18  | 7.5                     | -   |
| HEE/HEEE     | 1.0             | 18  | 7.5                     | 9.2 |
| HMN(16A/40A) | 1.5             | 16  | 7.5                     | 9.2 |
| HQ(16A/40A)  | 2.5             | 14  | 7.5                     | 9.2 |
| HK(16A/40A)  | 4.0             | 12  | 7.5                     | 9.2 |
|              | 6.0             | 10  | -                       | 9.2 |

### SPRING TERMINAL

HAS series  
HES series  
HESAV series



| Inserts         | Max. wire gauge |     | Stripping length<br>L (mm) |
|-----------------|-----------------|-----|----------------------------|
|                 | mm <sup>2</sup> | AWG |                            |
| HAS, HES, HESAV | 2.5             | 14  | 9-11                       |

### RECOMMENDED TIGHTENING TORQUE AND SIZE OF SCREW DRIVER

| Size of screw | Connector type                                                                       | Tightening torque [Nm] | Tightening torque [lbft] | Recommended size of screwdriver |
|---------------|--------------------------------------------------------------------------------------|------------------------|--------------------------|---------------------------------|
| M3            | Screw terminal HA-003/HA-004/HQ-005                                                  | 0.25                   | 0.20                     | 0.4x2.5                         |
| M3            | Screw terminal HA-010, HA-016                                                        | 0.50                   | 0.40                     | 0.5x3.5 or ±size 1              |
| M3            | HE, HVAE Screw terminal HE, HVAE fixing screws of all kinds, guiding pins and bushes | 0.50                   | 0.40                     | 0.5x3.5                         |
| M4            | Ground terminal HA, HE, HD, HDD                                                      | 1.20                   | 0.90                     | 0.5x3.5 or ±size 1+2            |
| M4            | Terminal blocks HSB                                                                  | 1.20                   | 0.90                     | 0.8x4.5                         |
| M5            | Ground terminal HSB                                                                  | 2.00                   | 1.40                     | 0.8x4.5/1.2x8.0                 |



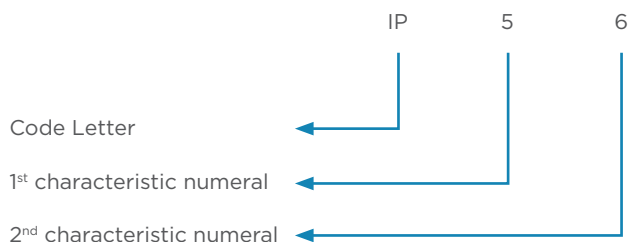
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## Degree of protection provided by enclosures

For safety reasons, electrical equipment needs to be protected against outside influences. The basis for the determination is the standard IEC 529 titled 'Degree of protection provided by enclosures (IP-Code)'.

Using a standardized test procedure the extent of the protection class is verified. To classify different housings according to their protection class, a designation system is used which consists of the code – letters 'IP' and two code numbers.

### ARRANGEMENT OF THE IP-CODE (INTERNATIONAL/INGRESS PROTECTION)



### MEANING OF THE 1ST CHARACTERISTIC NUMERAL

The first numeral describes the protection of the housing against intrusion of foreign bodies as well as the protection of people against dangerous parts or influences. Because of this, there are two descriptions and definitions for each of the first code letter.

| 1 <sup>st</sup> numeral | Protection against solid objects and against access to hazardous parts                                                                                                                |                                                                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                         | short description                                                                                                                                                                     | definition                                                                                                                                                    |
| 0                       | No protection                                                                                                                                                                         |                                                                                                                                                               |
| 1                       | <ul style="list-style-type: none"><li>protection against solid foreign bodies of Ø 50mm</li><li>protection against access to hazardous parts with the back of a hand</li></ul>        | A sphere of Ø 50mm, must not intrude                                                                                                                          |
| 2                       | <ul style="list-style-type: none"><li>protection against solid foreign bodies of Ø 12mm</li><li>protection against access to hazardous parts with the finger</li></ul>                | A sphere of Ø 12mm diameter, must not intrude                                                                                                                 |
| 3                       | <ul style="list-style-type: none"><li>protection against solid foreign bodies of 2.5mm diameter and bigger</li><li>protection against access to hazardous parts with a tool</li></ul> | A sphere of Ø 2.5mm diameter, must not intrude                                                                                                                |
| 4                       | <ul style="list-style-type: none"><li>protection against solid foreign bodies of 1.0mm diameter and bigger</li><li>protection against access to hazardous parts with a wire</li></ul> | The probe, sphere of Ø 1.0mm, must not intrude                                                                                                                |
| 5                       | Protected against dust                                                                                                                                                                | The infiltration of dust is not completely prevented, but it does not infiltrate to such an extent that the operation or the safety of the device is affected |
| 6                       | Dust proof                                                                                                                                                                            | No infiltration of dust                                                                                                                                       |

## MEANING OF THE 2ND CHARACTERISTIC NUMERAL

The second numeral describes the protection of the housing against the intrusion of water with harmful effects.

| 2 <sup>nd</sup> numeral | Protection degrees against the intrusion of water, designated by the second code digit |                                                                                                                                                                                                                                                         |
|-------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                         | short description                                                                      | definition                                                                                                                                                                                                                                              |
| 0                       | Not protected                                                                          | –                                                                                                                                                                                                                                                       |
| 1                       | Protected against dripping water                                                       | Vertically falling drops shall have not harmful effects                                                                                                                                                                                                 |
| 2                       | Protected against dripping water when the housing is at an angle of up to 15°          | Vertically falling drops shall have not harmful effects when the enclosure is tilted up to 15°                                                                                                                                                          |
| 3                       | Protected against water spray                                                          | Water sprayed at an angle up to 60°, shall have no harmful effects                                                                                                                                                                                      |
| 4                       | Protected against splash water                                                         | Water splashed against the enclosure from any direction, shall have no harmful effects                                                                                                                                                                  |
| 4K                      | Protected against splash water with increased pressure                                 | Water splashed against the enclosure with increased pressure from any direction, shall have no harmful effects (Applies acc. to DIN 40050-9 only for road vehicles)                                                                                     |
| 5                       | Protected against jets of water                                                        | Water splashes against the enclosure from any direction as a water jet, shall have no harmful effects                                                                                                                                                   |
| 6                       | Protected against strong jets of water                                                 | Water splashes against the enclosure from any direction as a strong water jet, shall have no harmful effects                                                                                                                                            |
| 6K                      | Protected against strong jets of water with increased pressure                         | Water splashes directly against the enclosure from any direction as a strong water jet with increased pressure, shall have no harmful effects (Applies acc. to DIN 40050-9 only for road vehicles)                                                      |
| 7                       | Protection against the effects of temporary submersion in water                        | Quantity of water that ingresses an enclosure, when it is temporarily immersed under standardized conditions of pressure and time, shall have no harmful effects                                                                                        |
| 8                       | Protection against the effects of continuous submersion in water                       | Quantity of water that ingresses an enclosure, when it is continuously immersed under conditions of pressure and time, shall have no harmful effects. The conditions must, however be harder than for code digit 7 and agreed between user and producer |
| 9K                      | Protected against water during high-pressure / jet-stream cleaning                     | Water that is directed against the housing with greatly increased pressure from any direction must not have any detrimental effect (Applies acc. to DIN 40050-9 only for road vehicles)                                                                 |

## Standards

### SPECIFICATIONS

TE connectors are still made on IEC 664/664 A, DIN VDE 0110/01.89 and DIN VDE 0627/06.86 standards. The standards have defined normal rules and requirements which include features construction and requirements.

To determine the minimum clearances and creepage distance, the recent applicable standard is the IEC 60664-1 standard (10.92), a fundamental safety standard to which all product in the committees should refer.

If no notice to products in the catalogue, clearance and creepage distances of all products in the catalogue are based on DIN VDE 0110:1989-01 and degrees pollution 3.

#### **Include some contents:**

1. Over-voltage categories (I, II, III, IV)
2. Degrees of pollution
3. Insulating material
4. Determination of clearances

### OVER-VOLTAGE CATEGORIES

#### **1. Over-voltage category I**

Equipment in over-voltage category I is only intended for use in apparatus or parts of systems in which no over-voltages will occur or are specially protected against over-voltages by means of surge voltages, filters or capacitors.

#### **2. Over-voltage category II**

Equipment in over-voltage category II is intended for use in systems or parts there of in which lightning over-voltages do not have to be taken into account.

#### **3. Over-voltage category III**

Equipment in over-voltage category III is intended for use in equipment for fixed installation, i.e. protective devices, relays, switches and plug devices.

## Insulation Coordination for Electrical Connectors in Low Voltage Plants

Dimensioning of Clearance and Creeping Distances acc. to DIN EN60664-1; following pages show only a part of the standards.

### INSULATION COORDINATION

Insulation coordination includes the design of the electrical insulation of a connector depending on its use and environment. This occurs either by design of the clearance distances (basis is the expected power surge) or by design of the creeping distance (basis is the operating voltage as well as the quality of the insulating material). Furthermore, insulation-changing conditions are taken into account (pollution, protective measures against pollution, air pressure, thermal or chemical influences).

Air distances are measured according to the outer or inner power surge expected. The four power surge classes (power surge categories I to IV) take the different use of the connector into account. Depending on the homogeneity of the field between the electrodes (case A – inhomogenous field, case B – homogenous field) the air distances can be determined according to table 2a (minimum air distances); industrial connectors are always determined according to case A.

The influence from pollution when determining the air- and creeping distances is taken into account by using four degrees of severity (pollution degree 1 to 4).

Basis of the creeping distances is the rated voltage which is deduced from the operating voltage. The minimum creeping distances are allocated in table 4 depending on the severity of pollution. If the product descriptions do not contain any additional information the products listed in this catalogue were rated according to norm DIN VDE 0110 for surge category III and severity of pollution 3.

### SURGE CATEGORY I TO IV

- Resources of surge category I are goods for the termination of fixed electrical installations of a building. Measures for the limitation of transient surges were taken either in the fixed installation or between the fixed installation and the equipment.
- Resources of surge category II are resources which use power and are fed from a fixed installation. Note: e.g. domestic appliances, portable tools and other appliances as well as similar consumers.
- Resources of surge category III are part of a fixed installation. They are resources from which a high degree of availability is expected. Note: Examples for such appliances are e.g. industrial connectors, distribution panels, power switches, distributors, switches, sockets.
- Devices of surge category IV are for use at the supply terminal of the installation. Note: Examples for such appliances are electricity counters, overload cut-out switches.

### POLLUTION DEGREE 1 TO 4

DIN VDE 0110 defines the pollution degrees as follows:

#### **Pollution Degree 1:**

There is no or only dry, non-conductive pollution. The pollution is without influence.

#### **Pollution Degree 2:**

There is only non-conductive pollution. Occasional momentary conductivity due to condensation.

#### **Pollution Degree 3:**

There is conductive pollution or dry non-conductive pollution, which becomes conductive due to condensation.

#### **Pollution Degree 4:**

There is a continuous conductivity due to conductive dust, rain or moisture.

### **Insulation Material**

The insulation materials are divided into the following four groups depending on their comparative tracking index (CTI):

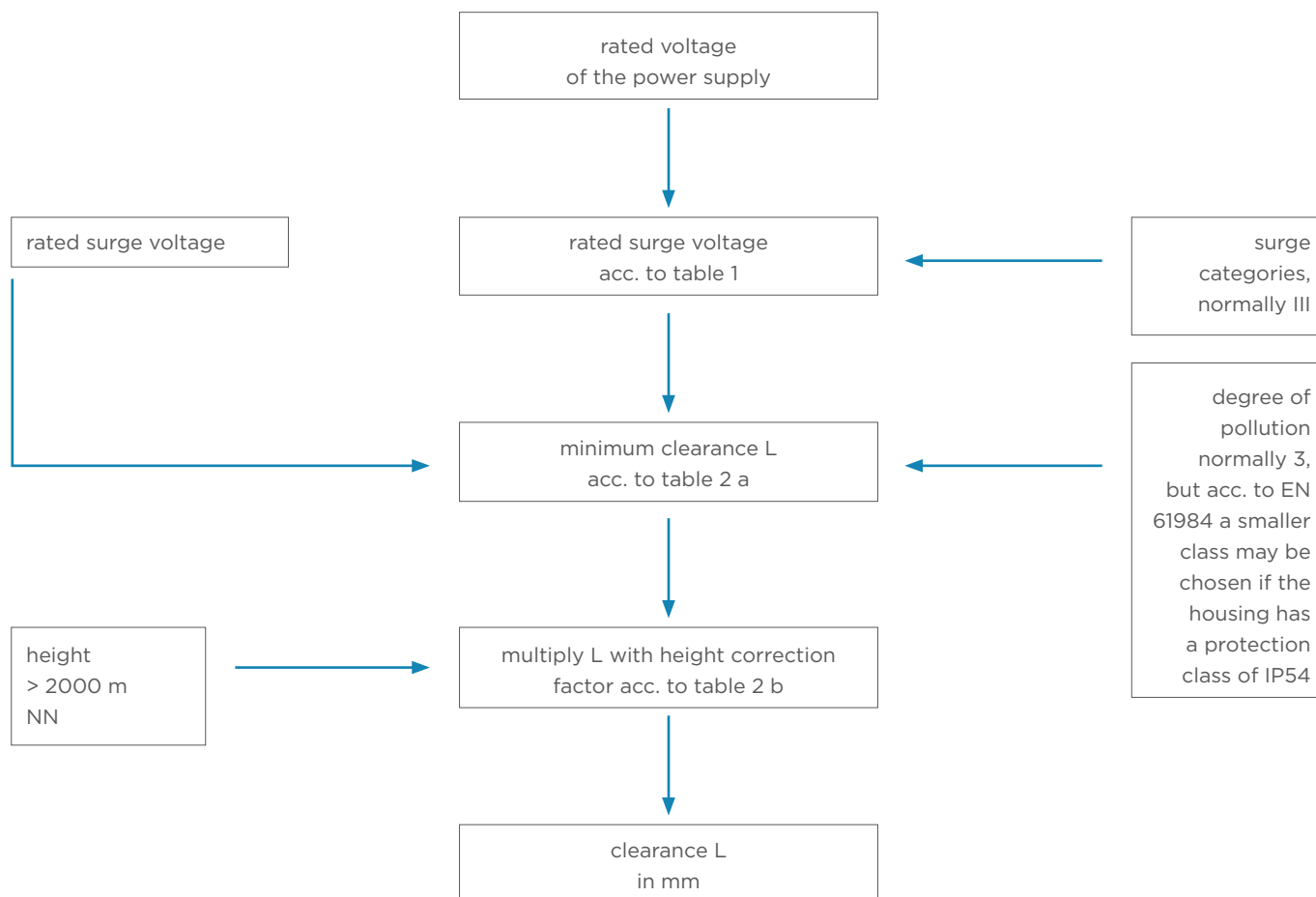
Insulation material I: .....  $600 \leq \text{CTI}$

Insulation material II: .....  $400 \leq \text{CTI} < 600$

Insulation material III a: .....  $175 \leq \text{CTI} < 400$

## Measurement of Clearances

### DIAGRAM FOR THE DETERMINATION OF CLEARANCES



### RATED SURGE VOLTAGE FOR UTILITIES

| Rated voltage of the power supply* in V |                              | Rated Surge Voltage in kV (1.2/50ms) for                      |                                                                |                                                                     |                                                  |
|-----------------------------------------|------------------------------|---------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------|
| 3-phase systems                         | single systems in the centre | utilities at the feed of the installation (surge category IV) | utilities as part of a fixed installation (surge category III) | utilities for connection to fixed installations (surge category II) | Specially protected utilities (surge category I) |
|                                         | 120 up to 240                | 4                                                             | 2.5                                                            | 1.5                                                                 | 0.8                                              |
| 230/400**<br>277/480**                  |                              | 6                                                             | 4                                                              | 2.5                                                                 | 1.5                                              |
| 400/690**                               |                              | 8                                                             | 6                                                              | 4                                                                   | 2.5                                              |
| 1000                                    |                              | 12                                                            | 8                                                              | 6                                                                   | 4                                                |

\*) chosen voltage values

\*\*) the / dash is for a 3-phase system with 4 lines. The lower value is for phase to neutral, the higher value is for phase to phase

## MINIMUM CLEARANCE IN AIR AT INSTALLATION HEIGHTS OF UP TO 2000 M ABOVE SEA LEVEL (NN)

| "rated surge voltage [kV]" | case A, inhomogenous field, degree of pollution |        |        |        | case B, homogenous field, degree of pollution |        |        |        |
|----------------------------|-------------------------------------------------|--------|--------|--------|-----------------------------------------------|--------|--------|--------|
|                            | 1 (mm)                                          | 2 (mm) | 3 (mm) | 4 (mm) | 1 (mm)                                        | 2 (mm) | 3 (mm) | 4 (mm) |
| 0.33 _)                    | 0.01                                            | _)     | 0.80   | 1.6    | 0.01                                          | _)     | 0.8    | 1.6    |
| 0.40                       | 0.02                                            |        |        |        | 0.02                                          |        |        |        |
| 0.5 _)                     | 0.04                                            |        |        |        | 0.04                                          |        |        |        |
| 0.60                       | 0.06                                            |        |        |        | 0.06                                          |        |        |        |
| 0.80 _)                    | 0.10                                            |        |        |        | 0.10                                          |        |        |        |
| 1.0                        | 0.15                                            | 0.25   | 1.0    | 1.6    | 0.15                                          | 0.3    | 0.5    | 1.6    |
| 1.2                        | 0.25                                            |        |        |        | 0.2                                           |        |        |        |
| 1.5 _)                     | 0.5                                             | 0.5    | 1.5    | 2      | 0.3                                           | 0.3    | 1.2    | 2      |
| 2.0                        | 1.0                                             | 1.0    |        |        | 0.45                                          | 0.5    |        |        |
| 2.5 _)                     | 1.5                                             | 1.5    | 1.5    | 2      | 0.6                                           | 0.6    | 1.5    | 3      |
| 3.0                        | 2                                               | 2      | 2      | 2      | 0.8                                           | 0.8    | 2      | 3.5    |
| 4.0 _)                     | 3                                               | 3      | 3      | 3      | 1.2                                           | 1.2    | 2      | 4.5    |
| 5.0                        | 4                                               | 4      | 4      | 4      | 1.5                                           | 1.5    | 2.5    | 5.5    |
| 6.0 _)                     | 5.5                                             | 5.5    | 5.5    | 5.5    | 2                                             | 2      | 3      | 6.7    |
| 8.0 _)                     | 8                                               | 8      | 8      | 8      | 3                                             | 3      | 4      | 8      |
| 10                         | 11                                              | 11     | 11     | 11     | 3.5                                           | 3.5    | 5      | 10     |
| 12 _)                      | 14                                              | 14     | 14     | 14     | 4.5                                           | 4.5    | 6      | 12.5   |
| 15                         | 18                                              | 18     | 18     | 18     | 5.5                                           | 5.5    | 7      | 15     |
| 20                         | 25                                              | 25     | 25     | 25     | 8                                             | 8      | 10     | 20     |
| 25                         | 33                                              | 33     | 33     | 33     | 10                                            | 10     | 12.5   | 25     |
| 30                         | 40                                              | 40     | 40     | 40     | 12.5                                          | 12.5   | 15     | 30     |
| 40                         | 60                                              | 60     | 60     | 60     | 17                                            | 17     | 20     | 40     |
| 50                         | 75                                              | 75     | 75     | 75     | 22                                            | 22     | 25     | 50     |
| 60                         | 90                                              | 90     | 90     | 90     | 27                                            | 27     | 30     | 60     |
| 80                         | 130                                             | 130    | 130    | 130    | 35                                            | 35     | 40     | 80     |
| 100                        | 170                                             | 170    | 170    | 170    | 45                                            | 45     | 50     | 100    |

1) This voltage is

- for functional insulation: the maximum impulse voltage expected to occur across the clearance
- for basic insulation directly exposed by transient overvoltages
- for other basic insulation

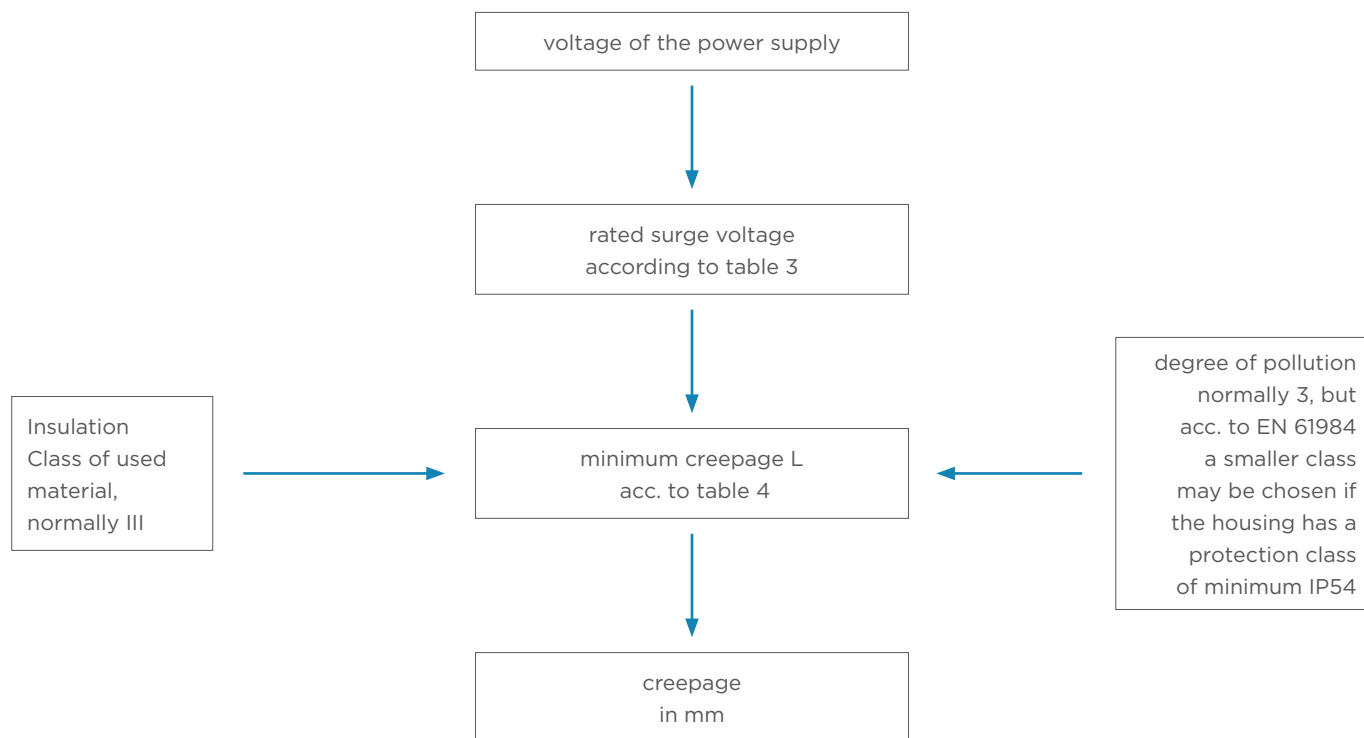
\_ ) Preferred values

## FACTORS FOR HEIGHT CORRECTION

| height in m | normal air pressure in kPa | multiplication factor for distances |
|-------------|----------------------------|-------------------------------------|
| 2000        | 80.0                       | 1.00                                |
| 3000        | 70.0                       | 1.14                                |
| 4000        | 62.0                       | 1.29                                |
| 5000        | 54.0                       | 1.48                                |
| 6000        | 47.0                       | 1.70                                |
| 7000        | 41.0                       | 1.95                                |
| 8000        | 35.5                       | 2.25                                |
| 9000        | 30.5                       | 2.62                                |
| 10000       | 26.5                       | 3.02                                |
| 15000       | 12.0                       | 6.67                                |
| 20000       | 5.5                        | 14.50                               |

## Measurement of creepage

### DIAGRAM FOR THE DETERMINATION OF CREEPAGE





| voltage of the power supply [V] | rated voltage [V] |
|---------------------------------|-------------------|
| 60                              | 63                |
| 110/120/127                     | 125               |
| 150                             | 160               |
| 208                             | 200               |
| 220/230/240                     | 250               |
| 300                             | 320               |
| 380/400/415                     | 400               |
| 440                             | 500               |
| 480/500                         | 500               |
| 575                             | 630               |
| 600                             | 630               |
| 660/690                         | 630               |
| 720/830                         | 800               |
| 960                             | 1000              |
| 1000                            | 1000              |

Table 3

\*the above shown table does not give the entire correlation of world-wide used networks and rated voltages; it is reduced to the most common ones; further details, see DIN EN60664-1

## CREEPPAGES IN [MM] FOR ELECTRICAL EQUIPMENTS

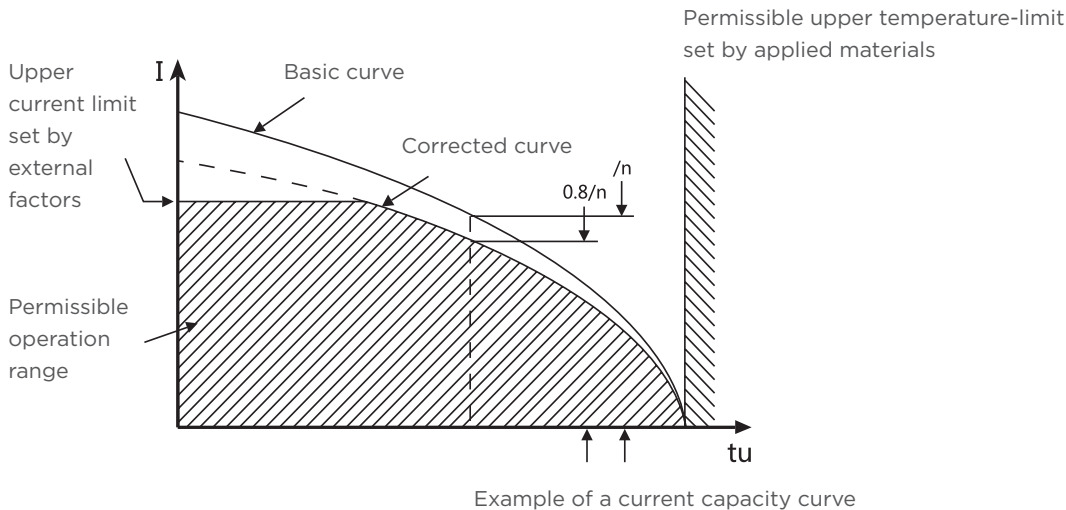
| rated<br>voltage<br>[V] | degree of pollution        |                    |      |      |                    |      |      |                    |      |      |
|-------------------------|----------------------------|--------------------|------|------|--------------------|------|------|--------------------|------|------|
|                         | 1 All Insulator<br>Classes | 2 Insulation Class |      |      | 3 Insulation Class |      |      | 4 Insulation Class |      |      |
|                         |                            | I                  | II   | III  | I                  | II   | III  | I                  | II   | III  |
| 10                      | 0.08                       | 0.40               | 0.40 | 0.40 | 1.00               | 1.00 | 1.00 | 1.6                | 1.6  | 1.6  |
| 12.5                    | 0.09                       | 0.42               | 0.42 | 0.42 | 1.05               | 1.05 | 1.05 | 1.6                | 1.6  | 1.6  |
| 16                      | 0.10                       | 0.45               | 0.45 | 0.45 | 1.10               | 1.10 | 1.10 | 1.6                | 1.6  | 1.6  |
| 20                      | 0.110                      | 0.48               | 0.48 | 0.48 | 1.20               | 1.20 | 1.20 | 1.6                | 1.6  | 1.6  |
| 25                      | 0.125                      | 0.50               | 0.50 | 0.50 | 1.25               | 1.25 | 1.25 | 1.7                | 1.7  | 1.7  |
| 32                      | 0.140                      | 0.53               | 0.53 | 0.53 | 1.30               | 1.30 | 1.30 | 1.8                | 1.8  | 1.8  |
| 40                      | 0.16                       | 0.56               | 0.80 | 1.10 | 1.4                | 1.6  | 1.8  | 1.9                | 2.4  | 3.0  |
| 50                      | 0.18                       | 0.60               | 0.85 | 1.20 | 1.5                | 1.7  | 1.9  | 2.0                | 2.5  | 3.2  |
| 63                      | 0.20                       | 0.63               | 0.90 | 1.25 | 1.6                | 1.8  | 2.0  | 2.1                | 2.6  | 3.4  |
| 80                      | 0.22                       | 0.67               | 0.95 | 1.3  | 1.7                | 1.9  | 2.1  | 2.2                | 2.8  | 3.6  |
| 100                     | 0.25                       | 0.71               | 1.00 | 1.4  | 1.8                | 2.0  | 2.2  | 2.4                | 3.0  | 3.8  |
| 125                     | 0.28                       | 0.75               | 1.05 | 1.5  | 1.9                | 2.1  | 2.4  | 2.5                | 3.2  | 4.0  |
| 160                     | 0.32                       | 0.80               | 1.1  | 1.6  | 2.0                | 2.2  | 2.5  | 3.2                | 4.0  | 5.0  |
| 200                     | 0.42                       | 1.00               | 1.4  | 2.0  | 2.5                | 2.8  | 3.2  | 4.0                | 5.0  | 6.3  |
| 250                     | 0.56                       | 1.25               | 1.8  | 2.5  | 3.2                | 3.6  | 4.0  | 5.0                | 6.3  | 8.0  |
| 320                     | 0.75                       | 1.60               | 2.2  | 3.2  | 4.0                | 4.5  | 5.0  | 6.3                | 8.0  | 10.0 |
| 400                     | 1.00                       | 2.00               | 2.8  | 4.0  | 5.0                | 5.6  | 6.3  | 8.0                | 10.0 | 12.5 |
| 500                     | 1.30                       | 2.50               | 3.6  | 5.0  | 6.3                | 7.1  | 8.0  | 10.0               | 12.5 | 16.0 |
| 630                     | 1.8                        | 3.2                | 4.5  | 6.3  | 8.0                | 9    | 10.0 | 12.5               | 16   | 20   |
| 800                     | 2.4                        | 4.0                | 5.6  | 8.0  | 10.0               | 11   | 12.5 | 16.0               | 20   | 25   |
| 1000                    | 3.2                        | 5.0                | 7.1  | 10.0 | 12.5               | 14   | 16.0 | 20.0               | 25   | 32   |

Table 4

## Standards

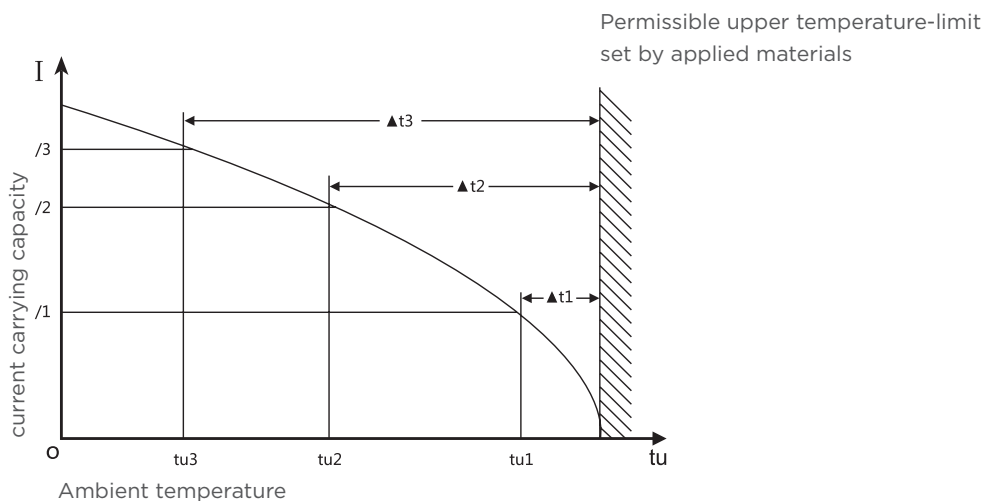
### CURRENT CARRYING CAPACITY

The current carrying capacity is determined in tests which are conducted on the basis of the DIN IEC 60 512 part 3. The current carrying capacity is limited by the thermal properties of materials which are used for inserts as well as by the insulating materials. These components have a maximum temperature which should not be exceeded.



The relationship between the current, the temperature rise (loss at the contact resistance) and the ambient temperature of the connector is represented by a curve. On a linear coordinate system the current lies on the vertical line (ordinate) and the ambient temperature on the horizontal line (abscissa) which ends at the permissible upper-limit temperature.

In another measurement the self-heating ( $\Delta t$ ) at different currents is determined. The corrected current carrying capacity curve is derived from this basic curve. The reasons for the correction are external factors that bring an additional limitation to the current carrying capacity, i.e. connectable wire gauge or an unequal dispersion of current. In practice it is not usual to load all terminals simultaneously with the maximum current. In such a case one contact can be loaded with a higher current as permitted by the current capacity curve, if less than 20% of the whole is loaded.



## Standards

### TIGHTENING TORQUE OF TERMINAL BLOCK SCREWS

IEC 60 947-1:1996/EN 60 947-1:1977 modified, table 4 specifies tightening torques for screw connections based on the type and size of the screw for electrical and mechanical type tests. Tightening contact terminal block to this torque guarantees that the connected conductors are reliably connected. The technical product data given in this catalog differ from this value. However they indicate a practical range of tightening torques which provides a gas-tightening contact and offers long-term contact stability.

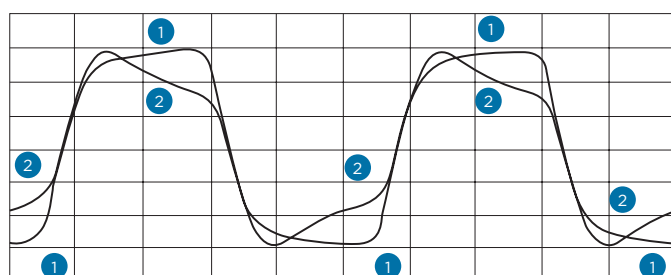
#### Extract from IEC 60 947-1/EN 60 947, Table 4

The torque according to IEC, EN

| Head screw with slot |                               |                         |                  |
|----------------------|-------------------------------|-------------------------|------------------|
| Thread Type          | Recommended tightening torque |                         |                  |
|                      | Torque [Nm]                   | CuZn or CuSN screw [Nm] | Steel screw [Nm] |
| M2.5                 | 0.4                           | 0.6                     | 0.8              |
| M3                   | 0.5                           | 0.8                     | 1.0              |
| M3.5                 | 0.8                           | 1.2                     | -                |
| M4                   | 1.2                           | 1.8                     | 2.0              |
| M5                   | 2.0                           | 3.0                     | 4.5              |
| M6                   | 2.5                           | 4.0                     | 8.0              |

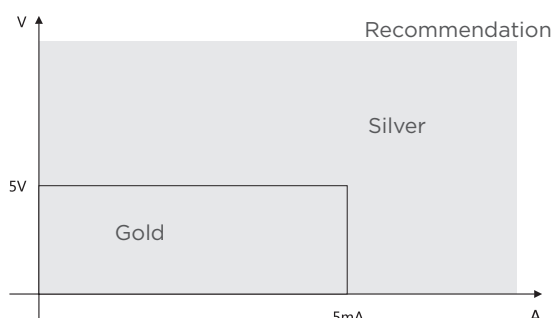
### LOW CURRENTS AND VOLTAGES

Standard contacts have a silver plated surface. This precious metal has excellent conductive properties. In the course of a contact's lifetime, the silver surface generates a black oxide layer due to its affinity to sulphur. This layer is smooth and very thin and is partly interrupted. When the contacts are mated and unmated, thus guaranteeing very a low contact resistances. In the case of very low currents or voltages small changes to the transmitted signal may be encountered. This is illustrated below where an artificially aged contact representing a twenty year life is compared with a new contact.



- 1 New contact
- 2 After ageing

Changes to the transmitted signal after artificial ageing



Left is a table derived from actual experiences

## Selection guide

### TECHNICAL INFORMATION OF INSERTS

| Insert | Type    | Poles  | Current | Voltage | Terminal                                     | Contacts                               | Shells |
|--------|---------|--------|---------|---------|----------------------------------------------|----------------------------------------|--------|
| HA     | HA-003  | 3+PE   | 10A     | 250 V   | screw                                        | -                                      | H3A    |
|        | HA-004  | 4+PE   | 10A     | 250V    | screw                                        | -                                      | H3A    |
|        | HA-010  | 10+PE  | 16A     | 250V    | screw<br>crimp                               | CEM/F(16A)<br>DEM/F(16A)               | H10A   |
|        | HA-016  | 16+PE  | 16A     | 250V    |                                              |                                        | H16A   |
|        | HA-032  | 32+PE  | 16A     | 250V    |                                              |                                        | H32A   |
|        | HAS-003 | 003+PE | 10A     | 400V    | spring                                       | -                                      | H3A    |
|        | HAS-004 | 004+PE | 10A     | 400V    | spring                                       | -                                      | H3A    |
| HD     | HD-007  | 7+PE   | 10A     | 250V    | crimp                                        | CDM/F(10A)<br>DDM/F(10A)<br>CJM/F(10A) | H3A    |
|        | HD-008  | 8      | 10A     | 50V     |                                              |                                        | H3A    |
|        | HD-015  | 15+PE  | 10A     | 250V    |                                              |                                        | H10A   |
|        | HD-025  | 25+PE  | 10A     | 250V    |                                              |                                        | H16A   |
|        | HD-040  | 40+PE  | 10A     | 250V    |                                              |                                        | H16B   |
|        | HD-050  | 50+PE  | 10A     | 250V    |                                              |                                        | H32A   |
|        | HD-064  | 64+PE  | 10A     | 250V    |                                              |                                        | H24B   |
|        | HD-080  | 80+PE  | 10A     | 250V    |                                              |                                        | H32B   |
|        | HD-128  | 128+PE | 10A     | 250V    |                                              |                                        | H48B   |
| HDD    | HDD-016 | 16+PE  | 10A     | 250V    | crimp                                        | CDM/F(10A)<br>DDM/F(10A)<br>CJM/F(10A) | H6B    |
|        | HDD-024 | 24+PE  | 10A     | 250V    |                                              |                                        | H6B    |
|        | HDD-042 | 42+PE  | 10A     | 250V    |                                              |                                        | H10B   |
|        | HDD-072 | 72+PE  | 10A     | 250V    |                                              |                                        | H16B   |
|        | HDD-108 | 108+PE | 10A     | 250V    |                                              |                                        | H24B   |
|        | HDD-144 | 144+PE | 10A     | 250V    |                                              |                                        | H32B   |
|        | HDD-216 | 216+PE | 10A     | 250V    |                                              |                                        | H48B   |
|        |         |        |         |         |                                              |                                        |        |
| HE     | HE-006  | 6+PE   | 16A     | 500V    | screw<br>crimp<br>spring<br>double<br>spring | CEM/F(16A)<br>DEM/F(16A)               | H6B    |
|        | HE-010  | 10+PE  | 16A     | 500V    |                                              |                                        | H10B   |
|        | HE-016  | 16+PE  | 16A     | 500V    |                                              |                                        | H16B   |
|        | HE-024  | 24+PE  | 16A     | 500V    |                                              |                                        | H24B   |
|        | HE-032  | 32+PE  | 16A     | 500V    |                                              |                                        | H32B   |
|        | HE-048  | 48+PE  | 16A     | 500V    |                                              |                                        | H48B   |
| HEE    | HEE-010 | 10+PE  | 16A     | 500V    | crimp                                        | CEM/F(16A)<br>DEM/F(16A)               | H6B    |
|        | HEE-018 | 18+PE  | 16A     | 500V    |                                              |                                        | H10B   |
|        | HEE-032 | 32+PE  | 16A     | 500V    |                                              |                                        | H16B   |
|        | HEE-046 | 46+PE  | 16A     | 500V    |                                              |                                        | H24B   |
|        | HEE-064 | 64+PE  | 16A     | 500V    |                                              |                                        | H32B   |
|        | HEE-092 | 92+PE  | 16A     | 500V    |                                              |                                        | H48B   |
|        | HEE-015 | 14+PE  | 16A     | 200V    |                                              | CSF(16A)                               | -      |

## Selection guide

### TECHNICAL INFORMATION OF INSERTS

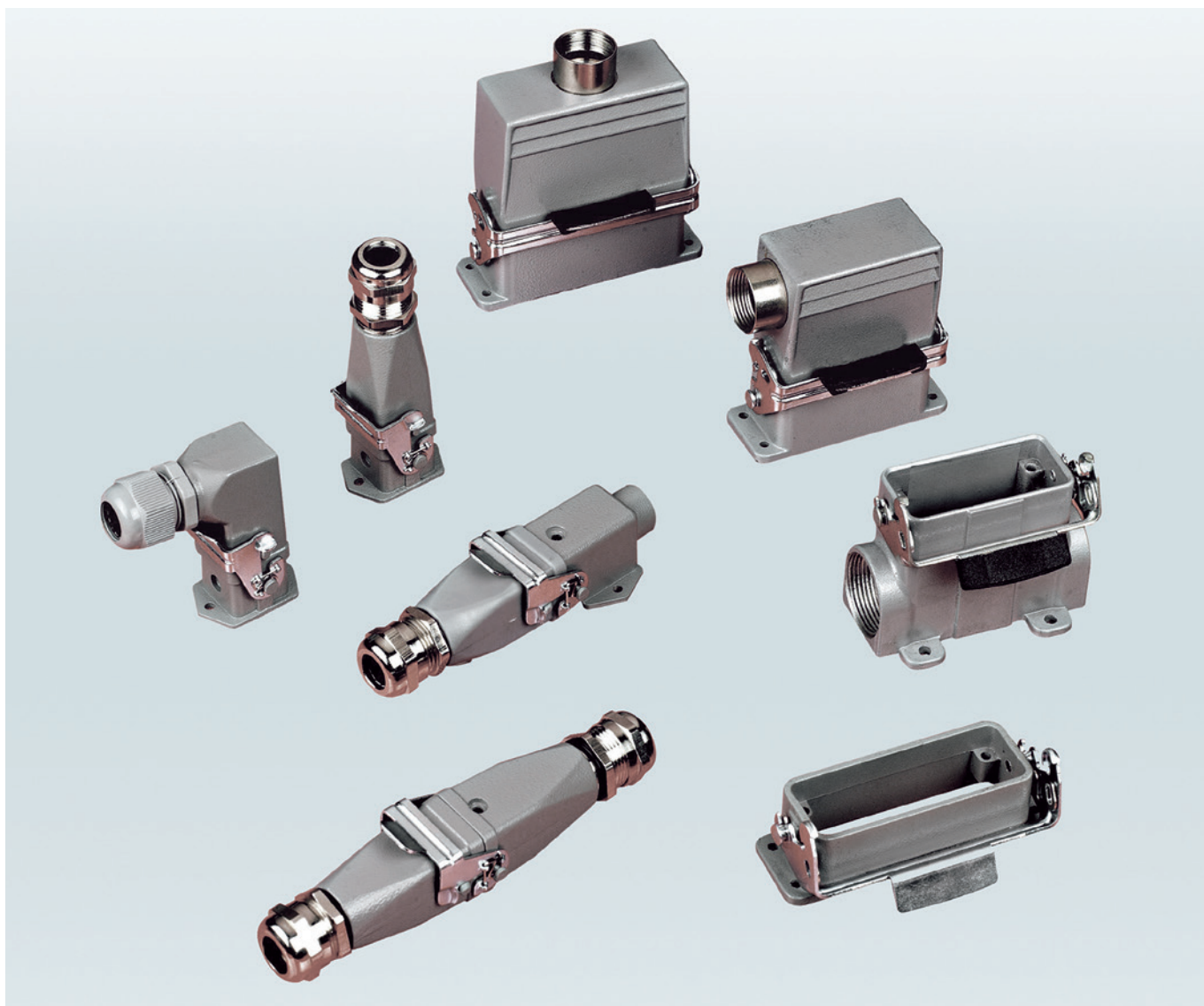
| Insert | Type      | Poles   | Current | Voltage   | Terminal                 | Contacts                                             | Shells |
|--------|-----------|---------|---------|-----------|--------------------------|------------------------------------------------------|--------|
| HEEE   | HEEE-020  | 20+PE   | 16A     | 400V      | crimp                    | CEM/F(16A)<br>DEM/F(16A)                             | H6B    |
|        | HEEE-032  | 32+PE   | 16A     | 400V      |                          |                                                      | H10B   |
|        | HEEE-040  | 40+PE   | 16A     | 500V      |                          |                                                      | H16B   |
|        | HEEE-048  | 48+PE   | 16A     | 400V      |                          |                                                      | H16B   |
|        | HEEE-064  | 64+PE   | 16A     | 500V      |                          |                                                      | H24B   |
|        | HEEE-072  | 72+PE   | 16A     | 400V      |                          |                                                      | H24B   |
|        | HEEE-080  | 80+PE   | 16A     | 500V      |                          |                                                      | H32B   |
|        | HEEE-096  | 96+PE   | 16A     | 400V      |                          |                                                      | H32B   |
|        | HEEE-128  | 128+PE  | 16A     | 500V      |                          |                                                      | H48B   |
|        | HEEE-144  | 144+PE  | 16A     | 400V      |                          |                                                      | H48B   |
| HVE    | HVE-003   | 3+PE+2  | 16A     | 830V      | screw<br>crimp<br>spring | CEM/F(16A)<br>DEM/F(16A)                             | H10B   |
|        | HVE-006   | 6+PE+2  | 16A     | 830V      |                          |                                                      | H16B   |
|        | HVE-010   | 10+PE+2 | 16A     | 830V      |                          |                                                      | H24B   |
| HSB    | HSB-006   | 6+PE    | 35A     | 400/690V  | screw                    | -                                                    | H16B   |
|        | HSB-012   | 12+PE   | 35A     | 400/690V  | screw                    | -                                                    | H32B   |
| HQ     | HQ-005    | 5+PE    | 16A     | 400V      | crimp                    | CEM/F(16A)<br>DEM/F(16A)                             | H3A    |
|        | HQ-007    | 7+PE    | 10A     | 400V      |                          | CDM/F(10A)<br>DDM/F(10A)                             | H3A    |
|        | HQ-008    | 8+PE    | 16A     | 500V      |                          | CEM/F(16A)<br>DEM/F(16A)                             | H8A    |
|        | HQ-012    | 12+PE   | 10A     | 400V      |                          | CDM/F(10A)<br>DDM/F(10A)                             | H3A    |
|        | HQ-017    | 17+PE   | 10A     | 250V      |                          |                                                      | H8A    |
|        | HQ4/2     | 4+PE+2  | 40A+10A | 600V+250V |                          | CDM/F(10A)<br>DDM/F(10A)<br>CMM/F(40A)<br>DMM/F(40A) | H8A    |
| HEAV   | HEAV-006  | 6+PE    | 16A     | 500V      | screw<br>spring          | -                                                    | H6B    |
|        | HEAV-010  | 10+PE   | 16A     | 500V      |                          | -                                                    | H10B   |
|        | HEAV-016  | 16+PE   | 16A     | 500V      |                          | -                                                    | H16B   |
|        | HEAV-024  | 24+PE   | 16A     | 500V      |                          | -                                                    | H24B   |
| HMN    | HMN-001   | 1       | 200A    | 1000V     | crimp                    | CHM/F(200A)                                          | -      |
|        | HMN-D2    | 2       | 100A    | 1000V     | crimp                    | CNM/F(100A)                                          | -      |
|        | HMN-002   | 2       | 70A     | 1000V     | crimp                    | CSM/F(70A)                                           | -      |
|        | HMN-003   | 3       | 40A     | 690V      | crimp                    | CMM/F(40A)<br>DMM/F(40A)                             | -      |
|        | HMN-004   | 4       | 40A     | 830V      | crimp                    | CMM/F(40A)<br>DMM/F(40A)                             | -      |
|        | HMN-004SC | 4       | -       | -         | -                        | -                                                    | -      |
|        | HMN-005   | 5       | 16A     | 400V      | spring                   | -                                                    | -      |
|        | HMN-006   | 6       | 16A     | 500V      | crimp                    | CEM/F(16A)<br>DEM/F(16A)                             | -      |
|        | HMN-006P  | 6       | 16A     | 830V      | crimp                    |                                                      | -      |

## Selection guide

### TECHNICAL INFORMATION OF INSERTS

| Insert     | Type     | Poles    | Current      | Voltage                        | Terminal | Contacts                                             | Shells |
|------------|----------|----------|--------------|--------------------------------|----------|------------------------------------------------------|--------|
| HMN        | HMN-008  | 8        | 16A          | 400V                           | crimp    | CEM/F(16A)<br>DEM/F(16A)                             | -      |
|            | HMN-012  | 12       | 10A          | 250V                           | crimp    | CDM/F(10A)<br>DDM/F(10A)                             | -      |
|            | HMN-017  | 17       | 10A          | 160V                           | crimp    | CDM/F(10A)<br>DDM/F(10A)                             | -      |
|            | HMN-020  | 20       | 16A          | 500V                           | crimp    | CEM/F(16A)<br>DEM/F(16A)                             | -      |
|            | HMN-025  | 25       | 5A           | 50V                            | crimp    | CAM/F(5A)<br>DAM/F(5A)                               | -      |
|            | HMN-009  | 9        | 5A           | 50V                            | crimp    | CAM/F(5A)<br>DAM/F(5A)                               | -      |
|            | HMN-RJ45 | 8        | 1A           | 50V                            | crimp    | -                                                    | -      |
|            | HMN-Q1   | 1+1      | 16A          | 50V                            | crimp    | CEM/F(16A)<br>DEM/F(16A)                             | -      |
|            | HMN-Q2   | 4+4      | 10A          | 50V                            | crimp    | CDM/F(10A)<br>DDM/F(10A)                             | -      |
|            | HMN-Q3   | 8+8      | 5A           | 50V                            | crimp    | CAM/F(5A)<br>DAM/F(5A)                               | -      |
|            | PIN-Q1   | 1        | 16A          | 50V                            | crimp    | CEM/F(16A)<br>DEM/F(16A)                             | -      |
|            | PIN-Q2   | 4        | 10A          | 50V                            | crimp    | CDM/F(10A)<br>DDM/F(10A)                             | -      |
|            | PIN-Q3   | 8        | 5A           | 50V                            | crimp    | CAM/F(5A)<br>DAM/F(5A)                               | -      |
|            | HMN-DM   | -        | -            | -                              | -        | -                                                    | -      |
| HK/<br>HWK | HK4/0    | 4+PE     | 80A          | 690V                           | screw    | -                                                    | H16B   |
|            | HK4/2    | 4+PE+2   | 80A+16A      | 690V+400V                      | screw    | -                                                    | H16B   |
|            | HK6/12   | 6+PE+12  | 40A+10A      | 690V+230/400V                  | screw    | -                                                    | H16B   |
|            | HK12/2   | 12+PE+2  | 40A+10A      | 690V+250V                      | crimp    | CMM/F(40A)<br>DMM/F(40A)<br>CDM/F(10A)<br>DDM/F(10A) | H16B   |
|            | HK6/36   | 6+PE+36  | 40A+10A      | 690V+160V                      | crimp    | CMM/F(40A)<br>DMM/F(40A)<br>CDM/F(10A)<br>DDM/F(10A) | H16B   |
|            | HK4/8    | 4+PE+8   | 80A+16A      | 400V                           | screw    | -                                                    | H24B   |
|            | HK8/24   | 8+PE+24  | 16A+10A      | 230/400V+160V                  | crimp    | CEM/F(16A)<br>DEM/F(16A)<br>CDM/F(10A)<br>DDM/F(10A) | H10B   |
|            | HWK6/6   | 6+PE+6   | 40A+16A      | 690V+400V                      | screw    | -                                                    | H16B   |
|            | HWK3/3/6 | 3+PE+3+6 | 100A+40A+16A | 400/690V+400/<br>690V+250/400V | screw    | -                                                    | H24B   |

## HA Series



### 1. Specifications

DIN VDE 0110 Concerning clearance and creepage distances

DIN VDE 0627 Connectors and plug devices

### 2. Standards

DIN EN 60664-1

DIN EN 61 984

### 3. Approvals



## HD technical characteristics

|                          |                           |
|--------------------------|---------------------------|
| Specifications .....     | DIN VDE 0627              |
| .....                    | DIN VDE 0110              |
| Standards .....          | DIN 43 652                |
| .....                    | CECC 75 301-801           |
| Number of contacts ..... | 7,8,15,25,40,50(2x25),64, |
| .....                    | 80(2x40),128(2x64) + PE   |

### INSERTS

|                                            |                               |
|--------------------------------------------|-------------------------------|
| Working current .....                      | 10A max                       |
| (See current carrying capacity)            |                               |
| Working voltage .....                      | (8D is 50V)                   |
| .....                                      | 250V, Insulation group C      |
| Test voltage urms .....                    | 4KV(8D is 0.8KV)              |
| Pollution degree .....                     | 3                             |
| Pollution degree 2 also 10A; 250V/400V     |                               |
| Insulation resistance .....                | $\geq 10^{10}\Omega$          |
| Material .....                             | Polycarbonate or Polybutylece |
| Temperature range .....                    | -40°C... +100°C/125°C         |
| Flammability acc. to UL94 .....            | V0                            |
| Working voltage acc. to UL/CSA.....        | 600V                          |
| Mechanical working life-mating cycles..... | $\geq 500$                    |

### CONTACTS

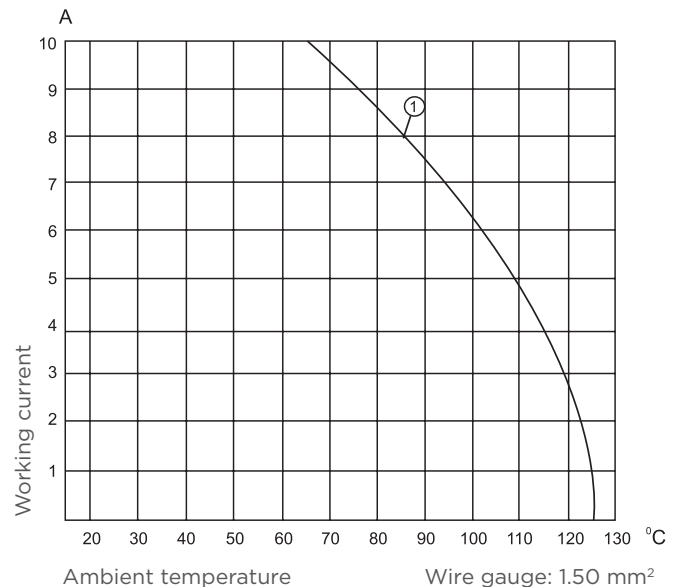
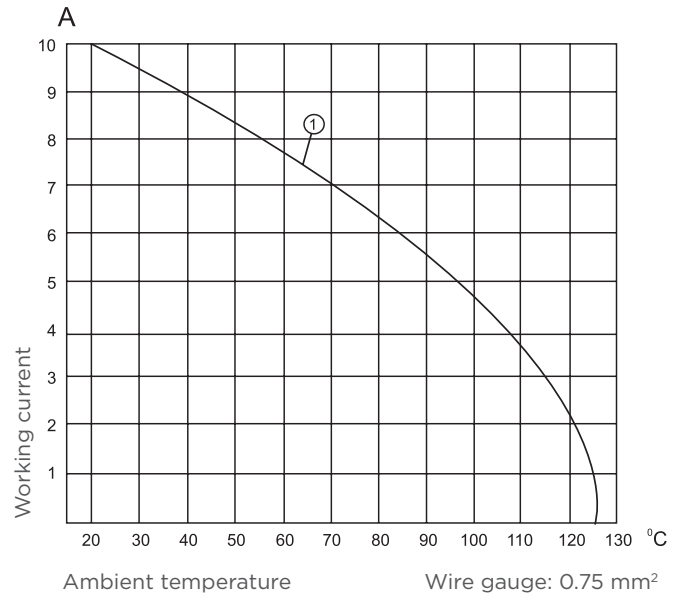
|                          |                         |
|--------------------------|-------------------------|
| Material .....           | Copper alloy            |
| Surface .....            | Hard silver-plated      |
| .....                    | Hard gold-plated        |
| Contact resistance ..... | $\leq 3m\Omega$         |
| Terminal .....           | Crimp terminal          |
| .....                    | Rolled terminal         |
| - mm <sup>2</sup> .....  | 0.15-2.5mm <sup>2</sup> |
| - AWG .....              | 26-14                   |

### HOODS, HOUSINGS

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element.....                         | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.



1 HD-007

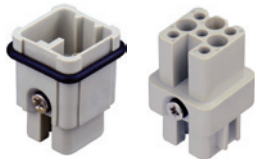
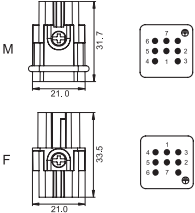
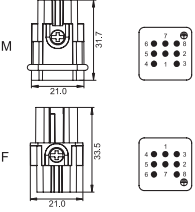


## HD-007/008 inserts

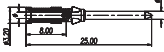
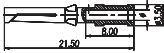
INSERTS FOR H3A HOOD/HOUSING

250V/50V 10A

7+  
8

| Dimensions (mm)                                                                               | Contact arrangement view from termination side                                     | Part Number     |                 | Type     |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------|-----------------|----------|
|                                                                                               |                                                                                    | Male insert     | Female insert   |          |
| 250V/10A<br> |   | T2020072101-000 |                 | HD-007-M |
|                                                                                               |                                                                                    |                 | T2020072201-000 | HD-007-F |
| 50V/10A<br> |  | T2020082101-000 |                 | HD-008-M |
|                                                                                               |                                                                                    |                 | T2020082201-000 | HD-008-F |

### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male<br> | 10A Male crimp contacts<br>   | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                             |                                                                                                                  | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| CDF/Female<br>                                                                                                                           | 10A Female crimp contacts<br> | 0.14-0.37       | 26-22 | 8.0               | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 8.0               | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 8.0               | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 8.0               | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 8.0               | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 6.0               | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.14-0.37       | 26-22 | 8.0               | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 8.0               | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 8.0               | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 8.0               | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 8.0               | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 6.0               | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

## HA technical characteristics

|                          |                         |
|--------------------------|-------------------------|
| Specifications .....     | DIN EN 60 664-1         |
| .....                    | DIN EN 61984            |
| Number of contacts ..... | 3,4,10,16,32(2x16) + PE |

### INSERTS

|                                            |                               |
|--------------------------------------------|-------------------------------|
| Working current                            |                               |
| HA-3, HA-4 .....                           | 10A                           |
| HA-10, HA-16, HA-32.....                   | 16A                           |
| Working voltage                            |                               |
| HA-3, HA-4 .....                           | 250V/400V                     |
| HA-10, HA-16, HA-32.....                   | 250V                          |
| Test voltage urms                          |                               |
| HA-003, HAS-004, HA-10, HA-16, HA-32.....  | 4KV                           |
| HAS-003.....                               | 6KV                           |
| HA-004 .....                               | 2.5KV                         |
| Pollution degree .....                     | 2                             |
| Insulation resistance .....                | $\geq 10^{10}\Omega$          |
| Material .....                             | Polycarbonate or Polybutylece |
| Temperature range .....                    | -40°C... +100°C/125°C         |
| Flammability acc. to UL94 .....            | V0                            |
| Working voltage acc. to UL/CSA.....        | 600V                          |
| Mechanical working life-mating cycles..... | $\geq 500$                    |

### CONTACTS

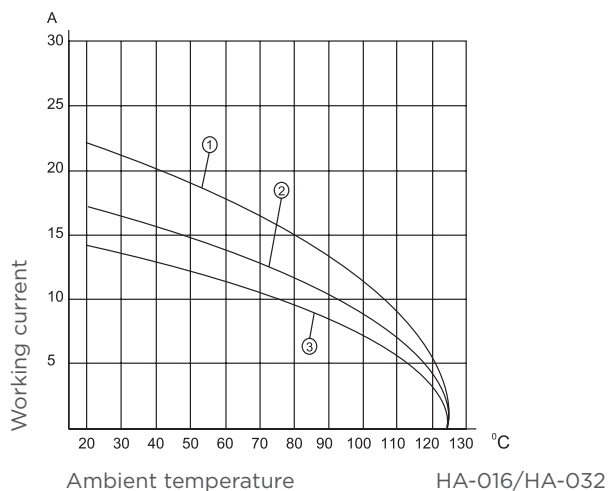
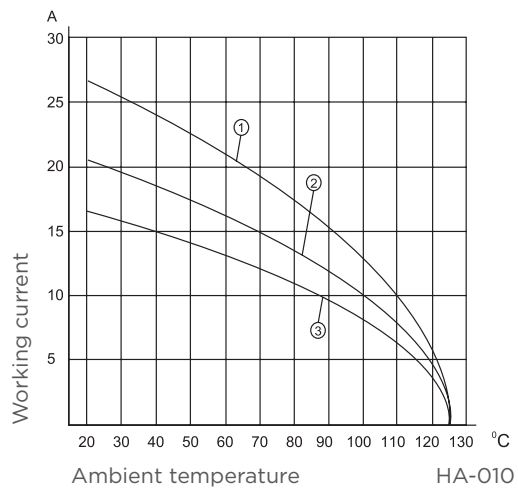
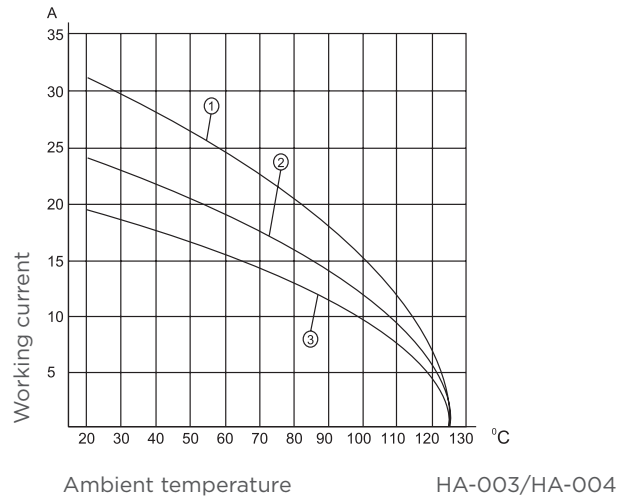
|                               |                                                                         |
|-------------------------------|-------------------------------------------------------------------------|
| Material .....                | Copper alloy                                                            |
| Surface .....                 | Hard silver-plated                                                      |
| .....                         | Hard gold-xplated                                                       |
| Contact resistance .....      | $\leq 1m\Omega$                                                         |
| Terminal .....                | Screw terminal                                                          |
| .....                         | Crimp terminal                                                          |
| .....                         | Spring terminal                                                         |
| - mm <sup>2</sup> .....       | 0.5-2.5mm <sup>2</sup> /0.14-4.0mm <sup>2</sup> /0.5-2.5mm <sup>2</sup> |
| - AWG .....                   | 20-14/26-14/20-14                                                       |
| - Tightening/test torque..... | 0.5Nm: HA-010, HA-016, HA-032                                           |
| .....                         | 0.25Nm: HA-003, HA-004                                                  |

### HOODS, HOUSINGS

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast zinc                      |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element.....                         | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +100°C/125°C              |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.



- 1 Wire gauge: 2.5mm<sup>2</sup>
- 2 Wire gauge: 1.5mm<sup>2</sup>
- 3 Wire gauge: 1.0mm<sup>2</sup>

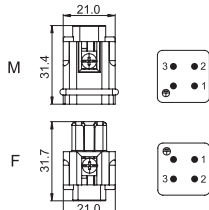
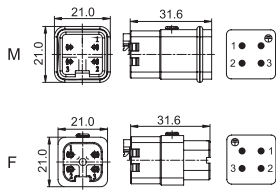
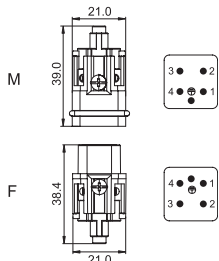
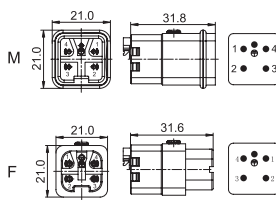
## HA-003/004 inserts

INSERTS FOR H3A HOOD/HOUSING

250V/400V 10A

3+⌀

4+⌀

| Dimensions (mm)                                                                                 | Contact arrangement view from termination side                                      | Part Number     |                 | Type      |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-----------------|-----------|
|                                                                                                 |                                                                                     | Male insert     | Female insert   |           |
| Screw terminal                                                                                  |                                                                                     |                 |                 |           |
| 250V/10A<br>   |    | T2010032101-000 |                 | HA-003-M  |
|                                                                                                 |                                                                                     |                 | T2010032201-000 | HA-003-F  |
| Spring terminal                                                                                 |                                                                                     |                 |                 |           |
| 400V/10A<br>  |   | T2010033101-000 |                 | HA-003-MS |
|                                                                                                 |                                                                                     |                 | T2010033201-000 | HA-003-FS |
| Screw terminal                                                                                  |                                                                                     |                 |                 |           |
| 250V/10A<br> |  | T2010042101-000 |                 | HA-004-M  |
|                                                                                                 |                                                                                     |                 | T2010042201-000 | HA-004-F  |
| Spring terminal                                                                                 |                                                                                     |                 |                 |           |
| 400V/10A<br> |  | T2010043101-000 |                 | HA-004-MS |
|                                                                                                 |                                                                                     |                 | T2010043201-000 | HA-004-FS |

## HQ technical characteristics

|                          |                  |
|--------------------------|------------------|
| Specifications .....     | DIN EN 60 664-1  |
| .....                    | DIN EN 61 984    |
| Number of contacts ..... | 5,7,8,12,17 + PE |

## CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.

## INSERTS

|                                             |                       |
|---------------------------------------------|-----------------------|
| Working current                             |                       |
| HQ-005,008.....                             | 16A max               |
| HQ-007,012,017 .....                        | 10A max               |
| Working voltage                             |                       |
| HQ-005,007,012.....                         | 400V                  |
| HQ-008.....                                 | 500V                  |
| HQ-017.....                                 | 250V                  |
| Test voltage urms                           |                       |
| HQ-005,017 .....                            | 4KV                   |
| HQ-007,008,012 .....                        | 6KV                   |
| Pollution degree .....                      | 3                     |
| Insulation resistance .....                 | $\geq 10^{10}\Omega$  |
| Material .....                              | Polycarbonate         |
| Temperature range .....                     | -40°C... +100°C/125°C |
| Flammability acc. to UL94 .....             | VO                    |
| Working voltage acc. to UL/CSA .....        | 600V                  |
| Mechanical working life-mating cycles ..... | $\geq 500$            |

## CONTACTS

|                                |                                        |
|--------------------------------|----------------------------------------|
| Material .....                 | Copper alloy                           |
| Surface .....                  | Hard silver-plated                     |
| .....                          | Hard gold-plated                       |
| Contact resistance .....       | $\leq 1\text{m}\Omega$                 |
| Terminal .....                 | Crimp terminal                         |
| - mm <sup>2</sup> .....        | 0.14-4.0/0.14-2.5/1.5-6mm <sup>2</sup> |
| - AWG .....                    | 26-12/26-14/16-10                      |
| - Tightening/test torque ..... | 0.25Nm                                 |

## HOODS, HOUSINGS

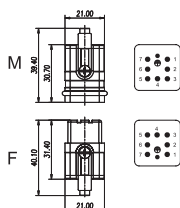
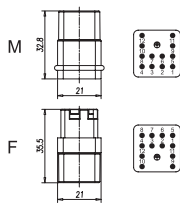
|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element.....                         | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

## HQ-007/012 inserts

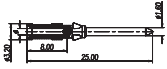
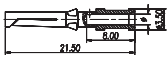
INSERTS FOR H3A HOOD/HOUSING

400V MAX. 10A

7+   
12+ 

| Dimensions (mm)                                                                    | Contact arrangement view from termination side                                     | Part Number     |                 | Type     |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------|-----------------|----------|
|                                                                                    |                                                                                    | Male insert     | Female insert   |          |
| Crimp terminal (Order crimp contacts separately)                                   |                                                                                    |                 |                 |          |
|   |   | T2080072101-000 |                 | HQ-007-M |
|                                                                                    |                                                                                    |                 | T2080072201-000 | HQ-007-F |
|  |  | T2080122101-000 |                 | HQ-012-M |
|                                                                                    |                                                                                    |                 | T2080122201-000 | HQ-012-F |

### 10A Contact

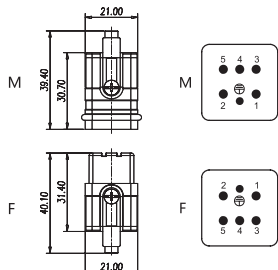
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male<br> | 10A Male crimp contacts<br>   | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                             |                                                                                                                  | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.14-0.37       | 26-22 | 8.0               | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 8.0               | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 8.0               | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 8.0               | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 8.0               | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 6.0               | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                                                                                                             | 10A Female crimp contacts<br> | 0.14-0.37       | 26-22 | 8.0               | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 8.0               | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 8.0               | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 8.0               | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 8.0               | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 6.0               | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

## HQ-005 inserts

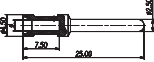
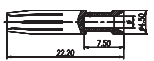
INSERTS FOR H3A HOOD/HOUSING

400V MAX. 16A

5+ (5)

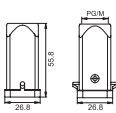
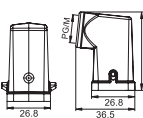
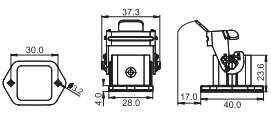
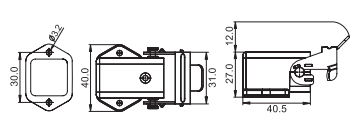
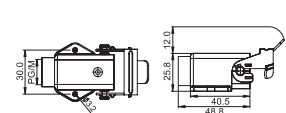
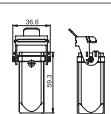
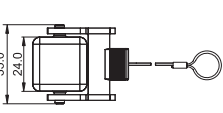
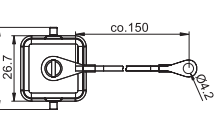
| Dimensions (mm)                                                                   | Contact arrangement view from termination side                                    | Part Number     |                 | Type     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------|-----------------|----------|
|                                                                                   |                                                                                   | Male insert     | Female insert   |          |
| Crimp terminal (Order crimp contacts separately)                                  |                                                                                   |                 |                 |          |
|  |  | T2080052101-000 |                 | HQ-005-M |
|                                                                                   |                                                                                   |                 | T2080052201-000 | HQ-005-F |

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male crimp contacts                                                             | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                     | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
|                                                   |  | 0.14-0.37       | 26-22 | 7.5                      | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                      |                                                                                     | 0.5             | 20    | 7.5                      | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                      |                                                                                     | 0.75            | 18    | 7.5                      | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                      |                                                                                     | 1.0             | 18    | 7.5                      | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                      |                                                                                     | 1.5             | 16    | 7.5                      | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                      |                                                                                     | 2.5             | 14    | 7.5                      | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                      |                                                                                     | 4.0             | 12    | 7.5                      | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                      |                                                                                     | 0.14-0.37       | 26-22 | 7.5                      | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                      |                                                                                     | 0.5             | 20    | 7.5                      | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                      |                                                                                     | 0.75            | 18    | 7.5                      | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                      |                                                                                     | 1.0             | 18    | 7.5                      | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                      |                                                                                     | 1.5             | 16    | 7.5                      | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                   |  | 2.5             | 14    | 7.5                      | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                      |                                                                                     | 4.0             | 12    | 7.5                      | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

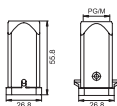
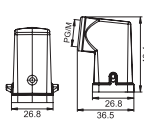
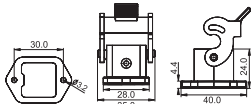
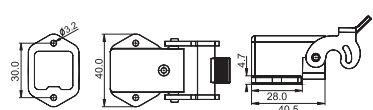
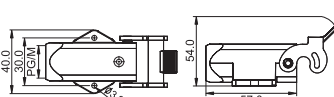
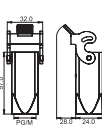
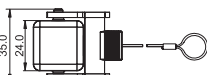
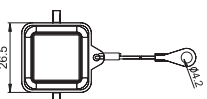
## H3A metal hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                     | Metr.                                                                               | PG   | Type                                             | Part Number                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|--------------------------------------------------|-------------------------------------------------------|
| Top entry                                                                           |                                                                                     |                                                                                     |      |                                                  |                                                       |
|    |    | M20                                                                                 | PG11 | H3A-MTG-PG11<br>H3A-MTG-M20                      | T1329030111-000<br>T1329030120-000                    |
| Side entry                                                                          |                                                                                     |                                                                                     |      |                                                  |                                                       |
|    |    | M20                                                                                 | PG11 | H3A-MTS-PG11<br>H3A-MTS-M20                      | T1319030111-000<br>T1319030120-000                    |
| Bulkhead mounting: Bottom entry                                                     |                                                                                     |                                                                                     |      |                                                  |                                                       |
|    |    |                                                                                     |      | H3A-MAG                                          | T1509030000-000                                       |
| Bulkhead mounting: Side entry                                                       |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  |  |                                                                                     |      | H3A-MAGS                                         | T1549030000-000                                       |
| Surface mounting: Side entry                                                        |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  |  | M16<br>M20                                                                          | PG11 | H3A-MAGSV-PG11<br>H3A-MAGSV-M16<br>H3A-MAGSV-M20 | T1619030111-000<br>T1619030116-000<br>T1619030120-000 |
| Cable-to-cable hood:                                                                |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  |  | M20                                                                                 | PG11 | H3A-MTGVB-PG11<br>H3A-MTGVB-M20                  | T1739030111-000<br>T1739030120-000                    |
| Protection covers for hoods (thermoplastic)                                         |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  | Note: For mounted male insert and hood                                              |  |      |                                                  | H3A-KDTP<br>T1010031100-000                           |
| Metal protection covers for hoods                                                   |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  | Note: For mounted female insert and hood                                            |  |      |                                                  | H3A-KDB<br>T1010033100-000                            |

## H3A thermoplastic hoods/housings

### THERMOPLASTIC HOODS, HOUSINGS

| Dimensions (mm)                                                                                      |                                                                                     | Metr.                                                                               | PG   | Type                                          | Part Number                                           |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|-----------------------------------------------|-------------------------------------------------------|
| Top entry                                                                                            |                                                                                     |                                                                                     |      |                                               |                                                       |
|                     |    | M20                                                                                 | PG11 | H3A-TG-PG11<br>H3A-TG-M20                     | T1329031111-000<br>T1329031120-000                    |
| Side entry                                                                                           |                                                                                     |                                                                                     |      |                                               |                                                       |
|                     |    | M20                                                                                 | PG11 | H3A-TS-PG11<br>H3A-TS-M20                     | T1319031111-000<br>T1319031120-000                    |
| Bulkhead mounting: Bottom entry                                                                      |                                                                                     |                                                                                     |      |                                               |                                                       |
|                     |    |                                                                                     |      | H3A-AG                                        | T1509031100-000                                       |
| Bulkhead mounting: Side entry                                                                        |                                                                                     |                                                                                     |      |                                               |                                                       |
|                   |  |                                                                                     |      | H3A-AGS                                       | T1509031111-000                                       |
| Surface mounting: Side entry                                                                         |                                                                                     |                                                                                     |      |                                               |                                                       |
|                   |  | M16<br>M20                                                                          | PG11 | H3A-AGSV-PG11<br>H3A-AGSV-M16<br>H3A-AGSV-M20 | T1619031111-000<br>T1619031116-000<br>T1619031120-000 |
| Cable-to-cable hood:                                                                                 |                                                                                     |                                                                                     |      |                                               |                                                       |
|                   |  | M20                                                                                 | PG11 | H3A-TGVB-PG11<br>H3A-TGVB-M20                 | T1739031111-000<br>T1739031120-000                    |
| Protection covers for hoods (thermoplastic)                                                          |                                                                                     |                                                                                     |      |                                               |                                                       |
|                   | Note: For mounted male insert and hood                                              |  |      | H3A-KDTP                                      | T1010031100-000                                       |
| Protection covers for hoods                                                                          |                                                                                     |                                                                                     |      |                                               |                                                       |
| <br>White    Grey | Note: For mounted female insert and hood                                            |  |      | H3A-KDBP (White)<br>H3A-KDBPG (Grey)          | T1010032100-000<br>T1010032300-000                    |
| Covers without sealing type                                                                          |                                                                                     |                                                                                     |      |                                               |                                                       |
|                                                                                                      |                                                                                     |                                                                                     |      | H3A-KDBP (White)<br>H3A-KDBP (Grey)           | T1010033200-000<br>T1010032200-000                    |



## HIP.3/4, HIP-K.3/4, EMV-K.3/4 housings

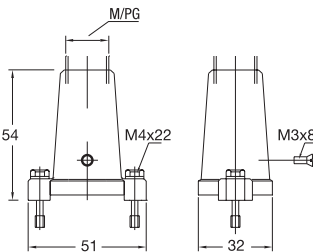
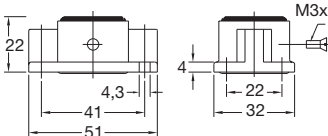
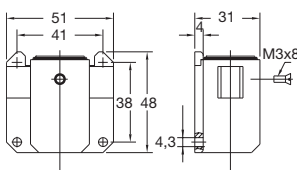
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                                                        | PG  | Type                                                                                                                                    | Part Number                                                                               |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Hood: Top entry                                                                     |                                                                                                              |     |                                                                                                                                         |                                                                                           |
|    |                             | M16 | 11                                                                                                                                      | <b>HIP</b><br>HIP.3/4.ST0.1.11.G<br>HIP.3/4.ST0.1.M16.G<br><br>1-1102600-5<br>0-1106408-1 |
|                                                                                     | M16<br>M20                                                                                                   | 11  | <b>HIP-K</b><br>HIP-K.3/4.ST0.1.11.G<br>HIP-K.3/4.ST0.1.M16.G<br>HIP-K.3/4.ST0.1.M20.G<br><br>2-1102600-5<br>0-1106408-2<br>0-1106408-3 |                                                                                           |
|                                                                                     | M16<br>M20                                                                                                   | 11  | <b>EMV-K</b><br>EMV-K.3/4.ST0.1.11.G<br>EMV-K.3/4.ST0.1.M16.G<br>EMV-K.3/4.ST0.1.M20.G<br><br>4-1102700-5<br>0-1106402-2<br>0-1106402-3 |                                                                                           |
| Surface mounted housing: Bottom entry                                               |                                                                                                              |     |                                                                                                                                         |                                                                                           |
|  | <br>Panel cut-out 21 x 21 |     |                                                                                                                                         | <b>HIP</b><br>HIP.3/4.AG<br><br>1-1102603-5                                               |
|                                                                                     |                                                                                                              |     |                                                                                                                                         | <b>HIP-K</b><br>HIP-K.3/4.AG<br><br>2-1102603-5                                           |
|                                                                                     |                                                                                                              |     |                                                                                                                                         | <b>EMV-K</b><br>EMV-K.3/4.AG<br><br>4-1102703-5                                           |
| Surface mounted housing: Bottom entry (by panel cut-out)                            |                                                                                                              |     |                                                                                                                                         |                                                                                           |
|  | <br>Panel cut-out ø 20    |     |                                                                                                                                         | <b>HIP</b><br>HIP.3/4.SGF<br><br>1-1102602-5                                              |
|                                                                                     |                                                                                                              |     |                                                                                                                                         | <b>HIP-K</b><br>HIP-K.3/4.SGF<br><br>2-1102602-5                                          |
|                                                                                     |                                                                                                              |     |                                                                                                                                         | <b>EMV-K</b><br>EMV-K.3/4.SGF<br><br>4-1102702-5                                          |

## HIP.3/4, HIP-K.3/4, EMV-K.3/4 housings

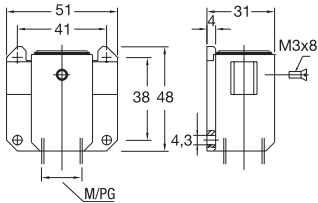
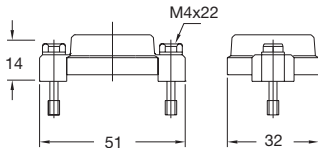
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

IP 68 / IP 69 K

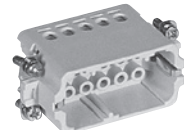
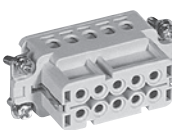
| Description                                                                         | Metr.                                                                               | PG   | Type                                      | Part Number |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|-------------------------------------------|-------------|
| <b>Surface mounted housing: Side entry</b>                                          |                                                                                     |      |                                           |             |
|    |    | M16  | <b>HIP</b><br>HIP.3/4.SG.1.11.G           | 1-1102601-5 |
|                                                                                     |                                                                                     | M20  | HIP.3/4.SG.1.M16.G                        | 0-1106407-1 |
|                                                                                     |                                                                                     |      | HIP.3/4.SG.1.M20.G                        | 0-1106401-4 |
|                                                                                     | M16                                                                                 | PG11 | <b>HIP-K</b><br>HIP-K.3/4.SG.1.11.G       | 2-1102601-5 |
|                                                                                     |                                                                                     |      | HIP-K.3/4.SG.1.M16.G                      | 0-1106407-2 |
|                                                                                     | M16                                                                                 | PG11 | <b>EMV-K</b><br>EMV-K.3/4.SG.1.11.G       | 4-1102701-5 |
|                                                                                     | M20                                                                                 |      | EMV-K.3/4.SG.1.M16.G                      | 0-1106401-2 |
|                                                                                     |                                                                                     |      | EMV-K.3/4.SG.1.M20.G                      | 0-1106401-3 |
| <b>Protective covers for housings</b>                                               |                                                                                     |      |                                           |             |
|  |  |      | <b>HIP/EMV</b><br>HIP/EMV.3/4.SKB         | 3-1106200-5 |
|                                                                                     |                                                                                     |      | <b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.3/4.SKB | 4-1106200-5 |

HA.10 contact inserts

SCREW TERMINAL, SPRING CLAMP TERMINAL,  
CRIMP TERMINAL FOR SCREW MACHINED HE/HA CRIMP CONTACTS

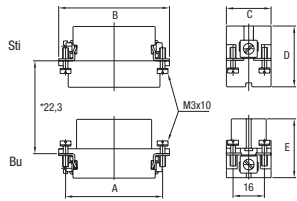
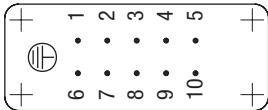
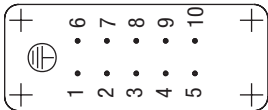
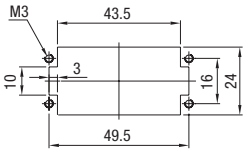
250V 16A

10+⌀

| Description                                                                         |                                                                                     | Type                | Part Number     |                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|-----------------|-----------------|
| Male insert                                                                         | Female insert                                                                       |                     | Male insert     | Female insert   |
| Screw terminal                                                                      |                                                                                     |                     |                 |                 |
|    |    | HA-010-M            | T2010102101-000 |                 |
|                                                                                     |                                                                                     | HA-010-F            |                 | T2010102201-000 |
| Spring Clamp terminal                                                               |                                                                                     |                     |                 |                 |
|    |    | HA.10.Sti.SC.B 1-10 | 7-1103414-1     |                 |
|                                                                                     |                                                                                     | HA.10.Bu.SC.B 1-10  |                 | 7-1103415-1     |
| Crimp terminal                                                                      |                                                                                     |                     |                 |                 |
|  |  | HA.10.Sti.C.B 1-10  | 2-1103414-3     |                 |
|                                                                                     |                                                                                     | HA.10.Bu.C.B 1-10   |                 | 2-1103415-3     |

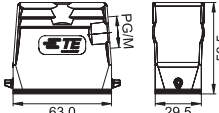
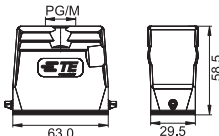
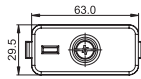
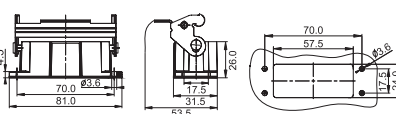
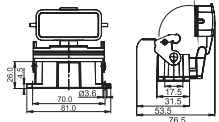
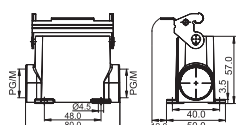
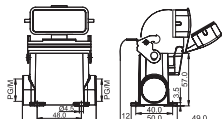
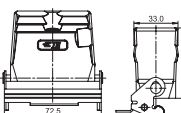
| Dimensions | A    | B  | C  | D  | E  |
|------------|------|----|----|----|----|
| mm         | 49.5 | 57 | 23 | 31 | 28 |

Suitable crimp contacts and crimping tools: see page 48

| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                      | Panel cut-out                                                                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                        |                                                                                       |
|  |  |  |  |

## H10A metal hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                   | Metr.                                                    | PG                           | Type                                                                                                                                                 | Part Number                                                                                                                                          |       |      |                                                            |              |                                                                                       |                                                                                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|    |                                                                                                                                  | M20<br>M25                                               | PG16<br>PG21                 | H10A-TS-PG16<br>H10A-TS-PG21<br>H10A-TS-M20<br>H10A-TS-M25                                                                                           | T1319100116-000<br>T1319100121-000<br>T1319100120-000<br>T1319100125-000                                                                             |       |      |                                                            |              |                                                                                       |                                                                                             |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|    |                                                                                                                                  | M20<br>M25                                               | PG16<br>PG21                 | H10A-TG-PG16<br>H10A-TG-PG21<br>H10A-TG-M20<br>H10A-TG-M25                                                                                           | T1329100116-000<br>T1329100121-000<br>T1329100120-000<br>T1329100125-000                                                                             |       |      |                                                            |              |                                                                                       |                                                                                             |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|    |                                                                                                                                                                                                                   | With plastic rope                                        |                              | H10A-KDT                                                                                                                                             | T1019101101-000<br>T1019101201-000                                                                                                                   |       |      |                                                            |              |                                                                                       |                                                                                             |
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|  |                                                                                                                                |                                                          |                              | H10A-AGS<br>H10A-ADMS                                                                                                                                | T1509101000-000<br>T1519101000-000                                                                                                                   |       |      |                                                            |              |                                                                                       |                                                                                             |
|  | With protection cover<br>                                                                                                      |                                                          |                              | H10A-ADMS                                                                                                                                            | T1519101000-000                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|  |                                                                                                                                | 1 Side entry<br>M20<br>M25<br>2 Side entry<br>M20<br>M25 | PG16<br>PG21<br>PG16<br>PG21 | H10A-SGRS-PG16<br>H10A-SGRS-PG21<br>H10A-SGRS-M20<br>H10A-SGRS-M25<br>H10A-SGRS-2PG16<br>H10A-SGRS-2PG21<br>H10A-SGRS-2M20<br>H10A-SGRS-2M25         | T1619101116-000<br>T1619101121-000<br>T1619101120-000<br>T1619101125-000<br>T1619101216-000<br>T1619101221-000<br>T1619101220-000<br>T1619101225-000 |       |      |                                                            |              |                                                                                       |                                                                                             |
|  | With protection cover<br>                                                                                                      | 1 Side entry<br>M20<br>M25<br>2 Side entry<br>M20<br>M25 | PG16<br>PG21<br>PG16<br>PG21 | H10A-SDRMS-PG16<br>H10A-SDRMS-PG21<br>H10A-SDRMS-M20<br>H10A-SDRMS-M25<br>H10A-SDRMS-2PG16<br>H10A-SDRMS-2PG21<br>H10A-SDRMS-2M20<br>H10A-SDRMS-2M25 | T1629101116-000<br>T1629101121-000<br>T1629101120-000<br>T1629101125-000<br>T1629101216-000<br>T1629101221-000<br>T1629101220-000<br>T1629101225-000 |       |      |                                                            |              |                                                                                       |                                                                                             |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|  | <table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>52.6</td></tr><tr><td>Hight</td><td>66.6</td></tr></table>  | Construction                                             | H                            | Low                                                                                                                                                  | 52.6                                                                                                                                                 | Hight | 66.6 | Low construction<br>M20<br>M25<br>High construction<br>M25 | PG16<br>PG21 | H10A-TBFS-PG16<br>H10A-TBFS-M20<br>H10A-TBFS-M25<br>H10A-TBFHS-PG21<br>H10A-TBFHS-M25 | T1739101116-000<br>T1739101120-000<br>T1739101125-000<br>T1779101121-000<br>T1779101125-000 |
| Construction                                                                        | H                                                                                                                                                                                                                 |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
| Low                                                                                 | 52.6                                                                                                                                                                                                              |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
| Hight                                                                               | 66.6                                                                                                                                                                                                              |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |

HA.16 contact inserts

SCREW TERMINAL, SPRING CLAMP TERMINAL,  
CRIMP TERMINAL FOR SCREW MACHINED HE/HA CRIMP CONTACTS

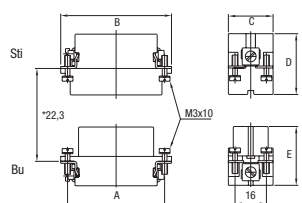
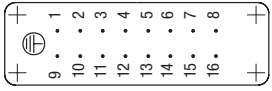
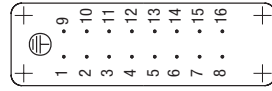
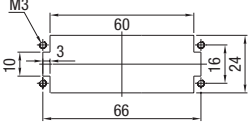
250V 16A

16+ 

| Description                                                                         |                                                                                     | Type                | Part Number     |                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|-----------------|-----------------|
| Male insert                                                                         | Female insert                                                                       |                     | Male insert     | Female insert   |
| Screw terminal                                                                      |                                                                                     |                     |                 |                 |
|    |    | HA-016-M            | T2010162101-000 |                 |
|                                                                                     |                                                                                     | HA-016-F            |                 | T2010162201-000 |
| Spring Clamp terminal                                                               |                                                                                     |                     |                 |                 |
|    |    | HA.16.Sti.SC.B 1-16 | 7-1103416-1     |                 |
|                                                                                     |                                                                                     | HA.16.Bu.SC.B 1-16  |                 | 7-1103417-1     |
| Crimp terminal                                                                      |                                                                                     |                     |                 |                 |
|  |  | HA-016-MC           | T2010164101-000 |                 |
|                                                                                     |                                                                                     | HA-016-FC           |                 | T2010164201-000 |

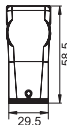
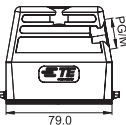
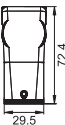
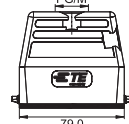
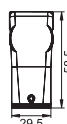
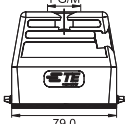
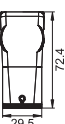
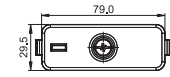
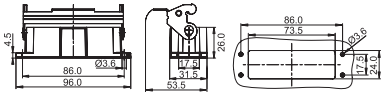
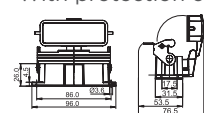
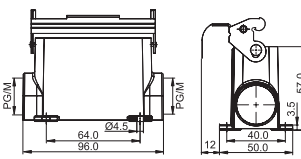
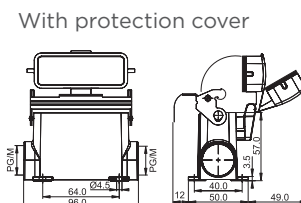
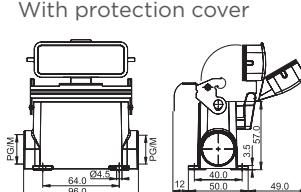
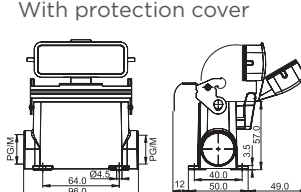
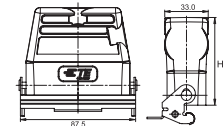
| Dimensions | A  | B  | C  | D  | E  |
|------------|----|----|----|----|----|
| mm         | 66 | 73 | 23 | 31 | 28 |

Suitable crimp contacts and crimping tools: see page 48

| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                      | Panel cut-out                                                                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                        |                                                                                       |
|  |  |  |  |

## H16A metal hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                     | Metr.                                                                             | PG                                                                                | Type                                                                              | Part Number                           |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|    | Low construction                                                                    |                                                                                   | High construction                                                                 |                                                                                   | Low construction<br>High construction | M20<br>M25<br><br>M25              | PG16<br>PG21<br><br>PG21                                                                                                                             | H16A-TS-PG16<br>H16A-TS-PG21<br>H16A-TS-M20<br>H16A-TS-M25<br><br>H16A-TSH-PG21<br>H16A-TSH-M25                                                      | T1319160116-000<br>T1319160121-000<br>T1319160120-000<br>T1319160125-000<br><br>T1339160121-000<br>T1339160125-000 |
|                                                                                     |    |  |  |  |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     | 79.0                                                                                | 29.5                                                                              | 79.0                                                                              | 29.5                                                                              |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     | 58.5                                                                                | 72.4                                                                              |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
| Hood: Top entry                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|    | Low construction                                                                    |                                                                                   | High construction                                                                 |                                                                                   | Low construction<br>High construction | M20<br>M25<br><br>M25              | PG16<br>PG21<br><br>PG21                                                                                                                             | H16A-TG-PG16<br>H16A-TG-PG21<br>H16A-TG-M20<br>H16A-TG-M25<br><br>H16A-TGH-PG21<br>H16A-TGH-M25                                                      | T1329160116-000<br>T1329160121-000<br>T1329160120-000<br>T1329160125-000<br><br>T1349160121-000<br>T1349160125-000 |
|                                                                                     |    |  |  |  |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     | 79.0                                                                                | 29.5                                                                              | 79.0                                                                              | 29.5                                                                              |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     | 58.5                                                                                | 72.4                                                                              |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
| Protection covers for hoods                                                         |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|   |   |                                                                                   | with plastic rope                                                                 |                                                                                   | H16A-KDT                              | T1019161101-000<br>T1019161201-000 |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
| Bulkhead mounted                                                                    |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|  |  |                                                                                   |                                                                                   |                                                                                   |                                       |                                    | H16A-AGS<br><br>H16A-ADS<br>H16A-ADMS                                                                                                                | T1509161000-000<br><br>T1519162000-000<br>T1519161000-000                                                                                            |                                                                                                                    |
|                                                                                     | With protection cover                                                               |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     |  |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
| Surface mounted: Side entry                                                         |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|  |  |                                                                                   | 1 Side entry                                                                      |                                                                                   | M20<br>M25<br><br>M20<br>M25          | PG16<br>PG21<br><br>PG16<br>PG21   | H16A-SGRS-PG16<br>H16A-SGRS-PG21<br>H16A-SGRS-M20<br>H16A-SGRS-M25<br>H16A-SGRS-2PG16<br>H16A-SGRS-2PG21<br>H16A-SGRS-2M20<br>H16A-SGRS-2M25         | T1619161116-000<br>T1619161121-000<br>T1619161120-000<br>T1619161125-000<br>T1619161216-000<br>T1619161221-000<br>T1619161220-000<br>T1619161225-000 |                                                                                                                    |
|                                                                                     | 2 Side entry                                                                        |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     | With protection cover                                                               |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     |  |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|  |  |                                                                                   | 1 Side entry                                                                      |                                                                                   | M20<br>M25<br><br>M20<br>M25          | PG16<br>PG21<br><br>PG16<br>PG21   | H16A-SDRMS-PG16<br>H16A-SDRMS-PG21<br>H16A-SDRMS-M20<br>H16A-SDRMS-M25<br>H16A-SDRMS-2PG16<br>H16A-SDRMS-2PG21<br>H16A-SDRMS-2M20<br>H16A-SDRMS-2M25 | T1629161116-000<br>T1629161121-000<br>T1629161120-000<br>T1629161125-000<br>T1629161216-000<br>T1629161221-000<br>T1629161220-000<br>T1629161225-000 |                                                                                                                    |
|                                                                                     | 2 Side entry                                                                        |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     | With protection cover                                                               |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     |  |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
| Cable-to-cable hood                                                                 |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|  |  |                                                                                   | Low construction                                                                  |                                                                                   | M20<br>M25<br><br>M25                 | PG16<br><br><br>PG21               | H16A-TBFS-PG16<br>H16A-TBFS-M20<br>H16A-TBFS-M25<br>H16A-TBFHS-PG21<br>H16A-TBFHS-M25                                                                | T1739161116-000<br>T1739161120-000<br>T1739161125-000<br>T1779161121-000<br>T1779161125-000                                                          |                                                                                                                    |
|                                                                                     | High construction                                                                   |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |
|                                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                       |                                    |                                                                                                                                                      |                                                                                                                                                      |                                                                                                                    |

HA.32 contact inserts

SCREW TERMINAL, SPRING CLAMP TERMINAL,  
CRIMP TERMINAL FOR SCREW MACHINED HE/HA CRIMP CONTACT

250V 16A

(2x16) 32+ ⚡

| Description           |               | Type                                        | Part Number                        |                                    |
|-----------------------|---------------|---------------------------------------------|------------------------------------|------------------------------------|
| Male insert           | Female insert |                                             | Male insert                        | Female insert                      |
| Screw terminal        |               |                                             |                                    |                                    |
|                       |               | HA-016-M(1-16)<br>HA-016-M(17-32)           | T2010162101-000<br>T2010322101-000 |                                    |
|                       |               | HA-016-F(1-16)<br>HA-016-F(17-32)           |                                    | T2010162201-000<br>T2010322201-000 |
| Spring Clamp terminal |               |                                             |                                    |                                    |
|                       |               | HA.16.Sti.SC.B 1-16<br>HA.16.Sti.SC.B 17-32 | 7-1103416-1<br>7-1103416-7         |                                    |
|                       |               | HA.16.Bu.SC.B 1-16<br>HA.16.Bu.SC.B 17-32   |                                    | 7-1103417-1<br>7-1103417-7         |
| Crimp terminal        |               |                                             |                                    |                                    |
|                       |               | HA-016-MC(1-16)<br>HA-016-MC(17-32)         | T2010164101-000<br>T2010324101-000 |                                    |
|                       |               | HA-016-FC(1-16)<br>HA-016-FC(17-32)         |                                    | T2010164201-000<br>T2010324201-000 |

| Dimensions | A  | B  | C  | D  | E  |
|------------|----|----|----|----|----|
| mm         | 66 | 73 | 23 | 31 | 28 |

Suitable crimp contacts and crimping tools: see page 48

| Dimensions (mm) | Contact arrangement |               |
|-----------------|---------------------|---------------|
|                 | Male insert         | Female insert |
|                 |                     |               |

POWDER-COATED, RAL 7037

42

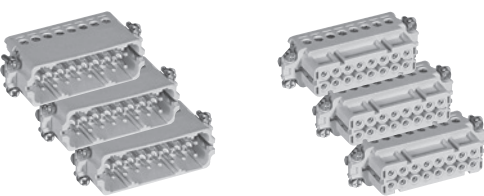
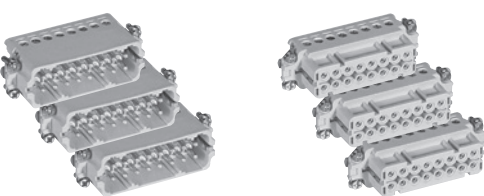
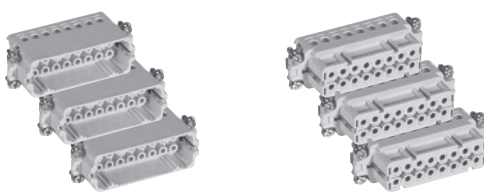


HA.48 contact inserts

SCREW TERMINAL, SPRING CLAMP TERMINAL,  
CRIMP TERMINAL FOR SCREW MACHINED HE/HA CRIMP CONTACT

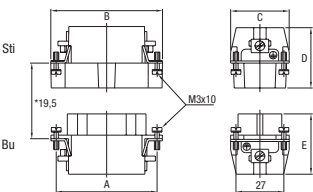
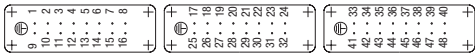
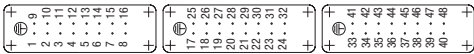
250V 16A

(3x16) 48+ Ⓢ

| Description                                                                         |               | Type                                                                | Part Number                               |                                           |
|-------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------|-------------------------------------------|-------------------------------------------|
| Male insert                                                                         | Female insert |                                                                     | Male insert                               | Female insert                             |
| Screw terminal                                                                      |               |                                                                     |                                           |                                           |
|    |               | HA.16.Sti.S.B 1-16<br>HA.16.Sti.S.B 17-32<br>HA.16.Sti.S.B 33-48    | 1-1103416-1<br>1-1103416-7<br>1-1103416-8 |                                           |
|                                                                                     |               | HA.16.Bu.S.B 1-16<br>HA.16.Bu.S.B 17-32<br>HA.16.Bu.S.B 33-48       |                                           | 1-1103417-1<br>1-1103417-7<br>1-1103417-8 |
| Spring Clamp terminal                                                               |               |                                                                     |                                           |                                           |
|   |               | HA.16.Sti.SC.B 1-16<br>HA.16.Sti.SC.B 17-32<br>HA.16.Sti.SC.B 33-48 | 7-1103416-1<br>7-1103416-7<br>7-1103416-8 |                                           |
|                                                                                     |               | HA.16.Bu.SC.B 1-16<br>HA.16.Bu.SC.B 17-32<br>HA.16.Bu.SC.B 33-48    |                                           | 7-1103417-1<br>7-1103417-7<br>7-1103417-8 |
| Crimp terminal                                                                      |               |                                                                     |                                           |                                           |
|  |               | HA.16.Sti.C.B 1-16<br>HA.16.Sti.C.B 17-32<br>HA.16.Sti.C.B 33-48    | 2-1103416-3<br>2-1103416-7<br>2-1103416-8 |                                           |
|                                                                                     |               | HA.16.Bu.C.B 1-16<br>HA.16.Bu.C.B 17-32<br>HA.16.Bu.C.B 33-48       |                                           | 2-1103417-3<br>2-1103417-7<br>2-1103417-8 |

| Dimensions | A    | B    | C  | D  | E  |
|------------|------|------|----|----|----|
| mm         | 77.5 | 83.5 | 33 | 34 | 35 |

Suitable crimp contacts and crimping tools: see page 48

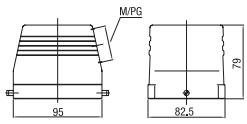
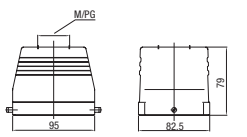
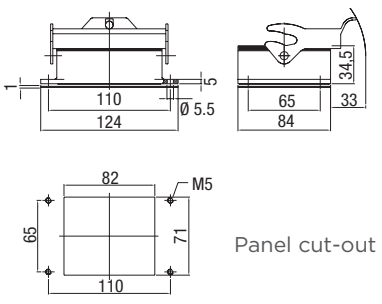
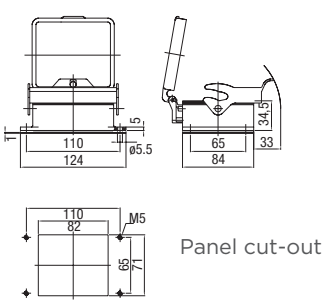
| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                         |
|  |  |  |

## HA.48 housings

POWDER-COATED, SILVER-GREY

### Side clip at housing bottom

IP 65

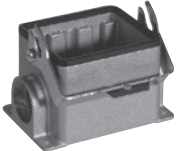
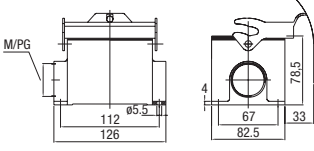
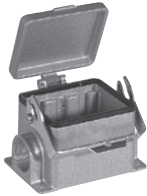
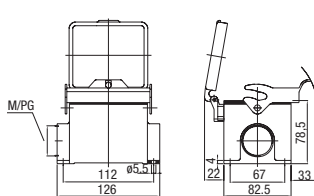
| Description                                                                                                                                                             | Metr. | PG | Type                                        | Part Number                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----|---------------------------------------------|----------------------------|
| Hood: Side entry, Standard construction                                                                                                                                 |       |    |                                             |                            |
|       | M32   | 29 | HA.48.STS-GR.1.29.G<br>HA.48.STS-GR.1.M32.G | 1-1102172-7<br>0-1102877-1 |
| Hood: Top entry, Standard construction                                                                                                                                  |       |    |                                             |                            |
|       | M32   | 29 | HA.48.STO-GR.1.29.G<br>HA.48.STO-GR.1.M32.G | 1-1102175-7<br>0-1102877-2 |
| Surface mounted housing: Bottom entry                                                                                                                                   |       |    |                                             |                            |
|     |       |    | HA.48.AG-LB                                 | 1-1102176-2                |
| Surface mounted housing with covers: Bottom entry                                                                                                                       |       |    |                                             |                            |
|   |       |    | HA.48.AGD-LB                                | 1-1102177-2                |

## HA.48 housings

POWDER-COATED, SILVER-GREY

Side clip at housing bottom

IP 65

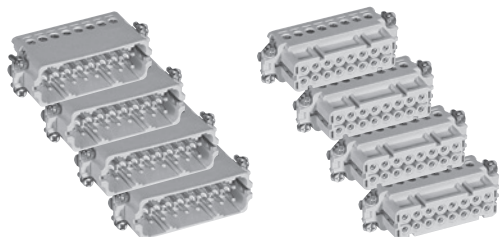
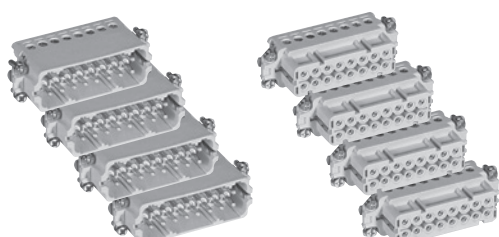
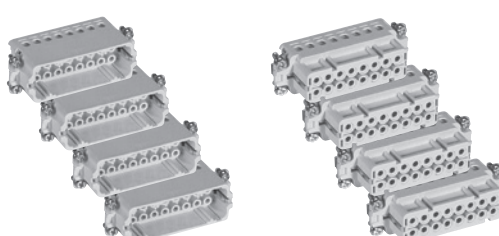
| Description                                                                                                                                                         | Metr.        | PG         | Type                                                                                       | Part Number                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Surface mounted housing: Side entry, Standard construction                                                                                                          |              |            |                                                                                            |                                                          |
|   |              | 29<br>2x29 | HA.48.SG-LB.1.29.Z<br>HA.48.SG-LB.2.29.Z                                                   | 1-1102179-2<br>1-1102181-2                               |
| Surface mounted housing: Side entry, Standard construction                                                                                                          |              |            |                                                                                            |                                                          |
|   | M32<br>2xM32 | 29<br>2x29 | HA.48.SGD-LB.1.29.Z<br>HA.48.SGD-LB.2.29.Z<br>HA.48.SGD-LB.1.M32.G<br>HA.48.SGD-LB.2.M32.G | 1-1102183-2<br>1-1102185-2<br>0-1102879-1<br>0-1102879-2 |

## HA.64 contact inserts

SCREW TERMINAL, SPRING CLAMP TERMINAL,  
CRIMP TERMINAL FOR SCREW MACHINED HE CRIMP CONTACTS

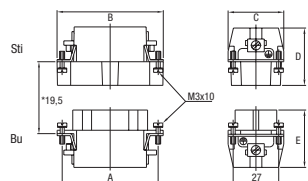
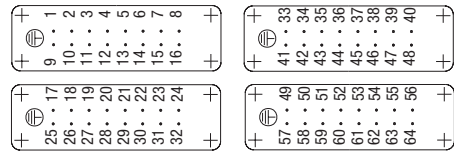
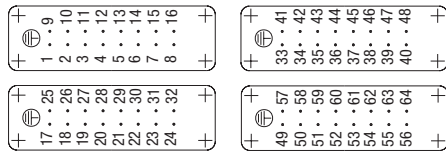
250V 16A

(4x16) 64+ Ⓢ

| Description                                                                         |               | Type                                                                                        | Part Number                                              |                                                          |
|-------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|
| Male insert                                                                         | Female insert |                                                                                             | Male insert                                              | Female insert                                            |
| Screw terminal                                                                      |               |                                                                                             |                                                          |                                                          |
|    |               | HA.16.Sti.S.B 1-16<br>HA.16.Sti.S.B 17-32<br>HA.16.Sti.S.B 33-48<br>HA.16.Sti.S.B 49-64     | 1-1103416-1<br>1-1103416-7<br>1-1103416-8<br>1-1103416-9 |                                                          |
|                                                                                     |               | HA.16.Bu.S.B 1-16<br>HA.16.Bu.S.B 17-32<br>HA.16.Bu.S.B 33-48<br>HA.16.Bu.S.B 49-64         |                                                          | 1-1103417-1<br>1-1103417-7<br>1-1103417-8<br>1-1103417-9 |
| Spring Clamp terminal                                                               |               |                                                                                             |                                                          |                                                          |
|   |               | HA.16.Sti.SC.B 1-16<br>HA.16.Sti.SC.B 17-32<br>HA.16.Sti.SC.B 33-48<br>HA.16.Sti.SC.B 49-64 | 7-1103416-1<br>7-1103416-7<br>7-1103416-8<br>7-1103416-9 |                                                          |
|                                                                                     |               | HA.16.Bu.SC.B 1-16<br>HA.16.Bu.SC.B 17-32<br>HA.16.Bu.SC.B 33-48<br>HA.16.Bu.SC.B 49-64     |                                                          | 7-1103417-1<br>7-1103417-7<br>7-1103417-8<br>7-1103417-9 |
| Crimp terminal                                                                      |               |                                                                                             |                                                          |                                                          |
|  |               | HA.16.Sti.C.B 1-16<br>HA.16.Sti.C.B 17-32<br>HA.16.Sti.C.B 33-48<br>HA.16.Sti.C.B 49-64     | 2-1103416-3<br>2-1103416-7<br>2-1103416-8<br>2-1103416-9 |                                                          |
|                                                                                     |               | HA.16.Bu.C.B 1-16<br>HA.16.Bu.C.B 17-32<br>HA.16.Bu.C.B 33-48<br>HA.16.Bu.C.B 49-64         |                                                          | 2-1103417-3<br>2-1103417-7<br>2-1103417-8<br>2-1103417-9 |

| Dimensions | A    | B    | C  | D  | E  |
|------------|------|------|----|----|----|
| mm         | 77.5 | 83.5 | 33 | 34 | 35 |

Suitable crimp contacts and crimping tools: see page 48

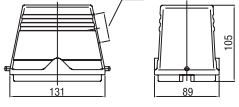
| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                         |
|  |  |  |

## HA.64 housings

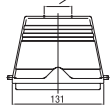
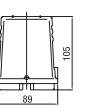
POWDER-COATED, SILVER-GREY

### Side clip at housing bottom

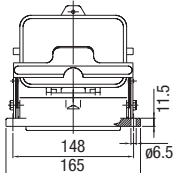
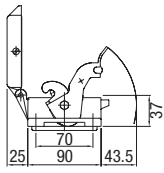
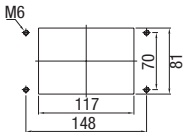
IP 65

| Description                                                                       | Metr.                                                                             | PG  | Type | Part Number          |             |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----|------|----------------------|-------------|
| Hood: Side entry, Standard construction                                           |                                                                                   |     |      |                      |             |
|  |  | M50 | 29   | HA.64.STS-GR.1.29.G  | 1-1102002-7 |
|                                                                                   |                                                                                   |     | 36   | HA.64.STS-GR.1.36.G  | 1-1102005-7 |
|                                                                                   |                                                                                   |     | 42   | HA.64.STS-GR.1.42.G  | 1-1102008-7 |
|                                                                                   |                                                                                   |     |      | HA.64.STS-GR.1.M50.G | 0-1106480-2 |

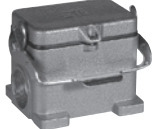
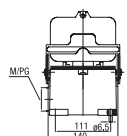
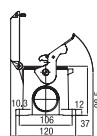
### Hood: Top entry, Standard construction

|                                                                                   |                                                                                                                                                                     |     |    |                      |             |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----------------------|-------------|
|  |   | M50 | 29 | HA.64.STO-GR.1.29.G  | 1-1102027-7 |
|                                                                                   |                                                                                                                                                                     |     | 36 | HA.64.STO-GR.1.36.G  | 1-1102030-7 |
|                                                                                   |                                                                                                                                                                     |     | 42 | HA.64.STO-GR.1.42.G  | 1-1102033-7 |
|                                                                                   |                                                                                                                                                                     |     |    | HA.64.STO-GR.1.M50.G | 0-1106480-1 |

### Surface mounted housing: Bottom entry, Standard construction

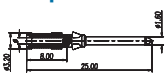
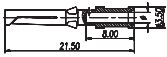
|                                                                                    |                                                                                                                                                                       |  |  |              |             |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--------------|-------------|
|  |   |  |  | HA.64.AGD-LB | 1-1102009-2 |
|                                                                                    |  <p>Panel cut-out</p>                                                              |  |  |              |             |
|                                                                                    |                                                                                                                                                                       |  |  |              |             |

### Surface mounted housing: Side entry, Standard construction

|                                                                                     |                                                                                                                                                                         |       |      |                      |             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|----------------------|-------------|
|  |   | 2xM40 | 29   | HA.64.SGD-LB.1.29.Z  | 1-1102011-2 |
|                                                                                     |                                                                                                                                                                         |       | 2x29 | HA.64.SGD-LB.2.29.Z  | 1-1102013-2 |
|                                                                                     |                                                                                                                                                                         |       | 36   | HA.64.SGD-LB.1.36.Z  | 1-1102015-2 |
|                                                                                     |                                                                                                                                                                         |       | 2x36 | HA.64.SGD-LB.2.36.Z  | 1-1102017-2 |
|                                                                                     |                                                                                                                                                                         |       |      | HA.64.SGD-LB.2.M40.Z | 0-1106479-1 |

## Crimp contacts HN.D series

### 10A Contact

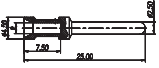
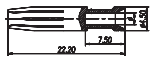
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male<br>crimp contacts<br> | Wire gauge      |       | Strip-<br>ping<br>length<br>mm | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                 | mm <sup>2</sup> | AWG   |                                | Type                          | Part Number     | Type                        | Part Number     |
|                                                     |                                | 0.14-0.37       | 26-22 | 8.0                            | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                      |                                                                                                                 | 0.5             | 20    | 8.0                            | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                      |                                                                                                                 | 0.75            | 18    | 8.0                            | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                      |                                                                                                                 | 1.0             | 18    | 8.0                            | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                      |                                                                                                                 | 1.5             | 16    | 8.0                            | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                      |                                                                                                                 | 2.5             | 14    | 6.0                            | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                      |                                                                                                                 |                 |       |                                |                               |                 |                             |                 |
| CDF/Female<br>                                      |                                                                                                                 | 0.14-0.37       | 26-22 | 8.0                            | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                      |                                                                                                                 | 0.5             | 20    | 8.0                            | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                      |                                                                                                                 | 0.75            | 18    | 8.0                            | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                      |                                                                                                                 | 1.0             | 18    | 8.0                            | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                      |                                                                                                                 | 1.5             | 16    | 8.0                            | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                      |                                                                                                                 | 2.5             | 14    | 6.0                            | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |
|                                                                                                                                      |                                                                                                                 |                 |       |                                |                               |                 |                             |                 |

## Crimping tools HN.D series

| Description                                                                                                                          |                                                                                     | Type            | Part Number     |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-----------------|
| <b>Crimp tool</b><br><br>Wire range: 0.5-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts                          |  | CRIMPBOX-0.5/4  | T3100000001-000 |
| <b>Crimp tool</b><br><br>Wire range: 0.14-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts<br>with locator and die |  | RSZ.HE-HN.D-HVT | 1-1105851-8     |
| <b>Removal tools</b><br><br>Used for CDM/CDF<br>contact series                                                                       |  | REMOV-HD        | T3100000003-000 |
| <b>M3 screw driver</b><br><br>Used for HA/HE inserts                                                                                 |  | SCREWD-M3       | T3100000009-000 |

## Crimp contacts HE/HA series

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length<br>mm | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                   | mm <sup>2</sup> | AWG   |                                | Type                          | Part Number     | Type                        | Part Number     |
|                                                     |                                                                                                                   | 0.14-0.37       | 26-22 | 7.5                            | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                      |                                                                                                                   | 0.5             | 20    | 7.5                            | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                      |                                                                                                                   | 0.75            | 18    | 7.5                            | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                      |                                                                                                                   | 1.0             | 18    | 7.5                            | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                      |                                                                                                                   | 1.5             | 16    | 7.5                            | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                      |                                                                                                                   | 2.5             | 14    | 7.5                            | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                      |                                                                                                                   | 4.0             | 12    | 7.5                            | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                      |                                                                                                                   |                 |       |                                |                               |                 |                             |                 |
| CEF/Female<br>                                      | 16A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5                            | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                      |                                                                                                                   | 0.5             | 20    | 7.5                            | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                      |                                                                                                                   | 0.75            | 18    | 7.5                            | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                      |                                                                                                                   | 1.0             | 18    | 7.5                            | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                      |                                                                                                                   | 1.5             | 16    | 7.5                            | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                      |                                                                                                                   | 2.5             | 14    | 7.5                            | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                      |                                                                                                                   | 4.0             | 12    | 7.5                            | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |
|                                                                                                                                      |                                                                                                                   |                 |       |                                |                               |                 |                             |                 |

## Crimping tools HE/HA series

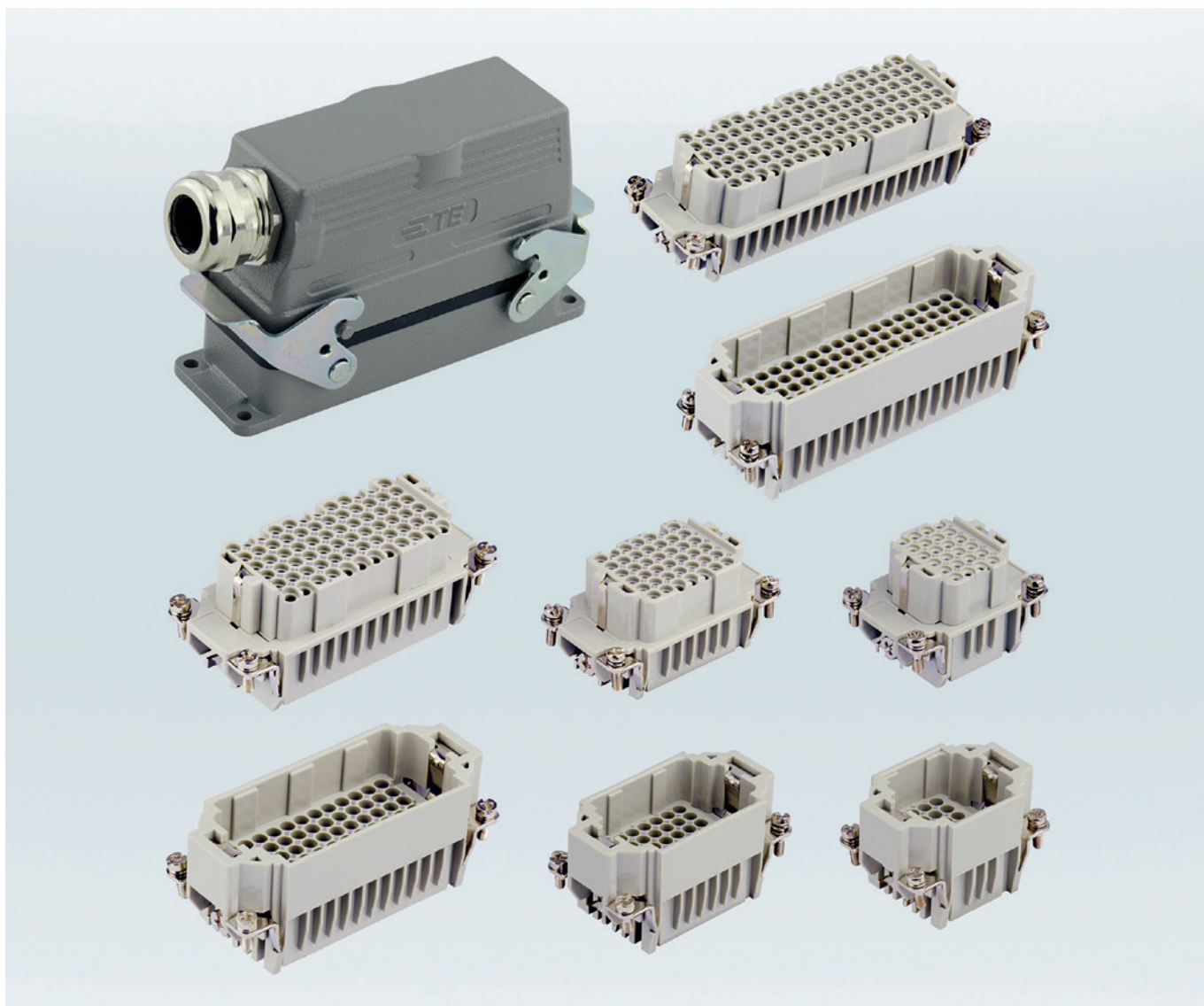
| Description                                                                                                                          |                                                                                     | Type            | Part Number     |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-----------------|
| <b>Crimp tool</b><br><br>Wire range: 0.5-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts                          |  | CRIMPBOX-0.5/4  | T3100000001-000 |
| <b>Crimp tool</b><br><br>Wire range: 0.14-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts<br>with locator and die |  | RSZ.HE-HN.D-HVT | 1-1105851-8     |
| <b>Removal tools</b><br><br>Used for CEM/CEF<br>contact series                                                                       |  | REMOV-HEE       | T3100000002-000 |
| <b>M3 screw driver</b><br><br>Used for HA/HE inserts                                                                                 |  | SCREWD-M3       | T3100000009-000 |

## Notes

[illegible]



## HD, HDD Series



### 1. Specifications

DIN VDE 0110 Concerning clearance and creepage distances

DIN VDE 0627 Connectors and plug devices

### 2. Standards

DIN EN 175 301-801

DIN EN 61984

### 3. Approvals



## HD technical characteristics

|                          |                           |
|--------------------------|---------------------------|
| Specifications .....     | DIN VDE 0627              |
| .....                    | DIN VDE 0110              |
| Standards .....          | DIN 43 652                |
| .....                    | CECC 75 301-801           |
| Number of contacts ..... | 7,8,15,25,40,50(2x25),64, |
| .....                    | 80(2x40),128(2x64) + PE   |

### INSERTS

|                                            |                               |
|--------------------------------------------|-------------------------------|
| Working current .....                      | 10A max                       |
| (See current carrying capacity)            |                               |
| Working voltage .....                      | (8D is 50V)                   |
| .....                                      | 250V, Insulation group C      |
| Test voltage urms .....                    | 4KV(8D is 0.8KV)              |
| Pollution degree .....                     | 2                             |
| Insulation resistance .....                | $\geq 10^{10} \Omega$         |
| Material .....                             | Polycarbonate or Polybutylece |
| Temperature range .....                    | -40°C... +100°C/125°C         |
| Flammability acc. to UL94 .....            | V0                            |
| Working voltage acc. to UL/CSA.....        | 600V                          |
| Mechanical working life-mating cycles..... | $\geq 500$                    |

### CONTACTS

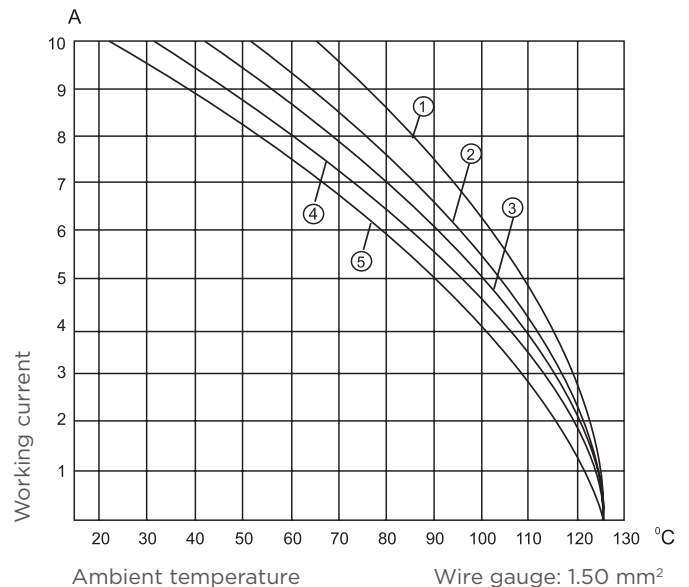
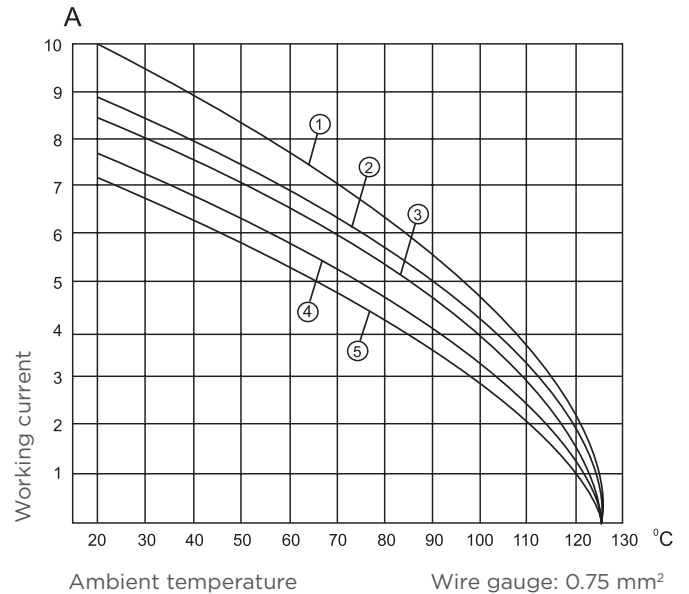
|                          |                         |
|--------------------------|-------------------------|
| Material .....           | Copper alloy            |
| Surface .....            | Hard silver-plated      |
| .....                    | Hard gold-plated        |
| Contact resistance ..... | $\leq 3m\Omega$         |
| Terminal .....           | Crimp terminal          |
| .....                    | Rolled terminal         |
| - mm <sup>2</sup> .....  | 0.15-2.5mm <sup>2</sup> |
| - AWG .....              | 26-14                   |

### HOODS/HOUSINGS

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element.....                         | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.



- 1 HD-007
- 2 HD-015
- 3 HD-025
- 4 HD-040
- 5 HD-064

## HDD technical characteristics

|                          |                       |
|--------------------------|-----------------------|
| Specifications .....     | DIN EN 60 664-1       |
| .....                    | DIN EN 61 984         |
| Number of contacts ..... | 16,24,42,72,84(2x42), |
| .....                    | 144(2x72) + PE        |

### INSERTS

|                                            |                          |
|--------------------------------------------|--------------------------|
| Working current .....                      | 10A max                  |
| (See current carrying capacity)            |                          |
| Working voltage .....                      | 250V, Insulation group C |
| Test voltage urms .....                    | 2.5KV                    |
| Pollution degree .....                     | 2                        |
| Insulation resistance .....                | $\geq 10^{10}\Omega$     |
| Material .....                             | Polycarbonate            |
| Temperature range .....                    | -40°C... +100°C/125°C    |
| Flammability acc. to UL94 .....            | V0                       |
| Working voltage acc. to UL/CSA.....        | 500V                     |
| Mechanical working life-mating cycles..... | $\geq 500$               |

### CONTACTS

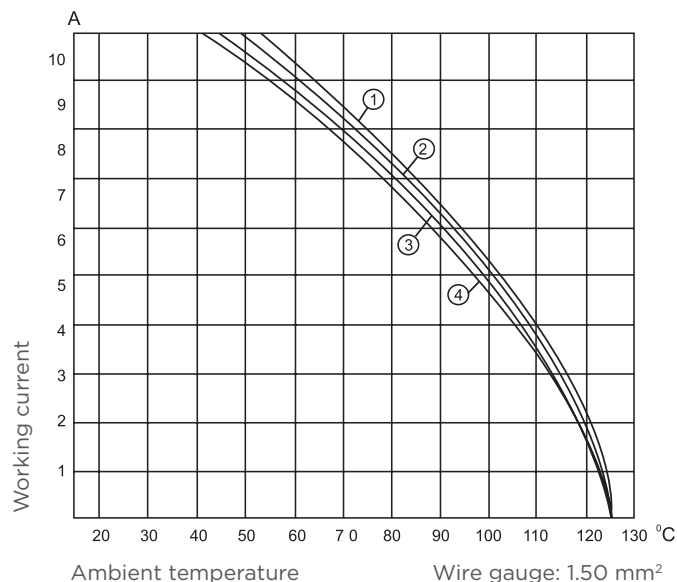
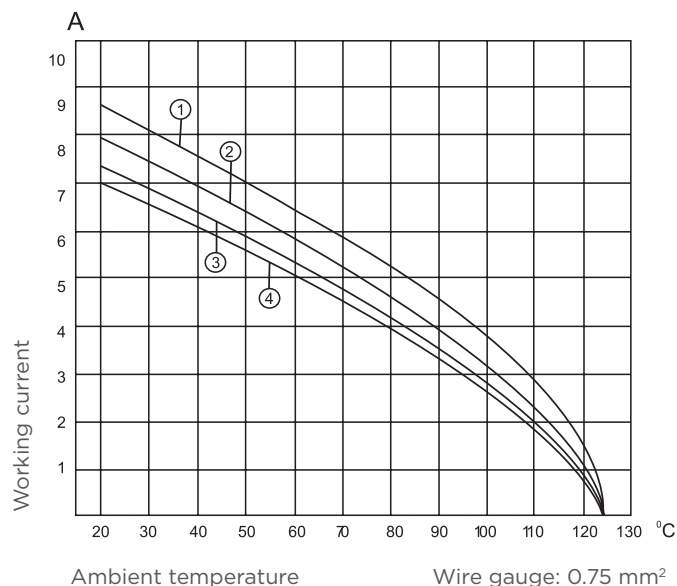
|                          |                         |
|--------------------------|-------------------------|
| Material .....           | Copper alloy            |
| Surface .....            | Hard silver-plated      |
| .....                    | Hard gold-plated        |
| Contact resistance ..... | $\leq 3m\Omega$         |
| Terminal .....           | Crimp terminal          |
| .....                    | Rolled terminal         |
| - mm <sup>2</sup> .....  | 0.14-2.5mm <sup>2</sup> |
| - AWG .....              | 26-14                   |

### HOODS/HOUSINGS

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element.....                         | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

## CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
Control and test procedures according to DIN IEC 60512-3.



- 1 HDD-024
- 2 HDD-042
- 3 HDD-072
- 4 HDD-108

## HD, HDD series

### MODIFIED CONTACT ARRANGEMENT

The connector series HDD and HD equipped with all contacts may be used for voltages up to 250V-insulation group C. A modified contact loading arrangement permits use up to 500V-also in insulation group C.

|                                        | Contact arrangement view from termination side |                 |              |               |
|----------------------------------------|------------------------------------------------|-----------------|--------------|---------------|
|                                        | Working contact                                | Without contact | Male insert  | Female insert |
| Series HDD<br>380V-Insulation group C  | <p>12 + </p>                                   | <p>21 + </p>    | <p>34 + </p> | <p>52 + </p>  |
| 500V-Insulation group C                | <p>5 + </p>                                    | <p>11 + </p>    | <p>17 + </p> | <p>26 + </p>  |
| Series HD<br>500V ~ Pollution degree 3 | <p>3 + </p>                                    | <p>7 + </p>     | <p>11 + </p> | <p>20 + </p>  |
|                                        |                                                |                 |              | <p>32 + </p>  |

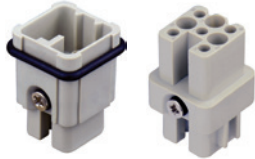
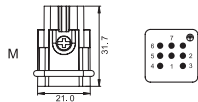
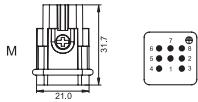
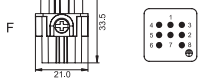
## HD-007/008 inserts

INSERTS FOR H3A HOOD/HOUSING

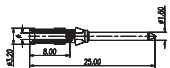
250V/50V 10A

7+ (⊕)

8

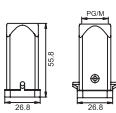
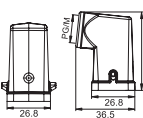
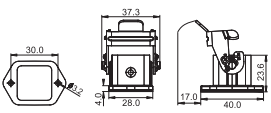
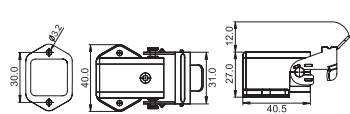
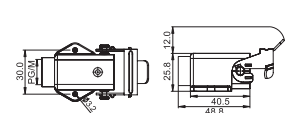
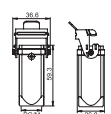
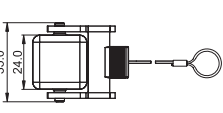
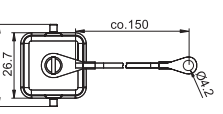
| Dimensions (mm)                                                                               | Contact arrangement view from termination side                                                                                                                          | Part Number     |                 | Type     |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|----------|
|                                                                                               |                                                                                                                                                                         | Male insert     | Female insert   |          |
| 250V/10A<br> | <br>  | T2020072101-000 |                 | HD-007-M |
|                                                                                               |                                                                                                                                                                         |                 | T2020072201-000 | HD-007-F |
| 50V/10A<br> | <br> | T2020082101-000 |                 | HD-008-M |
|                                                                                               |                                                                                                                                                                         |                 | T2020082201-000 | HD-008-F |

### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male<br> | 10A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                             |                                                                                                                     | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
| CDF/Female<br>                                                                                                                           | 10A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 8.0                      | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 0.5             | 20    | 8.0                      | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 0.75            | 18    | 8.0                      | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 1.0             | 18    | 8.0                      | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 1.5             | 16    | 8.0                      | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 2.5             | 14    | 6.0                      | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 0.14-0.37       | 26-22 | 8.0                      | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 0.5             | 20    | 8.0                      | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 0.75            | 18    | 8.0                      | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 1.0             | 18    | 8.0                      | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 1.5             | 16    | 8.0                      | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 2.5             | 14    | 6.0                      | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

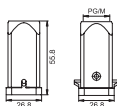
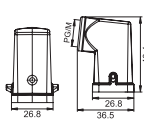
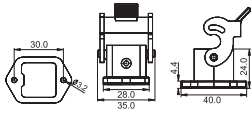
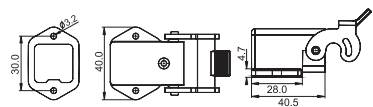
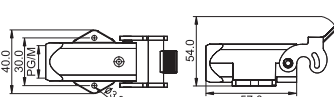
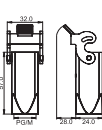
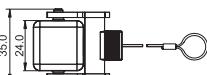
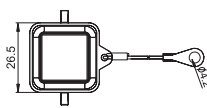
## H3A metal hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                     | Metr.                                                                               | PG   | Type                                             | Part Number                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|--------------------------------------------------|-------------------------------------------------------|
| Top entry                                                                           |                                                                                     |                                                                                     |      |                                                  |                                                       |
|    |    | M20                                                                                 | PG11 | H3A-MTG-PG11<br>H3A-MTG-M20                      | T1329030111-000<br>T1329030120-000                    |
| Side entry                                                                          |                                                                                     |                                                                                     |      |                                                  |                                                       |
|    |    | M20                                                                                 | PG11 | H3A-MTS-PG11<br>H3A-MTS-M20                      | T1319030111-000<br>T1319030120-000                    |
| Bulkhead mounting: Bottom entry                                                     |                                                                                     |                                                                                     |      |                                                  |                                                       |
|    |    |                                                                                     |      | H3A-MAG                                          | T1509030000-000                                       |
| Bulkhead mounting: Side entry                                                       |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  |  |                                                                                     |      | H3A-MAGS                                         | T1549030000-000                                       |
| Surface mounting: Side entry                                                        |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  |  | M16<br>M20                                                                          | PG11 | H3A-MAGSV-PG11<br>H3A-MAGSV-M16<br>H3A-MAGSV-M20 | T1619030111-000<br>T1619030116-000<br>T1619030120-000 |
| Cable-to-cable hood:                                                                |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  |  | M20                                                                                 | PG11 | H3A-MTGVB-PG11<br>H3A-MTGVB-M20                  | T1739030111-000<br>T1739030120-000                    |
| Protection covers for hoods (thermoplastic)                                         |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  | Note: For mounted male insert and hood                                              |  |      | H3A-KDTP                                         | T1010031100-000                                       |
| Metal protection covers for hoods                                                   |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  | Note: For mounted female insert and hood                                            |  |      | H3A-KDB                                          | T1010033100-000                                       |

## H3A thermoplastic hoods/housings

### THERMOPLASTIC HOODS, HOUSINGS

| Dimensions (mm)                                                                                      |                                                                                     | Metr.                                                                               | PG   | Type                                          | Part Number                                           |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|-----------------------------------------------|-------------------------------------------------------|
| Top entry                                                                                            |                                                                                     |                                                                                     |      |                                               |                                                       |
|                     |    | M20                                                                                 | PG11 | H3A-TG-PG11<br>H3A-TG-M20                     | T1329031111-000<br>T1329031120-000                    |
| Side entry                                                                                           |                                                                                     |                                                                                     |      |                                               |                                                       |
|                     |    | M20                                                                                 | PG11 | H3A-TS-PG11<br>H3A-TS-M20                     | T1319031111-000<br>T1319031120-000                    |
| Bulkhead mounting: Bottom entry                                                                      |                                                                                     |                                                                                     |      |                                               |                                                       |
|                     |    |                                                                                     |      | H3A-AG                                        | T1509031100-000                                       |
| Bulkhead mounting: Side entry                                                                        |                                                                                     |                                                                                     |      |                                               |                                                       |
|                   |  |                                                                                     |      | H3A-AGS                                       | T1509031111-000                                       |
| Surface mounting: Side entry                                                                         |                                                                                     |                                                                                     |      |                                               |                                                       |
|                   |  | M16<br>M20                                                                          | PG11 | H3A-AGSV-PG11<br>H3A-AGSV-M16<br>H3A-AGSV-M20 | T1619031111-000<br>T1619031116-000<br>T1619031120-000 |
| Cable-to-cable hood:                                                                                 |                                                                                     |                                                                                     |      |                                               |                                                       |
|                   |  | M20                                                                                 | PG11 | H3A-TGVB-PG11<br>H3A-TGVB-M20                 | T1739031111-000<br>T1739031120-000                    |
| Protection covers for hoods (thermoplastic)                                                          |                                                                                     |                                                                                     |      |                                               |                                                       |
|                   | Note: For mounted male insert and hood                                              |  |      | H3A-KDTP                                      | T1010031100-000                                       |
| Protection covers for hoods                                                                          |                                                                                     |                                                                                     |      |                                               |                                                       |
| <br>White    Grey | Note: For mounted female insert and hood                                            |  |      | H3A-KDBP (White)<br>H3A-KDBPG (Grey)          | T1010032100-000<br>T1010032300-000                    |
| Covers without sealing type                                                                          |                                                                                     |                                                                                     |      |                                               |                                                       |
|                                                                                                      |                                                                                     |                                                                                     |      | H3A-KDBP (White)<br>H3A-KDBP (Grey)           | T1010033200-000<br>T1010032200-000                    |



## HIP.3/4, HIP-K.3/4, EMV-K.3/4 housings

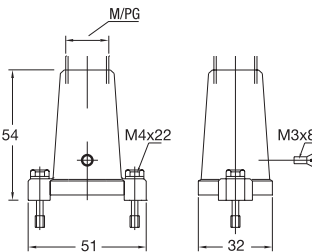
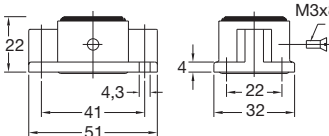
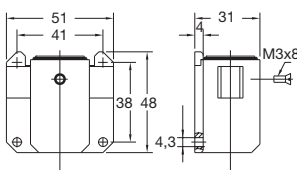
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                                                            | PG         | Type | Part Number                                                                                                                             |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Top entry                                                                     |                                                                                                                  |            |      |                                                                                                                                         |
|    |                                 | M16        | 11   | <b>HIP</b><br>HIP.3/4.ST0.1.11.G<br>HIP.3/4.ST0.1.M16.G<br><br>1-1102600-5<br>0-1106408-1                                               |
|                                                                                     |                                                                                                                  | M16<br>M20 | 11   | <b>HIP-K</b><br>HIP-K.3/4.ST0.1.11.G<br>HIP-K.3/4.ST0.1.M16.G<br>HIP-K.3/4.ST0.1.M20.G<br><br>2-1102600-5<br>0-1106408-2<br>0-1106408-3 |
|                                                                                     |                                                                                                                  | M16<br>M20 | 11   | <b>EMV-K</b><br>EMV-K.3/4.ST0.1.11.G<br>EMV-K.3/4.ST0.1.M16.G<br>EMV-K.3/4.ST0.1.M20.G<br><br>4-1102700-5<br>0-1106402-2<br>0-1106402-3 |
| Surface mounted housing: Bottom entry                                               |                                                                                                                  |            |      |                                                                                                                                         |
|  | <br><br>Panel cut-out 21 x 21 |            |      | <b>HIP</b><br>HIP.3/4.AG<br><br>1-1102603-5                                                                                             |
|                                                                                     |                                                                                                                  |            |      | <b>HIP-K</b><br>HIP-K.3/4.AG<br><br>2-1102603-5                                                                                         |
|                                                                                     |                                                                                                                  |            |      | <b>EMV-K</b><br>EMV-K.3/4.AG<br><br>4-1102703-5                                                                                         |
| Surface mounted housing: Bottom entry (by panel cut-out)                            |                                                                                                                  |            |      |                                                                                                                                         |
|  | <br><br>Panel cut-out ø 20    |            |      | <b>HIP</b><br>HIP.3/4.SGF<br><br>1-1102602-5                                                                                            |
|                                                                                     |                                                                                                                  |            |      | <b>HIP-K</b><br>HIP-K.3/4.SGF<br><br>2-1102602-5                                                                                        |
|                                                                                     |                                                                                                                  |            |      | <b>EMV-K</b><br>EMV-K.3/4.SGF<br><br>4-1102702-5                                                                                        |



## HIP.3/4, HIP-K.3/4, EMV-K.3/4 housings

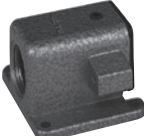
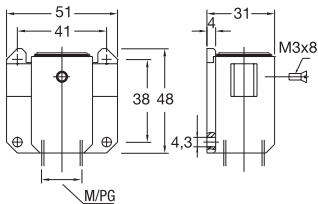
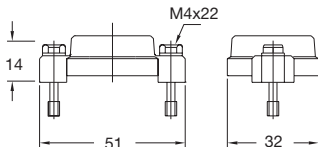
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

IP 68 / IP 69 K

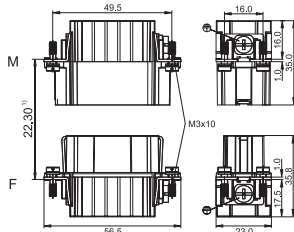
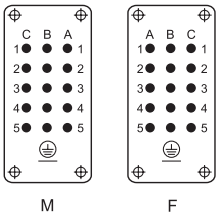
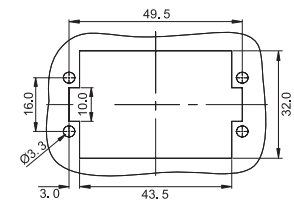
| Description                                                                         | Metr.                                                                               | PG   | Type                                                                                | Part Number |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|-------------|
| <b>Surface mounted housing: Side entry</b>                                          |                                                                                     |      |                                                                                     |             |
|    |    | M16  | <b>HIP</b><br>HIP.3/4.SG.1.11.G<br>HIP.3/4.SG.1.M16.G<br>HIP.3/4.SG.1.M20.G         | 1-1102601-5 |
|                                                                                     |                                                                                     | M20  |                                                                                     | 0-1106407-1 |
|                                                                                     |                                                                                     |      |                                                                                     | 0-1106401-4 |
|                                                                                     | M16                                                                                 | PG11 | <b>HIP-K</b><br>HIP-K.3/4.SG.1.11.G<br>HIP-K.3/4.SG.1.M16.G                         | 2-1102601-5 |
|                                                                                     |                                                                                     |      |                                                                                     | 0-1106407-2 |
|                                                                                     | M16                                                                                 | PG11 | <b>EMV-K</b><br>EMV-K.3/4.SG.1.11.G<br>EMV-K.3/4.SG.1.M16.G<br>EMV-K.3/4.SG.1.M20.G | 4-1102701-5 |
|                                                                                     | M20                                                                                 |      |                                                                                     | 0-1106401-2 |
|                                                                                     |                                                                                     |      |                                                                                     | 0-1106401-3 |
| <b>Protective covers for housings</b>                                               |                                                                                     |      |                                                                                     |             |
|  |  |      | <b>HIP/EMV</b><br>HIP/EMV.3/4.SKB                                                   | 3-1106200-5 |
|                                                                                     |                                                                                     |      | <b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.3/4.SKB                                           | 4-1106200-5 |

## HD-015 inserts

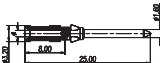
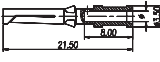
### INSERTS FOR H10A HOOD/HOUSING

250V 10A

15+⊕ (machined contacts)

| Dimensions (mm)                                                                    |                                                                                   | Type                                                                               | Part Number     |                 |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------|-----------------|
|                                                                                    |                                                                                   |                                                                                    | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                   |                                                                                   |                                                                                    |                 |                 |
|   |  | HD-015-M                                                                           | T2020152101-000 |                 |
|                                                                                    |                                                                                   | HD-015-F                                                                           |                 | T2020152201-000 |
| Contact arrangement view from termination side                                     |                                                                                   | Panel cut out for inserts for use without hoods/housings                           |                 |                 |
|  |                                                                                   |  |                 |                 |

### 10A Contact

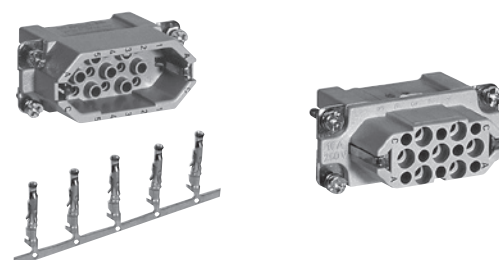
| Tech data                                                                                                                                                                                                          | 10A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                    |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CDM/Male</b>  |                                      | 0.14-0.37       | 26-22 | 8.0               | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.5             | 20    | 8.0               | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.75            | 18    | 8.0               | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.0             | 18    | 8.0               | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.5             | 16    | 8.0               | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 2.5             | 14    | 6.0               | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
| <b>CDF/Female</b><br>                                                                                                           | <b>10A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 8.0               | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.5             | 20    | 8.0               | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.75            | 18    | 8.0               | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.0             | 18    | 8.0               | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.5             | 16    | 8.0               | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 2.5             | 14    | 6.0               | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

# HD-015 inserts

INSERTS FOR H10A HOOD/HOUSING

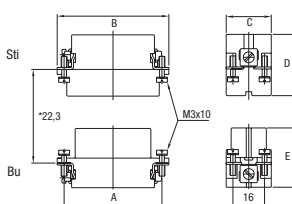
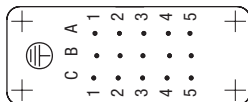
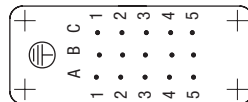
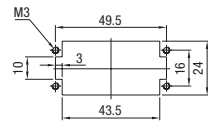
250V 10A

15+Ⓢ (stamped and formed contacts)

| Description                                                                       |               | Type        | Part Number |               |
|-----------------------------------------------------------------------------------|---------------|-------------|-------------|---------------|
| Male insert                                                                       | Female insert |             | Male insert | Female insert |
| Crimp terminal                                                                    |               |             |             |               |
|  |               | HD.15.Sti.C | 2-1103004-3 |               |
|                                                                                   |               | HD.15.Bu.C  |             | 2-1103005-3   |

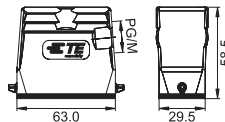
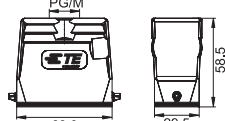
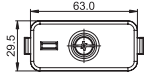
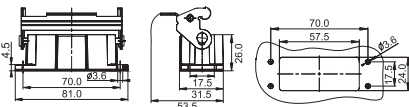
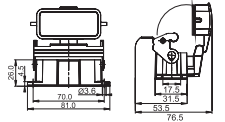
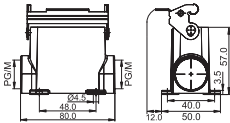
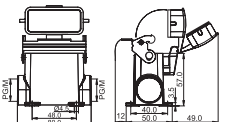
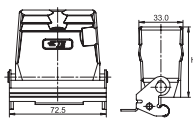
| Dimensions | A    | B  | C  | D  | E  |
|------------|------|----|----|----|----|
| mm         | 49.5 | 57 | 23 | 35 | 35 |

Suitable crimp contacts and crimping tools: see page 111

| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                      | Panel cut-out                                                                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                        |                                                                                       |
|  |  |  |  |

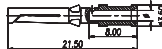
## H10A metal hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                   | Metr.                                                    | PG                           | Type                                                                                                                                                 | Part Number                                                                                                                                          |       |      |                                                            |              |                                                                                       |                                                                                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|    |                                                                                                                                  | M20<br>M25                                               | PG16<br>PG21                 | H10A-TS-PG16<br>H10A-TS-PG21<br>H10A-TS-M20<br>H10A-TS-M25                                                                                           | T1319100116-000<br>T1319100121-000<br>T1319100120-000<br>T1319100125-000                                                                             |       |      |                                                            |              |                                                                                       |                                                                                             |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|    |                                                                                                                                  | M20<br>M25                                               | PG16<br>PG21                 | H10A-TG-PG16<br>H10A-TG-PG21<br>H10A-TG-M20<br>H10A-TG-M25                                                                                           | T1329100116-000<br>T1329100121-000<br>T1329100120-000<br>T1329100125-000                                                                             |       |      |                                                            |              |                                                                                       |                                                                                             |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|    |                                                                                                                                                                                                                   | With plastic rope                                        |                              | H10A-KDT                                                                                                                                             | T1019101101-000<br>T1019101201-000                                                                                                                   |       |      |                                                            |              |                                                                                       |                                                                                             |
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|  |                                                                                                                                |                                                          |                              | H10A-AGS<br>H10A-ADMS                                                                                                                                | T1509101000-000<br>T1519101000-000                                                                                                                   |       |      |                                                            |              |                                                                                       |                                                                                             |
|  | <p>With protection cover</p>                                                                                                   |                                                          |                              | H10A-ADMS                                                                                                                                            | T1519101000-000                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|  |                                                                                                                                | 1 Side entry<br>M20<br>M25<br>2 Side entry<br>M20<br>M25 | PG16<br>PG21<br>PG16<br>PG21 | H10A-SGRS-PG16<br>H10A-SGRS-PG21<br>H10A-SGRS-M20<br>H10A-SGRS-M25<br>H10A-SGRS-2PG16<br>H10A-SGRS-2PG21<br>H10A-SGRS-2M20<br>H10A-SGRS-2M25         | T1619101116-000<br>T1619101121-000<br>T1619101120-000<br>T1619101125-000<br>T1619101216-000<br>T1619101221-000<br>T1619101220-000<br>T1619101225-000 |       |      |                                                            |              |                                                                                       |                                                                                             |
|  | <p>With protection cover</p>                                                                                                   | 1 Side entry<br>M20<br>M25<br>2 Side entry<br>M20<br>M25 | PG16<br>PG21<br>PG16<br>PG21 | H10A-SDRMS-PG16<br>H10A-SDRMS-PG21<br>H10A-SDRMS-M20<br>H10A-SDRMS-M25<br>H10A-SDRMS-2PG16<br>H10A-SDRMS-2PG21<br>H10A-SDRMS-2M20<br>H10A-SDRMS-2M25 | T1629101116-000<br>T1629101121-000<br>T1629101120-000<br>T1629101125-000<br>T1629101216-000<br>T1629101221-000<br>T1629101220-000<br>T1629101225-000 |       |      |                                                            |              |                                                                                       |                                                                                             |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                   |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
|  | <table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>52.6</td></tr><tr><td>Hight</td><td>66.6</td></tr></table>  | Construction                                             | H                            | Low                                                                                                                                                  | 52.6                                                                                                                                                 | Hight | 66.6 | Low construction<br>M20<br>M25<br>High construction<br>M25 | PG16<br>PG21 | H10A-TBFS-PG16<br>H10A-TBFS-M20<br>H10A-TBFS-M25<br>H10A-TBFHS-PG21<br>H10A-TBFHS-M25 | T1739101116-000<br>T1739101120-000<br>T1739101125-000<br>T1779101121-000<br>T1779101125-000 |
| Construction                                                                        | H                                                                                                                                                                                                                 |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
| Low                                                                                 | 52.6                                                                                                                                                                                                              |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |
| Hight                                                                               | 66.6                                                                                                                                                                                                              |                                                          |                              |                                                                                                                                                      |                                                                                                                                                      |       |      |                                                            |              |                                                                                       |                                                                                             |

## 250V 10A

25+ (⚡) (machined contacts)

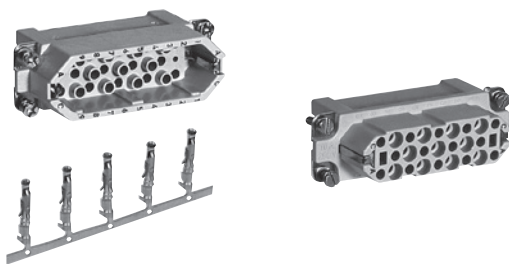
|                                                                                                                                                                                                                                           |                                                                                                                         |                   |         |                                   |                                      |                 |                                    |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------|---------|-----------------------------------|--------------------------------------|-----------------|------------------------------------|-----------------|
| <b>Tech data</b><br><b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CDM/Male</b><br> | <b>10A Male crimp contacts</b><br>   | <b>Wire gauge</b> |         | <b>Strip-<br/>ping<br/>length</b> | <b>Crimp contacts, silver-plated</b> |                 | <b>Crimp contacts, gold-plated</b> |                 |
|                                                                                                                                                                                                                                           |                                                                                                                         |                   |         |                                   |                                      |                 |                                    |                 |
|                                                                                                                                                                                                                                           |                                                                                                                         | mm²               | AWG     | mm                                | Type                                 | Part Number     | Type                               | Part Number     |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.14-0.37         | 26-22   | 8.0                               | CDM-0.14                             | T2020001002-000 | DDM-0.14                           | T2020011002-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20      | 8.0                               | CDM-0.5                              | T2020001005-000 | DDM-0.5                            | T2020011005-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18      | 8.0                               | CDM-0.75                             | T2020001008-000 | DDM-0.75                           | T2020011008-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18      | 8.0                               | CDM-1.0                              | T2020001010-000 | DDM-1.0                            | T2020011010-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16      | 8.0                               | CDM-1.5                              | T2020001015-000 | DDM-1.5                            | T2020011015-000 |
| 2.5                                                                                                                                                                                                                                       | 14                                                                                                                      | 6.0               | CDM-2.5 | T2020001025-000                   | DDM-2.5                              | T2020011025-000 |                                    |                 |
| <b>CDF/Female</b><br>                                                                                                                                  | <b>10A Female crimp contacts</b><br> | 0.14-0.37         | 26-22   | 8.0                               | CDF-0.14                             | T2020002002-000 | DDF-0.14                           | T2020012002-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20      | 8.0                               | CDF-0.5                              | T2020002005-000 | DDF-0.5                            | T2020012005-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18      | 8.0                               | CDF-0.75                             | T2020002008-000 | DDF-0.75                           | T2020012008-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18      | 8.0                               | CDF-1.0                              | T2020002010-000 | DDF-1.0                            | T2020012010-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16      | 8.0                               | CDF-1.5                              | T2020002015-000 | DDF-1.5                            | T2020012015-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14      | 6.0                               | CDF-2.5                              | T2020002025-000 | DDF-2.5                            | T2020012025-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         |                   |         |                                   |                                      |                 |                                    |                 |

# HD-025 inserts

## INSERTS FOR H16A HOOD/HOUSING

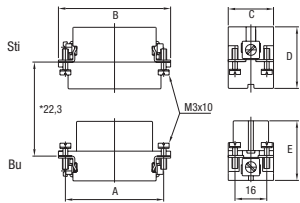
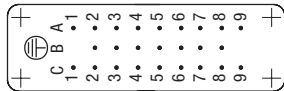
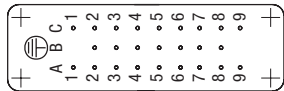
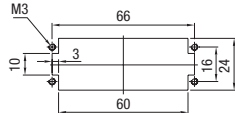
250V 10A

25+ Ⓢ (stamped and formed contacts)

| Description                                                                       |               | Type        | Part Number |               |
|-----------------------------------------------------------------------------------|---------------|-------------|-------------|---------------|
| Male insert                                                                       | Female insert |             | Male insert | Female insert |
| Crimp terminal (order crimp contacts separately)                                  |               |             |             |               |
|  |               | HD.25.Sti.C | 2-1103010-3 |               |
|                                                                                   |               | HD.25.Bu.C  |             | 2-1103011-3   |

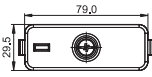
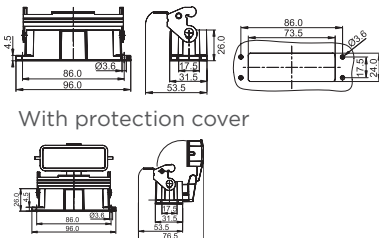
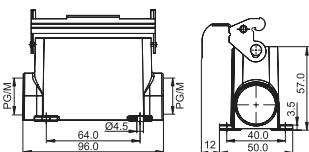
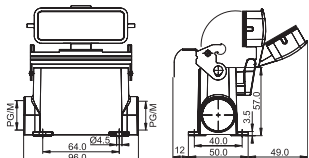
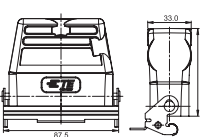
| Dimensions | A  | B  | C  | D  | E  |
|------------|----|----|----|----|----|
| mm         | 66 | 73 | 23 | 35 | 35 |

Suitable crimp contacts and crimping tools: see page 111

| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                      | Panel cut-out                                                                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                        |                                                                                       |
|  |  |  |  |

## H16A metal hoods/housings

POWDER-COATED, RAL 7037

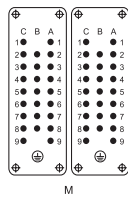
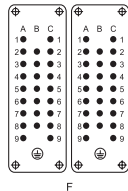
| Dimensions (mm)                                                                     |                                                                                     | Metr. | PG                                    | Type         | Part Number                                                 |                                                                            |                                                                          |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|---------------------------------------|--------------|-------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                     |       |                                       |              |                                                             |                                                                            |                                                                          |
|    | Low construction                                                                    |       | M20<br>M25                            | PG16<br>PG21 | H16A-TS-PG16<br>H16A-TS-PG21<br>H16A-TS-M20<br>H16A-TS-M25  | T1319160116-000<br>T1319160121-000<br>T1319160120-000<br>T1319160125-000   |                                                                          |
|                                                                                     | High construction                                                                   |       |                                       | PG21         | H16A-TSH-PG21<br>H16A-TSH-M25                               | T1339160121-000<br>T1339160125-000                                         |                                                                          |
|                                                                                     | Low construction                                                                    |       | M25                                   | PG21         | H16A-TSH-PG21<br>H16A-TSH-M25                               | T1339160121-000<br>T1339160125-000                                         |                                                                          |
|                                                                                     | High construction                                                                   |       |                                       |              |                                                             |                                                                            |                                                                          |
| Hood: Top entry                                                                     |                                                                                     |       |                                       |              |                                                             |                                                                            |                                                                          |
|    | Low construction                                                                    |       | M20<br>M25                            | PG16<br>PG21 | H16A-TG-PG16<br>H16A-TG-PG21<br>H16A-TG-M20<br>H16A-TG-M25  | T1329160116-000<br>T1329160121-000<br>T1329160120-000<br>T1329160125-000   |                                                                          |
|                                                                                     | High construction                                                                   |       |                                       | PG21         | H16A-TGH-PG21<br>H16A-TGH-M25                               | T1349160121-000<br>T1349160125-000                                         |                                                                          |
|                                                                                     | Low construction                                                                    |       | M25                                   | PG21         | H16A-TGH-PG21<br>H16A-TGH-M25                               | T1349160121-000<br>T1349160125-000                                         |                                                                          |
|                                                                                     | High construction                                                                   |       |                                       |              |                                                             |                                                                            |                                                                          |
| Protection covers for hoods                                                         |                                                                                     |       |                                       |              |                                                             |                                                                            |                                                                          |
|   |   |       | with plastic rope                     |              | H16A-KDT<br><br>T1019161101-000<br>T1019161201-000          |                                                                            |                                                                          |
| Bulkhead mounted                                                                    |                                                                                     |       |                                       |              |                                                             |                                                                            |                                                                          |
|  |  |       |                                       |              | H16A-AGS<br><br>T1509161000-000                             |                                                                            |                                                                          |
|                                                                                     | With protection cover                                                               |       |                                       |              | H16A-ADS<br>H16A-ADMS<br>T1519162000-000<br>T1519161000-000 |                                                                            |                                                                          |
| Surface mounted: Side entry                                                         |                                                                                     |       |                                       |              |                                                             |                                                                            |                                                                          |
|  |  |       | 1 Side entry                          | M20<br>M25   | PG16<br>PG21                                                | H16A-SGRS-PG16<br>H16A-SGRS-PG21<br>H16A-SGRS-M20<br>H16A-SGRS-M25         | T1619161116-000<br>T1619161121-000<br>T1619161120-000<br>T1619161125-000 |
|                                                                                     | With protection cover                                                               |       | 2 Side entry                          |              | PG16<br>PG21                                                | H16A-SGRS-2PG16<br>H16A-SGRS-2PG21<br>H16A-SGRS-2M20<br>H16A-SGRS-2M25     | T1619161216-000<br>T1619161221-000<br>T1619161220-000<br>T1619161225-000 |
|                                                                                     |  |       | 1 Side entry                          | M20<br>M25   | PG16<br>PG21                                                | H16A-SDRMS-PG16<br>H16A-SDRMS-PG21<br>H16A-SDRMS-M20<br>H16A-SDRMS-M25     | T1629161116-000<br>T1629161121-000<br>T1629161120-000<br>T1629161125-000 |
|                                                                                     |                                                                                     |       | 2 Side entry                          |              | PG16<br>PG21                                                | H16A-SDRMS-2PG16<br>H16A-SDRMS-2PG21<br>H16A-SDRMS-2M20<br>H16A-SDRMS-2M25 | T1629161216-000<br>T1629161221-000<br>T1629161220-000<br>T1629161225-000 |
| Cable-to-cable hood                                                                 |                                                                                     |       |                                       |              |                                                             |                                                                            |                                                                          |
|  |  |       | Low construction<br>High construction | M20<br>M25   | PG16                                                        | H16A-TBFS-PG16<br>H16A-TBFS-M20<br>H16A-TBFS-M25                           | T1739161116-000<br>T1739161120-000<br>T1739161125-000                    |
|                                                                                     |                                                                                     |       |                                       |              | PG21                                                        | H16A-TBFHS-PG21<br>H16A-TBFHS-M25                                          | T1779161121-000<br>T1779161125-000                                       |
|                                                                                     |                                                                                     |       |                                       | M25          | PG21                                                        | H16A-TBFHS-PG21<br>H16A-TBFHS-M25                                          | T1779161121-000<br>T1779161125-000                                       |
|                                                                                     |                                                                                     |       |                                       |              |                                                             |                                                                            |                                                                          |

## HD-050 inserts

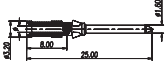
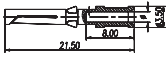
### INSERTS FOR H32A HOOD/HOUSING

250V 10A

50 (2x25)+⊕ (Turning contacts)

| Dimensions (mm)                                                                                                                                                        | Contact arrangement view from termination side                                         | Type                              | Part Number                        |                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------|------------------------------------|------------------------------------|
|                                                                                                                                                                        |                                                                                        |                                   | Male insert                        | Female insert                      |
| Crimp terminal (order crimp contacts separately)                                                                                                                       |                                                                                        |                                   |                                    |                                    |
| <br> | <br>M | HD-025-M(1-25)<br>HD-025-M(26-50) | T2020252101-000<br>T2020502101-000 |                                    |
|                                                                                                                                                                        | <br>F | HD-025-F(1-25)<br>HD-025-F(26-50) |                                    | T2020252201-000<br>T2020502201-000 |

### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: ≤3mΩ<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male<br>crimp contacts<br> | Wire gauge |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                    |                                                                                                                   | mm²        | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
| <b>CDF/Female</b><br>           | 10A Female<br>crimp contacts                                                                                      | 0.14-0.37  | 26-22 | 8.0                      | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                    |                                                                                                                   | 0.5        | 20    | 8.0                      | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                    |                                                                                                                   | 0.75       | 18    | 8.0                      | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                    |                                                                                                                   | 1.0        | 18    | 8.0                      | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                    |                                                                                                                   | 1.5        | 16    | 8.0                      | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                    |                                                                                                                   | 2.5        | 14    | 6.0                      | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                    |                                                                                                                   | 0.14-0.37  | 26-22 | 8.0                      | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                    |                                                                                                                   | 0.5        | 20    | 8.0                      | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                    |                                                                                                                   | 0.75       | 18    | 8.0                      | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                    |                                                                                                                   | 1.0        | 18    | 8.0                      | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                    |                                                                                                                   | 1.5        | 16    | 8.0                      | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                    |                                                                                                                   | 2.5        | 14    | 6.0                      | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

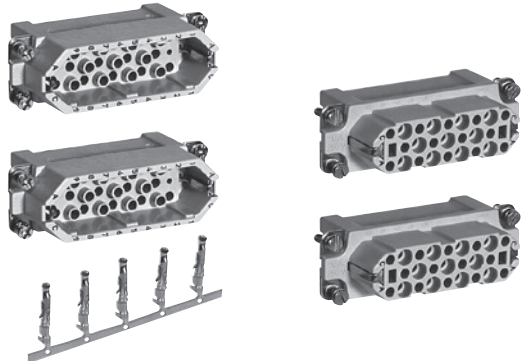


HD-050 inserts

INSERTS FOR H32A HOOD/HOUSING

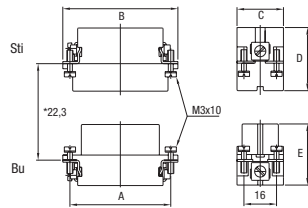
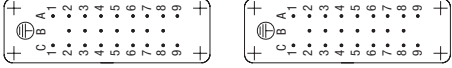
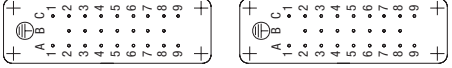
250V 10A

50 (2x25)+⊕ (stamped and formed contacts)

| Description                                                                       |               | Type        | Part Number |               |
|-----------------------------------------------------------------------------------|---------------|-------------|-------------|---------------|
| Male insert                                                                       | Female insert |             | Male insert | Female insert |
| Crimp terminal                                                                    |               |             |             |               |
|  |               | HD.25.Sti.C | 2-1103010-3 |               |
|                                                                                   |               | HD.25.Bu.C  |             | 2-1103011-3   |

| Dimensions | A  | B  | C  | D  | E  |
|------------|----|----|----|----|----|
| mm         | 66 | 73 | 23 | 35 | 35 |

Suitable crimp contacts and crimping tools: see page 111

| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                         |
|  |  |  |

POWDER-COATED, RAL 7037

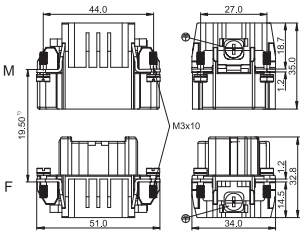
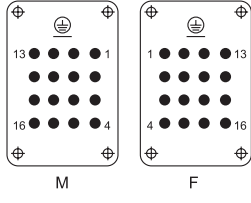
68

## HDD-016 inserts

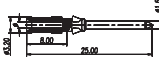
### INSERTS FOR H6B HOOD/HOUSING

250V 10A

16+⊕ (machined contacts)

| Dimensions (mm)                                                                     |                                                                                   | Type                                                     | Part Number     |                 |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------|-----------------|-----------------|
|                                                                                     |                                                                                   |                                                          | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                    |                                                                                   |                                                          |                 |                 |
|    |  | HDD-016-M                                                | T2030162101-000 |                 |
|                                                                                     |                                                                                   | HDD-016-F                                                |                 | T2030162201-000 |
| Contact arrangement view from termination side                                      |                                                                                   | Panel cut out for inserts for use without hoods/housings |                 |                 |
|  |                                                                                   |                                                          |                 |                 |

### 10A Contact

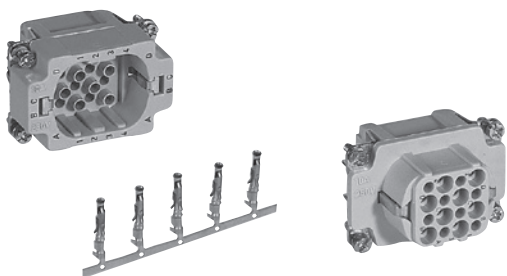
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male<br>crimp contacts<br> | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                   | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
|                                                   | 10A Female<br>crimp contacts                                                                                      | 0.14-0.37       | 26-22 | 8.0                      | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                      |                                                                                                                   | 0.5             | 20    | 8.0                      | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                      |                                                                                                                   | 0.75            | 18    | 8.0                      | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                      |                                                                                                                   | 1.0             | 18    | 8.0                      | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                      |                                                                                                                   | 1.5             | 16    | 8.0                      | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                      |                                                                                                                   | 2.5             | 14    | 6.0                      | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                      |                                                                                                                   | 0.14-0.37       | 26-22 | 8.0                      | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                      |                                                                                                                   | 0.5             | 20    | 8.0                      | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                      |                                                                                                                   | 0.75            | 18    | 8.0                      | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                      |                                                                                                                   | 1.0             | 18    | 8.0                      | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                      |                                                                                                                   | 1.5             | 16    | 8.0                      | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                      |                                                                                                                   | 2.5             | 14    | 6.0                      | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

# HDD-016 inserts

INSERTS FOR H6B HOOD/HOUSING

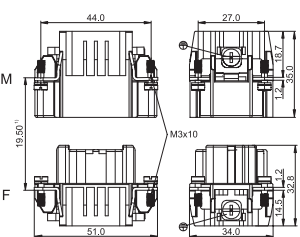
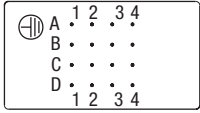
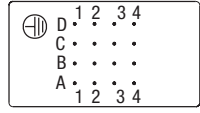
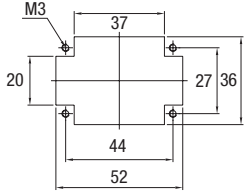
250V 10A

16+  (stamped and formed contacts)

| Description                                                                       |               | Type        | Part Number |               |
|-----------------------------------------------------------------------------------|---------------|-------------|-------------|---------------|
| Male insert                                                                       | Female insert |             | Male insert | Female insert |
| Crimp terminal                                                                    |               |             |             |               |
|  |               | HD.16.Sti.C | 2-1103006-3 |               |
|                                                                                   |               | HD.16.Bu.C  |             | 2-1103007-3   |

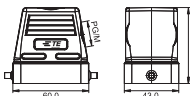
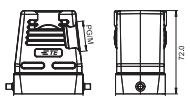
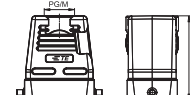
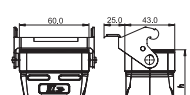
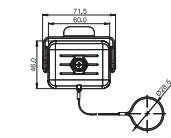
| Dimensions | A  | B  | C  | D  | E  |
|------------|----|----|----|----|----|
| mm         | 44 | 51 | 33 | 35 | 35 |

Suitable crimp contacts and crimping tools: see page 111

| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                      | Panel cut-out                                                                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                        |                                                                                       |
|  |  |  |  |

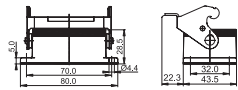
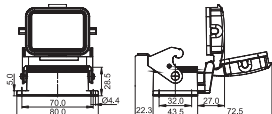
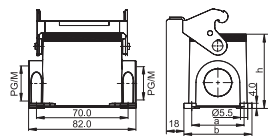
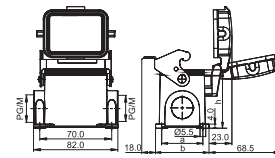
## H6B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                            | Metr.             | PG           | Type                                                                      | Part Number                                                                                 |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                            |                   |              |                                                                           |                                                                                             |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
|    | <div>Low construction</div> <div></div>                                                                                                   | M20<br>M25        | PG16<br>PG21 | H6B-TS-PG16<br>H6B-TS-PG21<br>H6B-TS-M20<br>H6B-TS-M25                    | T1310060116-000<br>T1310060121-000<br>T1310060120-000<br>T1310060125-000                    |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
|    | <div>High construction</div> <div></div>                                                                                                  | M20<br>M25<br>M32 | PG21<br>PG29 | H6B-TSH-PG21<br>H6B-TSH-PG29<br>H6B-TSH-M20<br>H6B-TSH-M25<br>H6B-TSH-M32 | T1330060121-000<br>T1330060129-000<br>T1330060120-000<br>T1330060125-000<br>T1330060132-000 |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                            |                   |              |                                                                           |                                                                                             |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
|   | <div>Low construction</div> <div></div>                                                                                                  | M20<br>M25        | PG16<br>PG21 | H6B-TG-PG16<br>H6B-TG-PG21<br>H6B-TG-M20<br>H6B-TG-M25                    | T1320060116-000<br>T1320060121-000<br>T1320060120-000<br>T1320060125-000                    |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
|  | <div>High construction</div> <div></div>                                                                                                | M20<br>M25<br>M32 | PG21<br>PG29 | H6B-TGH-PG21<br>H6B-TGH-PG29<br>H6B-TGH-M20<br>H6B-TGH-M25<br>H6B-TGH-M32 | T1340060121-000<br>T1340060129-000<br>T1340060120-000<br>T1340060125-000<br>T1340060132-000 |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                            |                   |              |                                                                           |                                                                                             |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                       | 62.5                                                                                        | High | 74.5 | Low construction<br>M20<br>M25<br><br>High construction<br>M20<br>M25<br>M32 | PG16<br><br>PG21<br>PG29 | H6B-TBFS-PG16<br>H6B-TBFS-M20<br>H6B-TBFS-M25<br><br>H6B-TBFHS-PG21<br>H6B-TBFHS-PG29<br>H6B-TBFHS-M20<br>H6B-TBFHS-M25<br>H6B-TBFHS-M32 | T1730062116-000<br>T1730062120-000<br>T1730062125-000<br><br>T1770062121-000<br>T1770062129-000<br>T1770062120-000<br>T1770062125-000<br>T1770062132-000 |
| Construction                                                                        | H                                                                                                                                                                                                                          |                   |              |                                                                           |                                                                                             |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
| Low                                                                                 | 62.5                                                                                                                                                                                                                       |                   |              |                                                                           |                                                                                             |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
| High                                                                                | 74.5                                                                                                                                                                                                                       |                   |              |                                                                           |                                                                                             |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                            |                   |              |                                                                           |                                                                                             |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |
|  | <div></div>                                                                                                                             |                   |              | H6B-KDTP                                                                  | T1010061400-000                                                                             |      |      |                                                                              |                          |                                                                                                                                          |                                                                                                                                                          |

## H6B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Metr.        | PG                                                                                                                                           | Type                                                                                                                                                 | Part Number     |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|----|----|----|------|----|----|----|--------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |                                                                                                                                              |                                                                                                                                                      |                 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                                                                                                                                              | H6B-AGS                                                                                                                                              | T1500062000-000 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
|    | With protection cover<br>                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |                                                                                                                                              | H6B-ADS                                                                                                                                              | T1510062100-000 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |                                                                                                                                              |                                                                                                                                                      |                 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
|   | <div><div><div>1 Side entry<br/>Low construction</div><div>M20<br/>M25</div><div>2 Side entry</div><div>1 Side entry<br/>High construction</div><div>2 Side entry</div><div>M25<br/>M32</div><div>M25<br/>M32</div></div><div></div><table><tr><td>Construction</td><td>A</td><td>B</td><td>H</td></tr><tr><td>Low</td><td>40</td><td>52</td><td>56</td></tr><tr><td>High</td><td>45</td><td>57</td><td>74</td></tr></table></div>                           | Construction | A                                                                                                                                            | B                                                                                                                                                    | H               | Low | 40 | 52 | 56 | High | 45 | 57 | 74 | PG16<br>PG21 | H6B-SGRS-PG16<br>H6B-SGRS-PG21<br>H6B-SGRS-M20<br>H6B-SGRS-M25<br>H6B-SGRS-2PG16<br>H6B-SGRS-2PG21<br>H6B-SGRS-2M20<br>H6B-SGRS-2M25 | T1610062116-000<br>T1610062121-000<br>T1610062120-000<br>T1610062125-000<br>T1610062216-000<br>T1610062221-000<br>T1610062220-000<br>T1610062225-000 |
| Construction                                                                        | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | B            | H                                                                                                                                            |                                                                                                                                                      |                 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
| Low                                                                                 | 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 52           | 56                                                                                                                                           |                                                                                                                                                      |                 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
| High                                                                                | 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 57           | 74                                                                                                                                           |                                                                                                                                                      |                 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
|  | With protection cover<br><div><div><div>1 Side entry<br/>Low construction</div><div>M20<br/>M25</div><div>2 Side entry</div><div>1 Side entry<br/>High construction</div><div>2 Side entry</div><div>M25<br/>M32</div><div>M25<br/>M32</div></div><div></div><table><tr><td>Construction</td><td>A</td><td>B</td><td>H</td></tr><tr><td>Low</td><td>40</td><td>52</td><td>56</td></tr><tr><td>High</td><td>45</td><td>57</td><td>74</td></tr></table></div> | Construction | A                                                                                                                                            | B                                                                                                                                                    | H               | Low | 40 | 52 | 56 | High | 45 | 57 | 74 | PG16<br>PG21 | H6B-SDRS-PG16<br>H6B-SDRS-PG21<br>H6B-SDRS-M20<br>H6B-SDRS-M25<br>H6B-SDRS-2PG16<br>H6B-SDRS-2PG21<br>H6B-SDRS-2M20<br>H6B-SDRS-2M25 | T1620062116-000<br>T1620062121-000<br>T1620062120-000<br>T1620062125-000<br>T1620062216-000<br>T1620062221-000<br>T1620062220-000<br>T1620062225-000 |
| Construction                                                                        | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | B            | H                                                                                                                                            |                                                                                                                                                      |                 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
| Low                                                                                 | 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 52           | 56                                                                                                                                           |                                                                                                                                                      |                 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
| High                                                                                | 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 57           | 74                                                                                                                                           |                                                                                                                                                      |                 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | PG21<br>PG29 | H6B-SDRHS-PG21<br>H6B-SDRHS-PG29<br>H6B-SDRHS-M25<br>H6B-SDRHS-M32<br>H6B-SDRHS-2PG21<br>H6B-SDRHS-2PG29<br>H6B-SDRHS-2M25<br>H6B-SDRHS-2M32 | T1660062121-000<br>T1660062129-000<br>T1660062125-000<br>T1660062132-000<br>T1660062221-000<br>T1660062229-000<br>T1660062225-000<br>T1660062232-000 |                 |     |    |    |    |      |    |    |    |              |                                                                                                                                      |                                                                                                                                                      |

## HIP.6/16, HIP-K.6/16, EMV-K.6/16 housings

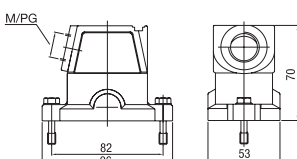
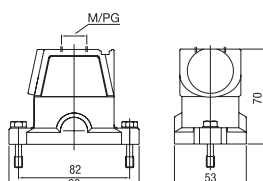
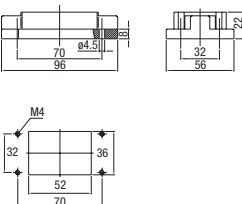
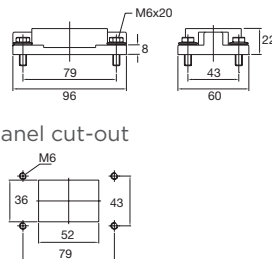
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

IP 68 / IP 69 K

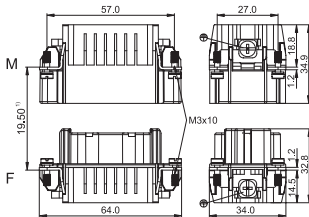
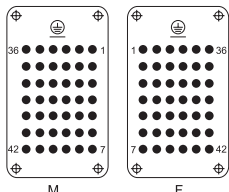
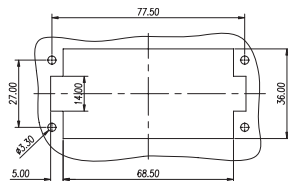
| Description                                                                         |                                                                                                      | Metr.      | PG             | Type                                                                                                               | Part Number                                              |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------|----------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                      |            |                |                                                                                                                    |                                                          |
|    |                     | M25        | 16             | <b>HIP</b><br>HIP.6/16.STS.1.16.G<br>HIP.6/16.STS.1.M25.G                                                          | 1-1102631-5<br>0-1106425-2                               |
|                                                                                     |                                                                                                      | M25        | 16<br>21       | <b>HIP-K</b><br>HIP-K.6/16.STS.1.16.G<br>HIP-K.6/16.STS.1.21.G<br>HIP-K.6/16.STS.1.M25.G                           | 2-1102631-5<br>2-1102633-5<br>0-1106425-4                |
|                                                                                     |                                                                                                      | M25        | 16             | <b>EMV-K</b><br>EMV-K.6/16.STS.1.16.G<br>EMV-K.6/16.STS.1.M25.G                                                    | 4-1102704-5<br>0-1106416-4                               |
| Hood: Top entry                                                                     |                                                                                                      |            |                |                                                                                                                    |                                                          |
|   |                    | M32        | 16             | <b>HIP</b><br>HIP.6/16.STO.1.16.G<br>HIP.6/16.STO.1.M32.G                                                          | 1-1102635-5<br>0-1106425-1                               |
|                                                                                     |                                                                                                      | M25<br>M32 | 16<br>21       | <b>HIP-K</b><br>HIP-K.6/16.STO.1.16.G<br>HIP-K.6/16.STO.1.21.G<br>HIP-K.6/16.STO.1.M25.G<br>HIP-K.6/16.STO.1.M32.G | 2-1102635-5<br>2-1102637-5<br>0-1106425-6<br>0-1106425-3 |
|                                                                                     |                                                                                                      | M32        | 13<br>16<br>21 | <b>EMV-K</b><br>EMV-K.6/16.STO.1.13.G<br>EMV-K.6/16.STO.1.16.G<br>EMV-K.6/16.STO.1.21.G<br>EMV-K.6/16.STO.1.M32.G  | 0-1108719-1<br>4-1102706-5<br>4-1102707-5<br>0-1106416-3 |
| Surface mounted housing: Bottom entry                                               |                                                                                                      |            |                |                                                                                                                    |                                                          |
|  |                   |            |                | <b>HIP</b><br>HIP.6/16.AG                                                                                          | 1-1102638-5                                              |
|                                                                                     |                                                                                                      |            |                | <b>HIP-K</b><br>HIP-K.6/16.AG                                                                                      | 2-1102638-5                                              |
|                                                                                     |                                                                                                      |            |                | <b>EMV-K</b><br>EMV-K.6/16.AG                                                                                      | 4-1102710-5                                              |
|  | <br>Panel cut-out |            |                | <b>HIP</b><br>HIP.6/16.AG.M6                                                                                       | 1-1102606-5                                              |
|                                                                                     |                                                                                                      |            |                | <b>HIP-K</b><br>HIP-K.6/16.AG.M6                                                                                   | 2-1102606-5                                              |
|                                                                                     |                                                                                                      |            |                | <b>EMV-K</b><br>EMV-K.6/16.AG.M6                                                                                   | 4-1102712-5                                              |

## HDD-042 inserts

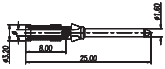
### INSERTS FOR H10B HOOD/HOUSING

250V 10A

42+⊕ (machined contacts)

| Dimensions (mm)                                                                    |                                                                                    | Type      | Part Number     |                 |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                    |                                                                                    |           | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                   |                                                                                    |           |                 |                 |
|   |   | HDD-042-M | T2030422101-000 |                 |
|                                                                                    |                                                                                    | HDD-042-F |                 | T2030422201-000 |
| Contact arrangement view from termination side                                     | Panel cut out for inserts for use without hoods/housings                           |           |                 |                 |
|  |  |           |                 |                 |

### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3m\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male<br>crimp contacts<br> | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                               |                                                                                                                   | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
| <br>CDF/Female                             | 10A Female<br>crimp contacts                                                                                      | 0.14-0.37       | 26-22 | 8.0                      | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                               |                                                                                                                   | 0.5             | 20    | 8.0                      | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                               |                                                                                                                   | 0.75            | 18    | 8.0                      | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                               |                                                                                                                   | 1.0             | 18    | 8.0                      | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                               |                                                                                                                   | 1.5             | 16    | 8.0                      | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                               |                                                                                                                   | 2.5             | 14    | 6.0                      | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                               |                                                                                                                   | 0.14-0.37       | 26-22 | 8.0                      | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                               |                                                                                                                   | 0.5             | 20    | 8.0                      | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                               |                                                                                                                   | 0.75            | 18    | 8.0                      | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                               |                                                                                                                   | 1.0             | 18    | 8.0                      | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                               |                                                                                                                   | 1.5             | 16    | 8.0                      | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                               |                                                                                                                   | 2.5             | 14    | 6.0                      | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

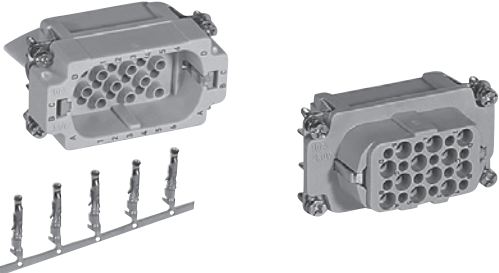


## HDD-024 inserts

## INSERTS FOR H10B HOOD/HOUSING

250V 10A

24+  (stamped and formed contacts)

| Description                                                                       |               | Type        | Part Number |               |
|-----------------------------------------------------------------------------------|---------------|-------------|-------------|---------------|
| Male insert                                                                       | Female insert |             | Male insert | Female insert |
| Crimp terminal                                                                    |               |             |             |               |
|  |               | HD.24.Sti.C | 2-1103008-3 |               |
|                                                                                   |               | HD.24.BU.C  |             | 2-1103009-3   |

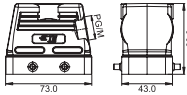
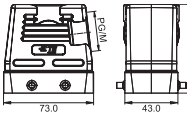
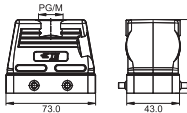
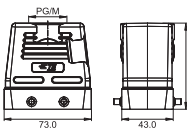
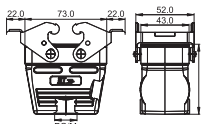
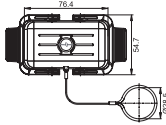
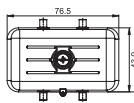
| Dimensions | A  | B  | C  | D  | E  |
|------------|----|----|----|----|----|
| mm         | 57 | 64 | 33 | 35 | 35 |

**Suitable crimp contacts and crimping tools: see page 111**

[illegible]

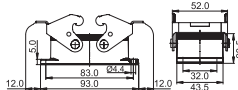
## H10B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                                                          | Metr.             | PG           | Type                                                                           | Part Number                                                                                 |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                                                                                          |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|    | <div>Low construction</div> <div></div>                                                                                                                                                                 | M20<br>M25        | PG16<br>PG21 | H10B-TS-PG16<br>H10B-TS-PG21<br>H10B-TS-M20<br>H10B-TS-M25                     | T1210100116-000<br>T1210100121-000<br>T1210100120-000<br>T1210100125-000                    |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|    | <div>High construction</div> <div></div>                                                                                                                                                                | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TSH-PG21<br>H10B-TSH-PG29<br>H10B-TSH-M20<br>H10B-TSH-M25<br>H10B-TSH-M32 | T1230100121-000<br>T1230100129-000<br>T1230100120-000<br>T1230100125-000<br>T1230100132-000 |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                                                                                          |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|    | <div>Low construction</div> <div></div>                                                                                                                                                                 | M20<br>M25        | PG16<br>PG21 | H10B-TG-PG16<br>H10B-TG-PG21<br>H10B-TG-M20<br>H10B-TG-M25                     | T1220100116-000<br>T1220100121-000<br>T1220100120-000<br>T1220100125-000                    |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  | <div>High construction</div> <div></div>                                                                                                                                                              | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TGH-PG21<br>H10B-TGH-PG29<br>H10B-TGH-M20<br>H10B-TGH-M25<br>H10B-TGH-M32 | T1240100121-000<br>T1240100129-000<br>T1240100120-000<br>T1240100125-000<br>T1240100132-000 |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                                                                                          |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  | <div></div> <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>74.5</td></tr></table></div> <div>Low construction<br/>High construction</div> | Construction      | H            | Low                                                                            | 62.5                                                                                        | High | 74.5 | M20<br>M25<br><br>M25<br>M32 | PG16<br><br>PG21<br>PG29 | H10B-TBFS-PG16<br>H10B-TBFS-M20<br>H10B-TBFS-M25<br><br>H10B-TBFHS-PG21<br>H10B-TBFHS-PG29<br>H10B-TBFHS-M25<br>H10B-TBFHS-M32 | T1710101116-000<br>T1710101120-000<br>T1710101125-000<br><br>T1750101121-000<br>T1750101129-000<br>T1750101125-000<br>T1750101132-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                                        |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Low                                                                                 | 62.5                                                                                                                                                                                                                                                                                     |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| High                                                                                | 74.5                                                                                                                                                                                                                                                                                     |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                                                                                          |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  |                                                                                                                                                                                                       |                   |              | H10B-KDTP                                                                      | T1010101400-000                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Housing protection cover                                                            |                                                                                                                                                                                                                                                                                          |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  |                                                                                                                                                                                                       |                   |              | H10B-KDBP                                                                      | T1010102100-000                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |

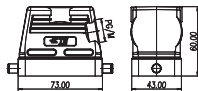
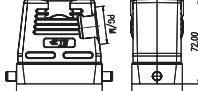
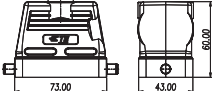
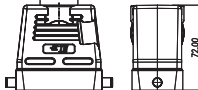
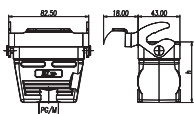
## H10B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                                   | Metr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| Construction | A        | B               | H  | Low  | 40 | 52                                | 56 | High | 45 | 57 | 74                                                                                                                                                                                | Side entry housing with two levers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| <div></div> | <div><div><div>With protection cover</div><div><div><div>1 Side entry</div><div>Low construction</div><div>M20</div><div>M25</div></div><div><div>2 Side entry</div><div>M20</div><div>M25</div></div><div><div>1 Side entry</div><div>High construction</div><div>M25</div><div>M32</div></div><div><div>2 Side entry</div><div>M25</div><div>M32</div></div></div><div><table><tr><td>Construction</td><td>A</td><td>B</td><td>C</td><td>D</td><td>F</td><td>G</td><td>H</td></tr><tr><td>Low</td><td>82</td><td>94</td><td>40</td><td>52</td><td>22</td><td>67</td><td>54</td></tr><tr><td>High</td><td>82</td><td>94</td><td>45</td><td>57</td><td>20</td><td>65</td><td>74</td></tr></table></div></div><div><div>PG16</div><div>PG21</div><div>H10B-AD-BO</div><div>H10B-SDR-BO-PG16</div><div>H10B-SDR-BO-PG21</div><div>H10B-SDR-BO-M20</div><div>H10B-SDR-BO-M25</div><div>H10B-SDR-BO-2PG16</div><div>H10B-SDR-BO-2PG21</div><div>H10B-SDR-BO-2M20</div><div>H10B-SDR-BO-2M25</div><div>PG16</div><div>PG21</div><div>H10B-SDR-BO-PG16</div><div>H10B-SDR-BO-PG21</div><div>H10B-SDR-BO-M20</div><div>H10B-SDR-BO-M25</div><div>H10B-SDR-BO-2PG16</div><div>H10B-SDR-BO-2PG21</div><div>H10B-SDR-BO-2M20</div><div>H10B-SDR-BO-2M25</div><div>PG21</div><div>PG29</div><div>H10B-SDRH-BO-PG21</div><div>H10B-SDRH-BO-PG29</div><div>H10B-SDRH-BO-M25</div><div>H10B-SDRH-BO-M32</div><div>PG21</div><div>PG29</div><div>H10B-SDRH-BO-PG21</div><div>H10B-SDRH-BO-PG29</div><div>H10B-SDRH-BO-2PG21</div><div>H10B-SDRH-BO-2PG29</div><div>H10B-SDRH-BO-2M25</div><div>H10B-SDRH-BO-2M32</div></div><div><div>T1430100000-000</div><div>T1460100116-000</div><div>T1460100121-000</div><div>T1460100120-000</div><div>T1460100125-000</div><div>T1460100216-000</div><div>T1460100221-000</div><div>T1460100220-000</div><div>T1460100225-000</div><div>T1490100121-000</div><div>T1490100129-000</div><div>T1490100125-000</div><div>T1490100132-000</div><div>T1490100221-000</div><div>T1490100229-000</div><div>T1490100225-000</div><div>T1490100232-000</div></div></div> 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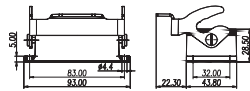
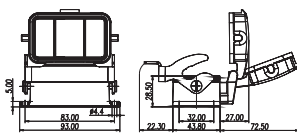
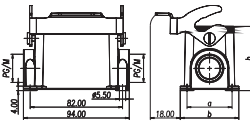
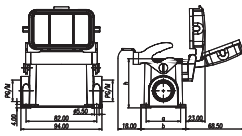
## H10B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                            | Metr.             | PG           | Type                                                                                          | Part Number                                                                                 |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|    | Low construction<br>                                                                                                                      | M20<br>M25        | PG16<br>PG21 | H10B-TS-RO-PG16<br>H10B-TS-RO-PG21<br>H10B-TS-RO-M20<br>H10B-TS-RO-M25                        | T1310100116-000<br>T1310100121-000<br>T1310100120-000<br>T1310100125-000                    |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|    | High construction<br>                                                                                                                     | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TSH-RO-PG21<br>H10B-TSH-RO-PG29<br>H10B-TSH-RO-M20<br>H10B-TSH-RO-M25<br>H10B-TSH-RO-M32 | T1330100121-000<br>T1330100129-000<br>T1330100120-000<br>T1330100125-000<br>T1330100132-000 |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|   | Low construction<br>                                                                                                                     | M20<br>M25        | PG16<br>PG21 | H10B-TG-RO-PG16<br>H10B-TG-RO-PG21<br>H10B-TG-RO-M20<br>H10B-TG-RO-M25                        | T1320100116-000<br>T1320100121-000<br>T1320100120-000<br>T1320100125-000                    |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|  | High construction<br>                                                                                                                   | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TGH-RO-PG21<br>H10B-TGH-RO-PG29<br>H10B-TGH-RO-M20<br>H10B-TGH-RO-M25<br>H10B-TGH-RO-M32 | T1340100121-000<br>T1340100129-000<br>T1340100120-000<br>T1340100125-000<br>T1340100132-000 |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|  | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                                           | 62.5                                                                                        | High | 74.5 | M20<br>M25<br><br>M25<br>M32 | PG16<br><br>PG21<br>PG29 | H10B-TBF-LB-PG16<br>H10B-TBF-LB-M20<br>H10B-TBF-LB-M25<br>H10B-TBFH-LB-PG21<br>H10B-TBFH-LB-PG29<br>H10B-TBFH-LB-M25<br>H10B-TBFH-LB-M32 | T1730103116-000<br>T1730103120-000<br>T1730103125-000<br>T1770103121-000<br>T1770103129-000<br>T1770103125-000<br>T1770103132-000 |
| Construction                                                                        | H                                                                                                                                                                                                                          |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Low                                                                                 | 62.5                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| High                                                                                | 74.5                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|  |                                                                                                                                                                                                                            |                   |              | H10B-KDTP-LB                                                                                  | T1010101500-000                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |

## H10B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                                                                            | Metr.        | PG | Type                      | Part Number                        |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----|---------------------------|------------------------------------|-----|----|----|----|-------|----|----|----|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                                            |              |    |                           |                                    |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
|    |                                                                                                                                                                                                                           |              |    | H10B-AG-LB                | T1500103000-000                    |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
|    | <p>With protection cover</p>                                                                                                                                                                                              |              |    | H10B-AD-LB<br>H10B-ADM-LB | T1510103000-000<br>T1510103001-000 |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                                                                            |              |    |                           |                                    |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
|  |  <table><tr><td>Construction</td><td>A</td><td>B</td><td>H</td></tr><tr><td>Low</td><td>40</td><td>52</td><td>54</td></tr><tr><td>Hight</td><td>45</td><td>57</td><td>74</td></tr></table>                              | Construction | A  | B                         | H                                  | Low | 40 | 52 | 54 | Hight | 45 | 57 | 74 | <div>1 Side entry<br/>Low construction<br/>2 Side entry<br/>High construction</div> <div>M20<br/>M25<br/>M20<br/>M25<br/>M25<br/>M32<br/>M25<br/>M32</div> | <div>PG16<br/>PG21<br/>PG16<br/>PG21<br/>PG21<br/>PG29<br/>PG21<br/>PG29</div> | <div>H10B-SGR-LB-PG16<br/>H10B-SGR-LB-PG21<br/>H10B-SGR-LB-M20<br/>H10B-SGR-LB-M25<br/>H10B-SGR-LB-2PG16<br/>H10B-SGR-LB-2PG21<br/>H10B-SGR-LB-2M20<br/>H10B-SGR-LB-2M25<br/>H10B-SGRH-LB-PG21<br/>H10B-SGRH-LB-PG29<br/>H10B-SGRH-LB-M25<br/>H10B-SGRH-LB-M32<br/>H10B-SGRH-LB-2PG21<br/>H10B-SGRH-LB-2PG29<br/>H10B-SGRH-LB-2M25<br/>H10B-SGRH-LB-2M32</div> | <div>T1610103116-000<br/>T1610103121-000<br/>T1610103120-000<br/>T1610103125-000<br/>T1610103216-000<br/>T1610103221-000<br/>T1610103220-000<br/>T1610103225-000<br/>T1650103121-000<br/>T1650103129-000<br/>T1650103125-000<br/>T1650103132-000<br/>T1650103221-000<br/>T1650103229-000<br/>T1650103225-000<br/>T1650103232-000</div> |
| Construction                                                                        | A                                                                                                                                                                                                                                                                                                          | B            | H  |                           |                                    |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
| Low                                                                                 | 40                                                                                                                                                                                                                                                                                                         | 52           | 54 |                           |                                    |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
| Hight                                                                               | 45                                                                                                                                                                                                                                                                                                         | 57           | 74 |                           |                                    |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
|  | <p>With protection cover</p>  <table><tr><td>Construction</td><td>A</td><td>B</td><td>H</td></tr><tr><td>Low</td><td>40</td><td>52</td><td>54</td></tr><tr><td>Hight</td><td>45</td><td>57</td><td>74</td></tr></table> | Construction | A  | B                         | H                                  | Low | 40 | 52 | 54 | Hight | 45 | 57 | 74 | <div>1 Side entry<br/>Low construction<br/>2 Side entry<br/>High construction</div> <div>M20<br/>M25<br/>M20<br/>M25<br/>M25<br/>M32<br/>M25<br/>M32</div> | <div>PG16<br/>PG21<br/>PG16<br/>PG21<br/>PG21<br/>PG29<br/>PG21<br/>PG29</div> | <div>H10B-SDR-LB-PG16<br/>H10B-SDR-LB-PG21<br/>H10B-SDR-LB-M20<br/>H10B-SDR-LB-M25<br/>H10B-SDR-LB-2PG16<br/>H10B-SDR-LB-2PG21<br/>H10B-SDR-LB-2M20<br/>H10B-SDR-LB-2M25<br/>H10B-SDRH-LB-PG21<br/>H10B-SDRH-LB-PG29<br/>H10B-SDRH-LB-M25<br/>H10B-SDRH-LB-M32<br/>H10B-SDRH-LB-2PG21<br/>H10B-SDRH-LB-2PG29<br/>H10B-SDRH-LB-2M25<br/>H10B-SDRH-LB-2M32</div> | <div>T1620103116-000<br/>T1620103121-000<br/>T1620103120-000<br/>T1620103125-000<br/>T1620103216-000<br/>T1620103221-000<br/>T1620103220-000<br/>T1620103225-000<br/>T1660103121-000<br/>T1660103129-000<br/>T1660103125-000<br/>T1660103132-000<br/>T1660103221-000<br/>T1660103229-000<br/>T1660103225-000<br/>T1660103232-000</div> |
| Construction                                                                        | A                                                                                                                                                                                                                                                                                                          | B            | H  |                           |                                    |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
| Low                                                                                 | 40                                                                                                                                                                                                                                                                                                         | 52           | 54 |                           |                                    |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
| Hight                                                                               | 45                                                                                                                                                                                                                                                                                                         | 57           | 74 |                           |                                    |     |    |    |    |       |    |    |    |                                                                                                                                                            |                                                                                |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |

## HIP.10/24, HIP-K.10/24, EMV-K.10/24 housings

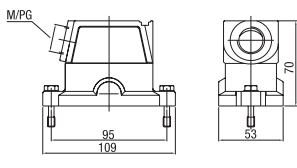
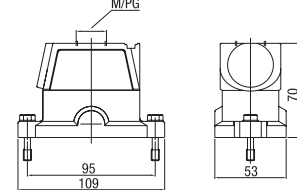
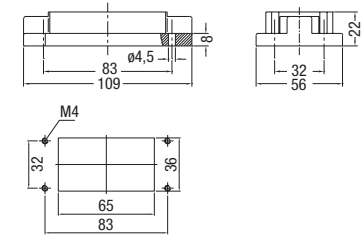
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         |                                                                                     | Metr.      | PG       | Type                                                                                                   | Part Number                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|----------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Hood: Side entry, Standard construction                                             |                                                                                     |            |          |                                                                                                        |                                                   |
|    |    | M25        | 16<br>21 | <b>HIP</b><br>HIP.10/24.STS.1.16.G<br>HIP.10/24.STS.1.21.G<br>HIP.10/24.STS.1.M25.G                    | 1-1102640-5<br>1-1102642-5<br>0-1106436-2         |
|                                                                                     |                                                                                     | M25<br>M32 | 21       | <b>HIP-K</b><br>HIP-K.10/24.STS.1.21.G<br>HIP-K.10/24.STS.1.M25.G<br>HIP-K.10/24.STS.1.M32.G           | 2-1102642-5<br>0-1106436-4<br>0-1106436-6         |
|                                                                                     |                                                                                     | M25<br>M32 | 21       | <b>EMV-K</b><br>EMV-K.10/24.STS.1.21.G<br>EMV-K.10/24.STS.1.M25.G<br>EMV-K.10/24.STS.1.M32.G           | 4-1102714-5<br>0-1106427-3<br>1-1106427-0         |
| Hood: Top entry                                                                     |                                                                                     |            |          |                                                                                                        |                                                   |
|  |  | M25        | 16<br>21 | <b>HIP</b><br>HIP.10/24.STO.1.16.G<br>HIP.10/24.STO.1.21.G<br>HIP.10/24.STO.1.M25.G                    | 1-1102644-5<br>1-1102646-5<br>0-1106436-1         |
|                                                                                     |                                                                                     | M25<br>M32 | 16       | <b>HIP-K</b><br>HIP-K.10/24.STO.1.16.G<br>HIP-K.10/24.STO.1.M25.G<br>HIP-K.10/24.STO.1.M32.G           | 2-1102644-5<br>0-1106436-3<br>0-1106436-5         |
|                                                                                     |                                                                                     | M25        | 21       | <b>EMV-K</b><br>EMV-K.10/24.STO.1.21.G<br>EMV-K.10/24.STO.1.M25.G                                      | 4-1102715-5<br>0-1106427-4                        |
| Surface mounted housing: Bottom entry                                               |                                                                                     |            |          |                                                                                                        |                                                   |
|  |  |            |          | <b>HIP</b><br>HIP.10/24.AG<br><br><b>HIP-K</b><br>HIP-K.10/24.AG<br><br><b>EMV-K</b><br>EMV-K.10/24.AG | 1-1102647-5<br><br>2-1102647-5<br><br>4-1102718-5 |

## HIP.10/24, HIP-K.10/24, EMV-K.10/24 housings

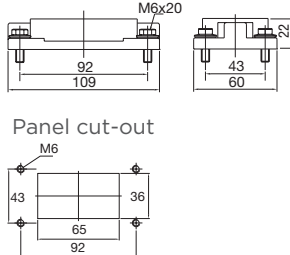
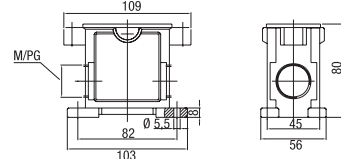
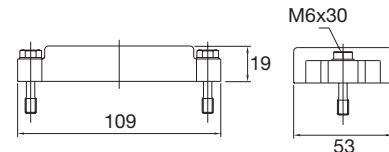
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

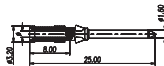
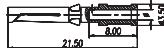
Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                               | PG                                 | Type                                                                                                            | Part Number                                                                                                                                                                                                                                            |                                                                                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Surface mounted housing: Bottom entry                                               |                                                                                     |                                    |                                                                                                                 |                                                                                                                                                                                                                                                        |                                                                                                                              |
|    |    |                                    | <b>HIP</b><br>HIP.10/24.AG.M6<br><br><b>HIP-K</b><br>HIP-K.10/24.AG.M6<br><br><b>EMV-K</b><br>EMV-K.10/24.AG.M6 | 1-1102612-5<br><br>2-1102612-5<br><br>4-1102720-5                                                                                                                                                                                                      |                                                                                                                              |
| Surface mounted housing: Side entry                                                 |                                                                                     |                                    |                                                                                                                 |                                                                                                                                                                                                                                                        |                                                                                                                              |
|   |   | 2xM32<br><br><br><br><br><br>2xM32 | 21<br>2x21<br><br><br><br><br>21<br>2x21<br><br><br><br><br>21<br>2x21                                          | <b>HIP</b><br>HIP.10/24.SG.1.21.G<br>HIP.10/24.SG.2.21.G<br>HIP.10/24.SG.2.M32.G<br><br><b>HIP-K</b><br>HIP-K.10/24.SG.1.21.G<br>HIP-K.10/24.SG.2.21.G<br><br><b>EMV-K</b><br>EMV-K.10/24.SG.1.21.G<br>EMV-K.10/24.SG.2.21.G<br>EMV-K.10/24.SG.2.M32.G | 1-1102610-5<br>1-1102611-5<br>0-1106435-1<br><br>5-1102610-5<br>2-1102611-5<br><br>5-1102716-5<br>4-1102717-5<br>0-1106426-2 |
| Protective covers for hoods and housing                                             |                                                                                     |                                    |                                                                                                                 |                                                                                                                                                                                                                                                        |                                                                                                                              |
|  |  |                                    | <b>HIP</b><br>HIP/EMV.10/24.SKB<br><br><b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.10/24.SKB                              | 3-1106202-5<br><br>4-1106202-5                                                                                                                                                                                                                         |                                                                                                                              |

250V 10A

40+  (machined contacts)

|                                                                                                                                                                                                                                           |                                                                                                                         |                   |       |                                   |                                      |                 |                                    |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------|-------|-----------------------------------|--------------------------------------|-----------------|------------------------------------|-----------------|
| <b>Tech data</b><br><b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CDM/Male</b><br> | <b>10A Male crimp contacts</b><br>   | <b>Wire gauge</b> |       | <b>Strip-<br/>ping<br/>length</b> | <b>Crimp contacts, silver-plated</b> |                 | <b>Crimp contacts, gold-plated</b> |                 |
|                                                                                                                                                                                                                                           |                                                                                                                         | mm²               | AWG   | mm                                | Type                                 | Part Number     | Type                               | Part Number     |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.14-0.37         | 26-22 | 8.0                               | CDM-0.14                             | T2020001002-000 | DDM-0.14                           | T2020011002-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20    | 8.0                               | CDM-0.5                              | T2020001005-000 | DDM-0.5                            | T2020011005-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18    | 8.0                               | CDM-0.75                             | T2020001008-000 | DDM-0.75                           | T2020011008-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18    | 8.0                               | CDM-1.0                              | T2020001010-000 | DDM-1.0                            | T2020011010-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16    | 8.0                               | CDM-1.5                              | T2020001015-000 | DDM-1.5                            | T2020011015-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14    | 6.0                               | CDM-2.5                              | T2020001025-000 | DDM-2.5                            | T2020011025-000 |
| <b>CDF/Female</b><br>                                                                                                                                  | <b>10A Female crimp contacts</b><br> | 0.14-0.37         | 26-22 | 8.0                               | CDF-0.14                             | T2020002002-000 | DDF-0.14                           | T2020012002-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20    | 8.0                               | CDF-0.5                              | T2020002005-000 | DDF-0.5                            | T2020012005-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18    | 8.0                               | CDF-0.75                             | T2020002008-000 | DDF-0.75                           | T2020012008-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18    | 8.0                               | CDF-1.0                              | T2020002010-000 | DDF-1.0                            | T2020012010-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16    | 8.0                               | CDF-1.5                              | T2020002015-000 | DDF-1.5                            | T2020012015-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14    | 6.0                               | CDF-2.5                              | T2020002025-000 | DDF-2.5                            | T2020012025-000 |

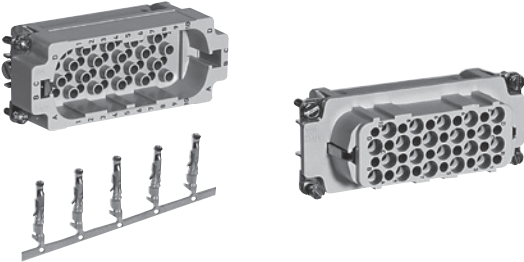


HD-040 inserts

INSERTS FOR H16B HOOD/HOUSING

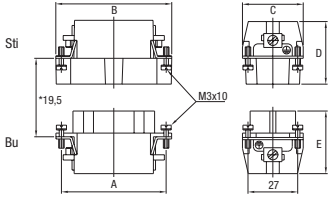
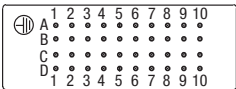
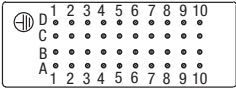
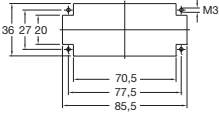
250V 10A

40+⌀ (stamped and formed contacts)

| Description                                                                       |               | Type        | Part Number |               |
|-----------------------------------------------------------------------------------|---------------|-------------|-------------|---------------|
| Male insert                                                                       | Female insert |             | Male insert | Female insert |
| Crimp terminal                                                                    |               |             |             |               |
|  |               | HD.40.Sti.C | 2-1103012-3 |               |
|                                                                                   |               | HD.40.BU.C  |             | 2-1103013-3   |

| Dimensions | A    | B    | C  | D  | E  |
|------------|------|------|----|----|----|
| mm         | 77.5 | 84.5 | 33 | 35 | 35 |

Suitable crimp contacts and crimping tools: see page 111

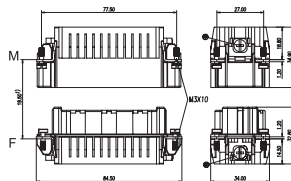
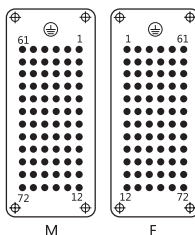
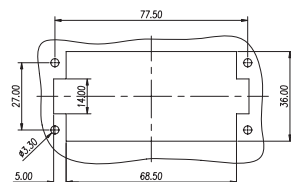
| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                      | Panel cut-out                                                                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                        |                                                                                       |
|  |  |  |  |

## HDD-072 inserts

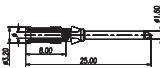
### INSERTS FOR H16B HOOD/HOUSING

250V 10A

72+⊕ (machined contacts)

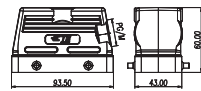
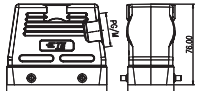
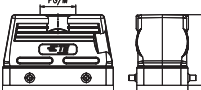
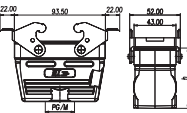
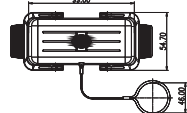
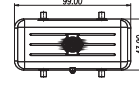
| Dimensions (mm)                                                                    |                                                                                    | Type      | Part Number     |                 |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                    |                                                                                    |           | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                   |                                                                                    |           |                 |                 |
|   |   | HDD-072-M | T2030722101-000 |                 |
|                                                                                    |                                                                                    | HDD-072-F |                 | T2030722201-000 |
| Contact arrangement view from termination side                                     | Panel cut out for inserts for use without hoods/housings                           |           |                 |                 |
|  |  |           |                 |                 |

### 10A Contact

| Tech data                                                                                                                                                                                                             | 10A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                       |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CDM/Male</b><br> |                                      | 0.14-0.37       | 26-22 | 8.0               | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 8.0               | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 8.0               | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 8.0               | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 8.0               | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 6.0               | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
| <b>CDF/Female</b><br>                                                                                                              | <b>10A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 8.0               | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 8.0               | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 8.0               | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 8.0               | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 8.0               | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 6.0               | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

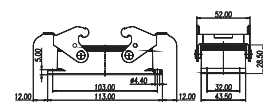
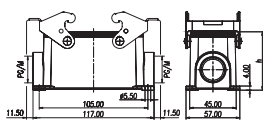
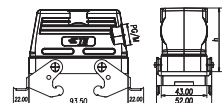
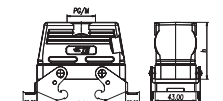
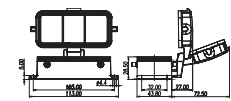
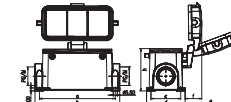
## H16B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                             | Metr.             | PG           | Type                                                                           | Part Number                                                                                 |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------|------|------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | Low construction<br>                                                                                                                       | M20<br>M25<br>M32 | PG16<br>PG21 | H16B-TS-PG16<br>H16B-TS-PG21<br>H16B-TS-M20<br>H16B-TS-M25<br>H16B-TS-M32      | T1210160116-000<br>T1210160121-000<br>T1210160120-000<br>T1210160125-000<br>T1210160132-000 |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | High construction<br>                                                                                                                      | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TSH-PG21<br>H16B-TSH-PG29<br>H16B-TSH-M25<br>H16B-TSH-M32<br>H16B-TSH-M40 | T1230160121-000<br>T1230160129-000<br>T1230060125-000<br>T1230160132-000<br>T1230160140-000 |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|   | Low construction<br>                                                                                                                      | M25<br>M32        | PG16<br>PG21 | H16B-TG-PG16<br>H16B-TG-PG21<br>H16B-TG-M25<br>H16B-TG-M32                     | T1220160116-000<br>T1220160121-000<br>T1220160125-000<br>T1220160132-000                    |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | High construction<br>                                                                                                                    | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TGH-PG21<br>H16B-TGH-PG29<br>H16B-TGH-M25<br>H16B-TGH-M32<br>H16B-TGH-M40 | T1240160121-000<br>T1240160129-000<br>T1240160125-000<br>T1240160132-000<br>T1240160140-000 |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>Hight</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                            | 62.5                                                                                        | Hight | 74.5 | <div>Low construction</div> M25<br>M32<br><div>High construction</div> M25<br>M32<br>M40 | PG21<br><br>PG21<br>PG29 | H16B-TBFS-PG21<br>H16B-TBFS-M25<br>H16B-TBFS-M32<br><br>H16B-TBFHS-PG21<br>H16B-TBFHS-PG29<br>H16B-TBFHS-M25<br>H16B-TBFHS-M32<br>H16B-TBFHS-M40 | T1710161121-000<br>T1710161125-000<br>T1710161132-000<br><br>T1750161121-000<br>T1750161129-000<br>T1750161125-000<br>T1750161132-000<br>T1750161140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                           |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Low                                                                                 | 62.5                                                                                                                                                                                                                        |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hight                                                                               | 74.5                                                                                                                                                                                                                        |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                          |                   |              | H16B-KDTP                                                                      | T1010161400-000                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Housing protection cover                                                            |                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                          |                   |              | H16B-KDBP                                                                      | T1010162100-000                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |

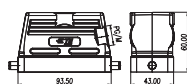
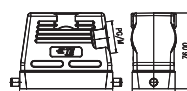
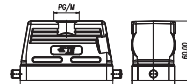
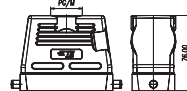
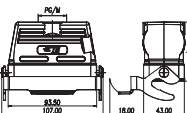
## H16B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                         | Metr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | PG           | Type     | Part Number     |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|-----------------|----|-------|----|--------------------------------------------------------------------|----------------------------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|-------|-----|-----|----|----|----|----|----|--------------------------------------------------------------------|----------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                               |              | H16B-AGS | T1410161000-000 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Surface mounted: Side entry                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                        |  <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table>                                                                                                                                                                                                                                                                                                                    | Construction | H        | Low             | 56 | Hight | 81 | 1 Side entry 2 Side entry<br>Low construction<br>High construction | M25<br>M25<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H16B-SGRS-PG21<br>H16B-SGRS-M25<br>H16B-SGRS-2PG21<br>H16B-SGRS-2M25<br>H16B-SGRHS-PG21<br>H16B-SGRHS-PG29<br>H16B-SGRHS-M25<br>H16B-SGRHS-M32<br>H16B-SGRHS-2PG21<br>H16B-SGRHS-2PG29<br>H16B-SGRHS-2M25<br>H16B-SGRHS-2M32 | T1440161121-000<br>T1440161125-000<br>T1440161221-000<br>T1440161225-000<br>T1470161121-000<br>T1470161129-000<br>T1470161125-000<br>T1470161132-000<br>T1470161221-000<br>T1470161229-000<br>T1470161225-000<br>T1470161232-000 |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                            | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                     | 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                   | 81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Side entry housing with two levers                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                      |  <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>76</td></tr></table>                                                                                                                                                                                                                                                                                                                  | Construction | H        | Low             | 60 | Hight | 76 | Low construction<br>High construction                              | M20<br>M25<br>M25<br>M32               | PG16<br>PG21<br>PG21<br>PG29                 | H16B-TSBS-PG16<br>H16B-TSBS-PG21<br>H16B-TSBS-M20<br>H16B-TSBS-M25<br>H16B-TSBHS-PG21<br>H16B-TSBHS-PG29<br>H16B-TSBHS-M25<br>H16B-TSBHS-M32                                                                                 | T1250163116-000<br>T1250163121-000<br>T1250163120-000<br>T1250163125-000<br>T1270163121-000<br>T1270163129-000<br>T1270163125-000<br>T1270163132-000                                                                             |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                            | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                     | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                   | 76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Top entry housing with two levers                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                      |  <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>76</td></tr></table>                                                                                                                                                                                                                                                                                                                  | Construction | H        | Low             | 60 | Hight | 76 | Low construction<br>High construction                              | M20<br>M25<br>M25<br>M32               | PG16<br>PG21<br>PG21<br>PG29                 | H16B-TGBS-PG16<br>H16B-TGBS-PG21<br>H16B-TGBS-M20<br>H16B-TGBS-M25<br>H16B-TGBHS-PG21<br>H16B-TGBHS-PG29<br>H16B-TGBHS-M25<br>H16B-TGBHS-M32                                                                                 | T1260163116-000<br>T1260163121-000<br>T1260163120-000<br>T1260163125-000<br>T1280163121-000<br>T1280163129-000<br>T1280163125-000<br>T1280163132-000                                                                             |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                            | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                     | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                   | 76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Bulkhead mounted with 4 bolts                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |          |                 |    |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|   | With protection cover<br>  <table><tr><td>Construction</td><td>A</td><td>B</td><td>C</td><td>D</td><td>F</td><td>G</td><td>H</td></tr><tr><td>Low</td><td>105</td><td>117</td><td>45</td><td>57</td><td>20</td><td>65</td><td>56</td></tr><tr><td>Hight</td><td>105</td><td>117</td><td>45</td><td>57</td><td>20</td><td>65</td><td>81</td></tr></table> | Construction | A        | B               | C  | D     | F  | G                                                                  | H                                      | Low                                          | 105                                                                                                                                                                                                                          | 117                                                                                                                                                                                                                              | 45 | 57 | 20 | 65 | 56 | Hight | 105 | 117 | 45 | 57 | 20 | 65 | 81 | 1 Side entry 2 Side entry<br>Low construction<br>High construction | M25<br>M25<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H16B-AD-BO<br>H16B-SDR-BO-PG21<br>H16B-SDR-BO-M25<br>H16B-SDR-BO-2PG21<br>H16B-SDR-BO-2M25<br>H16B-SDRH-BO-PG21<br>H16B-SDRH-BO-PG29<br>H16B-SDRH-BO-M25<br>H16B-SDRH-BO-M32<br>H16B-SDRH-BO-2PG21<br>H16B-SDRH-BO-2PG29<br>H16B-SDRH-BO-2M25<br>H16B-SDRH-BO-2M32 | T1430160000-000<br>T1460160121-000<br>T1460160125-000<br>T1460160221-000<br>T1460160225-000<br>T1490160121-000<br>T1490160129-000<br>T1490160125-000<br>T1490160132-000<br>T1490160221-000<br>T1490160229-000<br>T1490160225-000<br>T1490160232-000 |
| Construction                                                                                                                                                            | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | B            | C        | D               | F  | G     | H  |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                     | 105                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 117          | 45       | 57              | 20 | 65    | 56 |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                   | 105                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 117          | 45       | 57              | 20 | 65    | 81 |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |

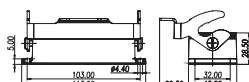
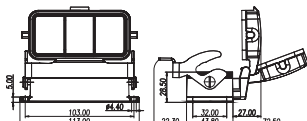
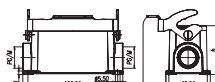
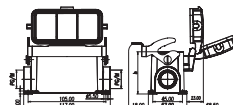
## H16B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                            | Metr.             | PG           | Type                                                                                          | Part Number                                                                                 |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|---------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|    | Low construction<br>                                                                                                                      | M25<br>M32        | PG21<br>PG29 | H16B-TS-RO-PG21<br>H16B-TS-RO-PG29<br>H16B-TS-RO-M25<br>H16B-TS-RO-M32                        | T1310160121-000<br>T1310160129-000<br>T1310160125-000<br>T1310160132-000                    |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|    | High construction<br>                                                                                                                     | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TSH-RO-PG21<br>H16B-TSH-RO-PG29<br>H16B-TSH-RO-M25<br>H16B-TSH-RO-M32<br>H16B-TSH-RO-M40 | T1330160121-000<br>T1330160129-000<br>T1330160125-000<br>T1330160132-000<br>T1330160140-000 |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|   | Low construction<br>                                                                                                                     | M25<br>M32        | PG21<br>PG29 | H16B-TG-RO-PG21<br>H16B-TG-RO-PG29<br>H16B-TG-RO-M25<br>H16B-TG-RO-M32                        | T1320160121-000<br>T1320160129-000<br>T1320160125-000<br>T1320160132-000                    |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  | High construction<br>                                                                                                                   | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TGH-RO-PG21<br>H16B-TGH-RO-PG29<br>H16B-TGH-RO-M25<br>H16B-TGH-RO-M32<br>H16B-TGH-RO-M40 | T1340160121-000<br>T1340160129-000<br>T1340160125-000<br>T1340160132-000<br>T1340160140-000 |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                                           | 62.5                                                                                        | High | 74.5 | <div>Low construction</div> M25<br>M32 <div>High construction</div> M25<br>M32<br>M40 | PG21<br>PG29<br><br>PG21<br>PG29 | H16B-TBF-LB-PG21<br>H16B-TBF-LB-PG29<br>H16B-TBF-LB-M25<br>H16B-TBF-LB-M32<br><br>H16B-TBFH-LB-PG21<br>H16B-TBFH-LB-PG29<br>H16B-TBFH-LB-M25<br>H16B-TBFH-LB-M32<br>H16B-TBFH-LB-M40 | T1730163121-000<br>T1730163129-000<br>T1730163125-000<br>T1730163132-000<br><br>T1770163121-000<br>T1770163129-000<br>T1770163125-000<br>T1770163132-000<br>T1770163140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                          |                   |              |                                                                                               |                                                                                             |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Low                                                                                 | 62.5                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| High                                                                                | 74.5                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  |                                                                                                                                                                                                                            |                   |              | H16B-KDTP-LB                                                                                  | T1010161500-000                                                                             |      |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |

## H16B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                                                                                                                                                                                                                          | PG           | Type | Part Number |                 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------|-------------|-----------------|------|----|-----------------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                |              |      |             |                 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|    |                                                                                                                                                                                               |              |      | H16B-AG-LB  | T1500163000-000 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|    | With protection cover<br>                                                                                                                                                                     |              |      | H16B-AD-LB  | T1510163000-000 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                                                |              |      |             |                 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|  |  <table border="1" data-bbox="323 1149 542 1238"><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>High</td><td>81</td></tr></table>                          | Construction | H    | Low         | 56              | High | 81 | 1 Side entry<br>Low construction<br>2 Side entry<br>High construction | M20<br>M25<br><br>M20<br>M25<br><br>M25<br>M32<br><br>M25<br>M32 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H16B-SGR-LB-PG16<br>H16B-SGR-LB-PG21<br>H16B-SGR-LB-M20<br>H16B-SGR-LB-M25<br>H16B-SGR-LB-2PG16<br>H16B-SGR-LB-2PG21<br>H16B-SGR-LB-2M20<br>H16B-SGR-LB-2M25<br><br>H16B-SGRH-LB-PG21<br>H16B-SGRH-LB-PG29<br>H16B-SGRH-LB-M25<br>H16B-SGRH-LB-M32<br>H16B-SGRH-LB-2PG21<br>H16B-SGRH-LB-2PG29<br>H16B-SGRH-LB-2M25<br>H16B-SGRH-LB-2M32 | T1610163116-000<br>T1610163121-000<br>T1610163120-000<br>T1610163125-000<br>T1610163216-000<br>T1610163221-000<br>T1610163220-000<br>T1610163225-000<br><br>T1650163121-000<br>T1650163129-000<br>T1650163125-000<br>T1650163132-000<br>T1650163221-000<br>T1650163229-000<br>T1650163225-000<br>T1650163232-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                              |              |      |             |                 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Low                                                                                 | 56                                                                                                                                                                                                                                                                             |              |      |             |                 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| High                                                                                | 81                                                                                                                                                                                                                                                                             |              |      |             |                 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|  | With protection cover<br> <table border="1" data-bbox="323 1565 542 1655"><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>High</td><td>81</td></tr></table> | Construction | H    | Low         | 56              | High | 81 | 1 Side entry<br>Low construction<br>2 Side entry<br>High construction | M20<br>M25<br><br>M20<br>M25<br><br>M25<br>M32<br><br>M25<br>M32 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H16B-SDR-LB-PG16<br>H16B-SDR-LB-PG21<br>H16B-SDR-LB-M20<br>H16B-SDR-LB-M25<br>H16B-SDR-LB-2PG16<br>H16B-SDR-LB-2PG21<br>H16B-SDR-LB-2M20<br>H16B-SDR-LB-2M25<br><br>H16B-SDRH-LB-PG21<br>H16B-SDRH-LB-PG29<br>H16B-SDRH-LB-M25<br>H16B-SDRH-LB-M32<br>H16B-SDRH-LB-2PG21<br>H16B-SDRH-LB-2PG29<br>H16B-SDRH-LB-2M25<br>H16B-SDRH-LB-2M32 | T1620163116-000<br>T1620163121-000<br>T1620163120-000<br>T1620163125-000<br>T1620163216-000<br>T1620163221-000<br>T1620163220-000<br>T1620163225-000<br><br>T1660163121-000<br>T1660163129-000<br>T1660163125-000<br>T1660163132-000<br>T1660163221-000<br>T1660163229-000<br>T1660163225-000<br>T1660163232-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                              |              |      |             |                 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Low                                                                                 | 56                                                                                                                                                                                                                                                                             |              |      |             |                 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| High                                                                                | 81                                                                                                                                                                                                                                                                             |              |      |             |                 |      |    |                                                                       |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |

## HIP.16/40, HIP-K.16/40, EMV-K.16/40 housings

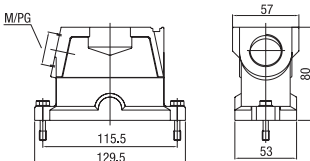
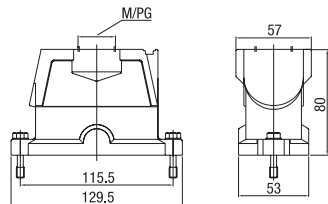
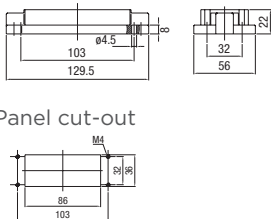
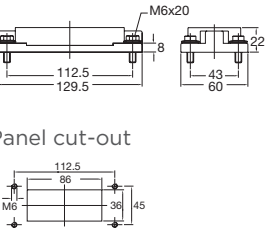
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         |                                                                                                      | Metr. | PG       | Type                                                                                        | Part Number                               |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------|----------|---------------------------------------------------------------------------------------------|-------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                      |       |          |                                                                                             |                                           |
|    |                     | M32   | 21<br>29 | <b>HIP</b><br>HIP.16/40.STS.1.21.G<br>HIP.16/40.STS.1.29.G<br>HIP.16/40.STS.1.M32.G         | 1-1102649-5<br>1-1102651-5<br>0-1106454-2 |
|                                                                                     |                                                                                                      | M32   | 29       | <b>HIP-K</b><br>HIP-K.16/40.STS.1.29.G<br>HIP-K.16/40.STS.1.M32.G                           | 2-1102651-5<br>0-1106444-2                |
|                                                                                     |                                                                                                      | M32   | 29<br>21 | <b>EMV-K</b><br>EMV-K.16/40.STS.1.29.G<br>EMV-K.16/40.STS.1.M32.G<br>EMV-K.16/40.STS.1.21.G | 4-1102723-5<br>0-1106446-4<br>4-1102722-5 |
| Hood: Top entry                                                                     |                                                                                                      |       |          |                                                                                             |                                           |
|  |                    | M32   | 21<br>29 | <b>HIP</b><br>HIP.16/40.STO.1.21.G<br>HIP.16/40.STO.1.29.G<br>HIP.16/40.STO.1.M32.G         | 1-1102653-5<br>1-1102655-5<br>0-1106454-1 |
|                                                                                     |                                                                                                      | M32   | 21<br>29 | <b>HIP-K</b><br>HIP-K.16/40.STO.2.21.G<br>HIP-K.16/40.STO.1.29.G<br>HIP-K.16/40.STO.1.M32.G | 0-1108534-1<br>2-1102655-5<br>0-1106444-1 |
|                                                                                     |                                                                                                      | M32   | 29       | <b>EMV-K</b><br>EMV-K.16/40.STO.1.29.G<br>EMV-K.16/40.STO.1.M32.G                           | 4-1102725-5<br>0-1106446-3                |
| Surface mounted housing: Bottom entry                                               |                                                                                                      |       |          |                                                                                             |                                           |
|  | <br>Panel cut-out |       |          | <b>HIP</b><br>HIP.16/40.AG                                                                  | 1-1102656-5                               |
|                                                                                     |                                                                                                      |       |          | <b>HIP-K</b><br>HIP-K.16/40.AG                                                              | 2-1102656-5                               |
|                                                                                     |                                                                                                      |       |          | <b>EMV-K</b><br>EMV-K.16/40.AG                                                              | 4-1102728-5                               |
|  | <br>Panel cut-out |       |          | <b>HIP</b><br>HIP.16/40.AG.M6                                                               | 1-1102618-5                               |
|                                                                                     |                                                                                                      |       |          | <b>HIP-K</b><br>HIP-K.16/40.AG.M6                                                           | 2-1102618-5                               |
|                                                                                     |                                                                                                      |       |          | <b>EMV-K</b><br>EMV-K.16/40.AG.M6                                                           | 4-1102730-5                               |

## HIP.16/40, HIP-K.16/40, EMV-K.16/40 housings

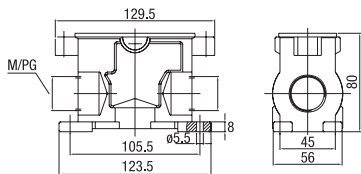
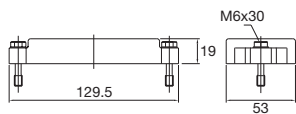
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                       | Metr.                                                                               | PG                                                                                  | Type                                                                                     | Part Number                                                                              |                                           |             |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------|-------------|
| Surface mounted housing: Side entry                                               |                                                                                     |                                                                                     |                                                                                          |                                                                                          |                                           |             |
|  |    | 2xM32                                                                               | 21<br>2x21                                                                               | <b>HIP</b><br>HIP.16/40.SG.1.21.G<br>HIP.16/40.SG.2.21.G<br>HIP.16/40.SG.2.M32.G         | 1-1102616-5<br>1-1102617-5<br>0-1106453-1 |             |
|                                                                                   |                                                                                     | 2xM32                                                                               | 21<br>2x21                                                                               | <b>HIP-K</b><br>HIP-K.16/40.SG.1.21.G<br>HIP-K.16/40.SG.2.21.G<br>HIP-K.16/40.SG.2.M32.G | 5-1102616-5<br>2-1102617-5<br>0-1106443-1 |             |
|                                                                                   | 2xM32                                                                               | 21<br>2x21                                                                          | <b>EMV-K</b><br>EMV-K.16/40.SG.1.21.Z<br>EMV-K.16/40.SG.2.21.Z<br>EMV-K.16/40.SG.2.M32.G | 4-1102726-5<br>4-1102727-5<br>0-1106445-2                                                |                                           |             |
|                                                                                   | Protective covers for housings                                                      |                                                                                     |                                                                                          |                                                                                          |                                           |             |
|                                                                                   |  |  |                                                                                          |                                                                                          | <b>HIP</b><br>HIP/EMV.16/40.SKB           | 3-1106203-5 |
|                                                                                   |                                                                                     |                                                                                     |                                                                                          |                                                                                          | <b>HIP-K</b><br>HIP-K.16/40.SKB           | 4-1106203-5 |

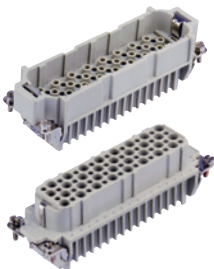
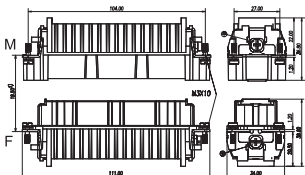
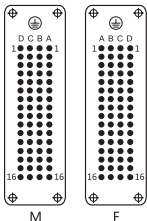
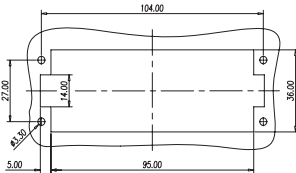


## HD-064 inserts

INSERTS FOR H24B HOOD/HOUSING

250V 10A

64+⊕ (machined contacts)

| Dimensions (mm)                                                                    |                                                                                    | Type     | Part Number     |                 |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------|-----------------|-----------------|
|                                                                                    |                                                                                    |          | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                   |                                                                                    |          |                 |                 |
|   |   | HD-064-M | T2020642101-000 |                 |
|                                                                                    |                                                                                    | HD-064-F |                 | T2020642201-000 |
| Contact arrangement view from termination side                                     | Panel cut out for inserts for use without hoods/housings                           |          |                 |                 |
|  |  |          |                 |                 |

## 10A Contact

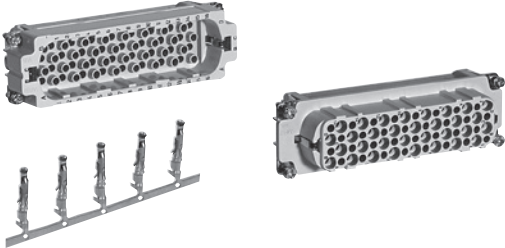
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male                                           | 10A Male<br>crimp contacts | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                |                            | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
| <br><br> |                            | 0.14-0.37       | 26-22 | 8.0                      | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                                                                |                            | 0.5             | 20    | 8.0                      | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                                                                |                            | 0.75            | 18    | 8.0                      | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                                                                |                            | 1.0             | 18    | 8.0                      | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                                                                |                            | 1.5             | 16    | 8.0                      | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                                                                |                            | 2.5             | 14    | 6.0                      | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                                                                |                            | 0.14-0.37       | 26-22 | 8.0                      | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                                                                |                            | 0.5             | 20    | 8.0                      | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                                                                |                            | 0.75            | 18    | 8.0                      | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                                                                |                            | 1.0             | 18    | 8.0                      | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                                                                |                            | 1.5             | 16    | 8.0                      | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                                                                |                            | 2.5             | 14    | 6.0                      | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

## HD-064 inserts

## INSERTS FOR H24B HOOD/HOUSING

250V 10A

64+  (stamped and formed contacts)

| Description                                                                       |               | Type        | Part Number |               |
|-----------------------------------------------------------------------------------|---------------|-------------|-------------|---------------|
| Male insert                                                                       | Female insert |             | Male insert | Female insert |
| Crimp terminal                                                                    |               |             |             |               |
|  |               | HD.64.Sti.C | 2-1103032-3 |               |
|                                                                                   |               | HD.64.BU.C  |             | 2-1103033-3   |

**Suitable crimp contacts and crimping tools: see page 111**

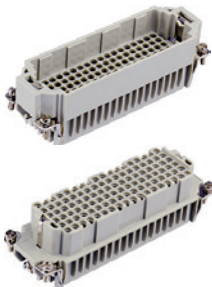
| Dimensions (mm)                                                                                                                                                                     | Contact arrangement                                                                                |                                                                                                         | Panel cut-out                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                     | Male insert                                                                                        | Female insert                                                                                           |                                                                                                                           |
| <p>Technical drawings of the terminal block showing dimensions A, B, C, D, E, and a 19.5mm height. It also shows a side view with a 27mm width and a detail of the M3x10 screw.</p> | <p>Top view of the male insert showing a grid of 16 pins, numbered 1 to 16, with a 27mm width.</p> | <p>Top view of the female insert showing a grid of 16 sockets, numbered 1 to 16, with a 27mm width.</p> | <p>Technical drawing of the panel cut-out showing dimensions 104, 97, 112, 20, 27, and 36. It also shows an M3 screw.</p> |

## HDD-108 inserts

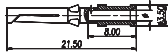
### INSERTS FOR H24B HOOD/HOUSING

250V 10A

108+⊕ (machined contacts)

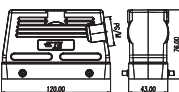
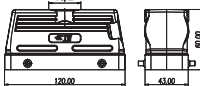
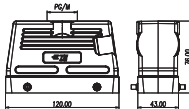
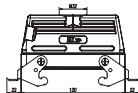
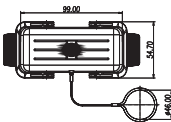
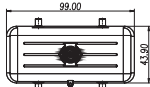
| Dimensions (mm)                                                                   | Type | Part Number |               |
|-----------------------------------------------------------------------------------|------|-------------|---------------|
|                                                                                   |      | Male insert | Female insert |
| Crimp terminal (order crimp contacts separately)                                  |      |             |               |
|  |      |             |               |

### 10A Contact

| Tech data                                                                                                                                                                                                             | 10A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                       |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CDM/Male</b><br> |                                      | 0.14-0.37       | 26-22 | 8.0               | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 8.0               | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 8.0               | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 8.0               | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 8.0               | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 6.0               | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
| <b>CDF/Female</b><br>                                                                                                              | <b>10A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 8.0               | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 8.0               | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 8.0               | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 8.0               | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 8.0               | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 6.0               | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

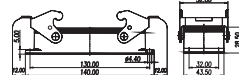
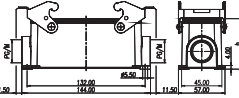
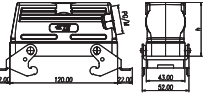
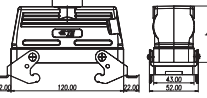
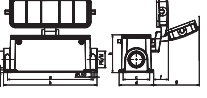
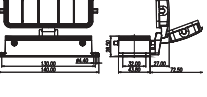
## H24B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                            | Metr.             | PG           | Type                                                                           | Part Number                                                                                 |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|--------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | Low construction<br>                                                                                                                      | M25<br>M32        | PG16<br>PG21 | H24B-TS-PG16<br>H24B-TS-PG21<br>H24B-TS-M25<br>H24B-TS-M32                     | T1210240116-000<br>T1210240121-000<br>T1210240125-000<br>T1210240132-000                    |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | High construction<br>                                                                                                                     | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TSH-PG21<br>H24B-TSH-PG29<br>H24B-TSH-M25<br>H24B-TSH-M32<br>H24B-TSH-M40 | T1230240121-000<br>T1230240129-000<br>T1230240125-000<br>T1230240132-000<br>T1230240140-000 |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
|   | Low construction<br>                                                                                                                     | M25<br>M32        | PG16<br>PG21 | H24B-TG-PG16<br>H24B-TG-PG21<br>H24B-TG-M25<br>H24B-TG-M32                     | T1220240116-000<br>T1220240121-000<br>T1220240125-000<br>T1220240132-000                    |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | High construction<br>                                                                                                                   | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TGH-PG21<br>H24B-TGH-PG29<br>H24B-TGH-M25<br>H24B-TGH-M32<br>H24B-TGH-M40 | T1240240121-000<br>T1240240129-000<br>T1240240125-000<br>T1240240132-000<br>T1240240140-000 |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>78.5</td></tr></table></div> | Construction      | H            | Low                                                                            | 62.5                                                                                        | High | 78.5 | <div>Low construction<br/>M25<br/>M32</div> <div>High construction<br/>M25<br/>M32<br/>M40</div> | PG21<br><br>PG21<br>PG29 | H24B-TBFS-PG21<br>H24B-TBFS-M25<br>H24B-TBFS-M32<br><br>H24B-TBFHS-PG21<br>H24B-TBFHS-PG29<br>H24B-TBFHS-M25<br>H24B-TBFHS-M32<br>H24B-TBFHS-M40 | T1710241121-000<br>T1710241125-000<br>T1710241132-000<br><br>T1750241121-000<br>T1750241129-000<br>T1750241125-000<br>T1750241132-000<br>T1750241140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                          |                   |              |                                                                                |                                                                                             |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
| Low                                                                                 | 62.5                                                                                                                                                                                                                       |                   |              |                                                                                |                                                                                             |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
| High                                                                                | 78.5                                                                                                                                                                                                                       |                   |              |                                                                                |                                                                                             |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                         |                   |              | H24B-KDTP                                                                      | T1010241400-000                                                                             |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
| Housing protection cover                                                            |                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                         |                   |              | H24B-KDBP                                                                      | T1010242100-000                                                                             |      |      |                                                                                                  |                          |                                                                                                                                                  |                                                                                                                                                          |

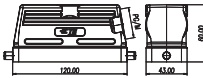
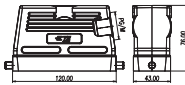
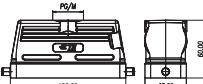
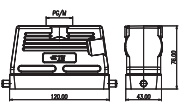
## H24B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Metr.        | PG | Type     | Part Number     |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----|----------|-----------------|-------|----|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|-------|-----|-----|----|----|----|----|----|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
|                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |    | H24B-AGS | T1410241000-000 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Surface mounted: Side entry                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
|                                                                                        | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table></div>                                                                                                                                                                                                                                                                                                                           | Construction | H  | Low      | 56              | Hight | 81 | <div>1 Side entry<br/>Low construction</div> <div>2 Side entry<br/>High construction</div> | <div>M25<br/>PG21</div> <div>M25<br/>PG21</div> <div>M25<br/>PG29</div> <div>M32<br/>PG21</div> <div>M25<br/>PG29</div> <div>M32</div> | <div>H24B-SGRS-PG21<br/>H24B-SGRS-M25<br/>H24B-SGRS-2PG21<br/>H24B-SGRS-2M25</div> <div>H24B-SGRHS-PG21<br/>H24B-SGRHS-PG29<br/>H24B-SGRHS-M25<br/>H24B-SGRHS-M32<br/>H24B-SGRHS-2PG21<br/>H24B-SGRHS-2PG29<br/>H24B-SGRHS-2M25<br/>H24B-SGRHS-2M32</div> | <div>T1440241121-000<br/>T1440241125-000<br/>T1440241221-000<br/>T1440241225-000</div> <div>T1470241121-000<br/>T1470241129-000<br/>T1470241125-000<br/>T1470241132-000<br/>T1470241221-000<br/>T1470241229-000<br/>T1470241225-000<br/>T1470241232-000</div> |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Construction                                                                                                                                                            | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                     | 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                   | 81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Side entry housing with two levers                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
|                                                                                      | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>High</td><td>76</td></tr></table></div>                                                                                                                                                                                                                                                                                                                          | Construction | H  | Low      | 60              | High  | 76 | <div>Low construction</div> <div>High construction</div>                                   | <div>M20<br/>M25</div> <div>M25<br/>M32</div>                                                                                          | <div>PG16<br/>PG21</div> <div>PG21<br/>PG29</div>                                                                                                                                                                                                         | <div>H24B-TSBS-PG16<br/>H24B-TSBS-PG21<br/>H24B-TSBS-M20<br/>H24B-TSBS-M25</div> <div>H24B-TSBHS-PG21<br/>H24B-TSBHS-PG29<br/>H24B-TSBHS-M25<br/>H24B-TSBHS-M32</div>                                                                                         | <div>T1250243116-000<br/>T1250243121-000<br/>T1250243120-000<br/>T1250243125-000</div> <div>T1270243121-000<br/>T1270243129-000<br/>T1270243125-000<br/>T1270243132-000</div> |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Construction                                                                                                                                                            | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                     | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| High                                                                                                                                                                    | 76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Top entry housing with two levers                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
|                                                                                      | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>76</td></tr></table></div>                                                                                                                                                                                                                                                                                                                         | Construction | H  | Low      | 60              | Hight | 76 | <div>Low construction</div> <div>High construction</div>                                   | <div>M20<br/>M25</div> <div>M25<br/>M32</div>                                                                                          | <div>PG16<br/>PG21</div> <div>PG21<br/>PG29</div>                                                                                                                                                                                                         | <div>H24B-TGBS-PG16<br/>H24B-TGBS-PG21<br/>H24B-TGBS-M20<br/>H24B-TGBS-M25</div> <div>H24B-TGBHS-PG21<br/>H24B-TGBHS-PG29<br/>H24B-TGBHS-M25<br/>H24B-TGBHS-M32</div>                                                                                         | <div>T1260243116-000<br/>T1260243121-000<br/>T1260243120-000<br/>T1260243125-000</div> <div>T1280243121-000<br/>T1280243129-000<br/>T1280243125-000<br/>T1280243132-000</div> |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Construction                                                                                                                                                            | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                     | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                   | 76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Bulkhead mounted with 4 bolts                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |       |    |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
|   | <div>With protection cover</div> <div><table><tr><td>Construction</td><td>A</td><td>B</td><td>C</td><td>D</td><td>F</td><td>G</td><td>H</td></tr><tr><td>Low</td><td>132</td><td>144</td><td>45</td><td>57</td><td>20</td><td>65</td><td>56</td></tr><tr><td>Hight</td><td>132</td><td>144</td><td>45</td><td>57</td><td>20</td><td>65</td><td>81</td></tr></table></div> | Construction | A  | B        | C               | D     | F  | G                                                                                          | H                                                                                                                                      | Low                                                                                                                                                                                                                                                       | 132                                                                                                                                                                                                                                                           | 144                                                                                                                                                                           | 45 | 57 | 20 | 65 | 56 | Hight | 132 | 144 | 45 | 57 | 20 | 65 | 81 | <div>1 Side entry<br/>Low construction</div> <div>2 Side entry<br/>High construction</div> | <div>M25</div> <div>M25</div> <div>M25<br/>M32</div> <div>M25<br/>M32</div> | <div>PG21</div> <div>PG21</div> <div>PG21<br/>PG29</div> <div>PG21<br/>PG29</div> | <div>H24B-AD-BO</div> <div>H24B-SDR-BO-PG21<br/>H24B-SDR-BO-M25<br/>H24B-SDR-BO-2PG21<br/>H24B-SDR-BO-2M25</div> <div>H24B-SDRH-BO-PG21<br/>H24B-SDRH-BO-PG29<br/>H24B-SDRH-BO-M25<br/>H24B-SDRH-BO-M32</div> <div>H24B-SDRH-BO-2PG21<br/>H24B-SDRH-BO-2PG29<br/>H24B-SDRH-BO-2M25<br/>H24B-SDRH-BO-2M32</div> | <div>T1430240000-000</div> <div>T1460240121-000<br/>T1460240125-000<br/>T1460240221-000<br/>T1460240225-000</div> <div>T1490240121-000<br/>T1490240129-000<br/>T1490240125-000<br/>T1490240132-000</div> <div>T1490240221-000<br/>T1490240229-000<br/>T1490240225-000<br/>T1490240232-000</div> |
| Construction                                                                                                                                                            | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | B            | C  | D        | F               | G     | H  |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                     | 132                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 144          | 45 | 57       | 20              | 65    | 56 |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                   | 132                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 144          | 45 | 57       | 20              | 65    | 81 |                                                                                            |                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |                                                                                                                                                                               |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                            |                                                                             |                                                                                   |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |

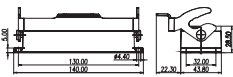
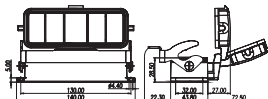
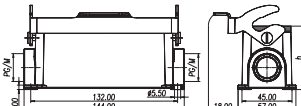
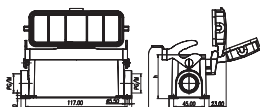
## H24B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                            | Metr.             | PG           | Type                                                                                          | Part Number                                                                                 |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|    | Low construction<br>                                                                                                                      | M25<br>M32        | PG21<br>PG29 | H24B-TS-RO-PG21<br>H24B-TS-RO-PG29<br>H24B-TS-RO-M25<br>H24B-TS-RO-M32                        | T1310240121-000<br>T1310240129-000<br>T1310240125-000<br>T1310240132-000                    |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|    | High construction<br>                                                                                                                     | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TSH-RO-PG21<br>H24B-TSH-RO-PG29<br>H24B-TSH-RO-M25<br>H24B-TSH-RO-M32<br>H24B-TSH-RO-M40 | T1330240121-000<br>T1330240129-000<br>T1330240125-000<br>T1330240132-000<br>T1330240140-000 |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|   | Low construction<br>                                                                                                                     | M25<br>M32        | PG21<br>PG29 | H24B-TG-RO-PG21<br>H24B-TG-RO-PG29<br>H24B-TG-RO-M25<br>H24B-TG-RO-M32                        | T1320240121-000<br>T1320240129-000<br>T1320240125-000<br>T1320240132-000                    |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  | High construction<br>                                                                                                                   | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TGH-RO-PG21<br>H24B-TGH-RO-PG29<br>H24B-TGH-RO-M25<br>H24B-TGH-RO-M32<br>H24B-TGH-RO-M40 | T1340240121-000<br>T1340240129-000<br>T1340240125-000<br>T1340240132-000<br>T1340240140-000 |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>78.5</td></tr></table></div> | Construction      | H            | Low                                                                                           | 62.5                                                                                        | High | 78.5 | <div>Low construction</div> M25<br>M32<br><div>High construction</div> M25<br>M32<br>M40 | PG21<br>PG29<br><br>PG21<br>PG29 | H24B-TBF-LB-PG21<br>H24B-TBF-LB-PG29<br>H24B-TBF-LB-M25<br>H24B-TBF-LB-M32<br><br>H24B-TBFH-LB-PG21<br>H24B-TBFH-LB-PG29<br>H24B-TBFH-LB-M25<br>H24B-TBFH-LB-M32<br>H24B-TBFH-LB-M40 | T1730242121-000<br>T1730242129-000<br>T1730242125-000<br>T1730242132-000<br><br>T1770243121-000<br>T1770243129-000<br>T1770243125-000<br>T1770243132-000<br>T1770243140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                          |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Low                                                                                 | 62.5                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| High                                                                                | 78.5                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  |                                                                                                                                                                                                                            |                   |              | H24B-KDTP-LB                                                                                  | T1010241500-000                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |

## H24B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                                                                                                                                                                                                                                      | PG           | Type       | Part Number     |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------|----|-------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                            |              |            |                 |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|    |                                                                                                                                                                                                           |              | H24B-AG-LB | T1500243000-000 |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|    | With protection cover<br>                                                                                                                                                                                 |              | H24B-AD-LB | T1510243000-000 |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                                                            |              |            |                 |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|  | <div><div>1 Side entry<br/>Low construction</div><div>2 Side entry</div></div> <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table> | Construction | H          | Low             | 56 | Hight | 81 | M20<br>M25<br><br>M20<br>M25<br><br>M25<br>M32<br><br>M25<br>M32                                                                                                                                                                           | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H24B-SGR-LB-PG16<br>H24B-SGR-LB-PG21<br>H24B-SGR-LB-M20<br>H24B-SGR-LB-M25<br>H24B-SGR-LB-2PG16<br>H24B-SGR-LB-2PG21<br>H24B-SGR-LB-2M20<br>H24B-SGR-LB-2M25<br>H24B-SGRH-LB-PG21<br>H24B-SGRH-LB-PG29<br>H24B-SGRH-LB-M25<br>H24B-SGRH-LB-M32<br>H24B-SGRH-LB-2PG21<br>H24B-SGRH-LB-2PG29<br>H24B-SGRH-LB-2M25<br>H24B-SGRH-LB-2M32 | T1610243116-000<br>T1610243121-000<br>T1610243120-000<br>T1610243125-000<br>T1610243216-000<br>T1610243221-000<br>T1610243220-000<br>T1610243225-000<br>T1650243121-000<br>T1650243129-000<br>T1650243125-000<br>T1650243132-000<br>T1650243221-000<br>T1650243229-000<br>T1650243225-000<br>T1650243232-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                                          |              |            |                 |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
| Low                                                                                 | 56                                                                                                                                                                                                                                                                                         |              |            |                 |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
| Hight                                                                               | 81                                                                                                                                                                                                                                                                                         |              |            |                 |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|  | With protection cover<br> <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table>                                                     | Construction | H          | Low             | 56 | Hight | 81 | <div><div>1 Side entry<br/>Low construction</div><div>M20<br/>M25</div><div>2 Side entry</div><div>M20<br/>M25</div><div>1 Side entry<br/>High construction</div><div>M25<br/>M32</div><div>2 Side entry</div><div>M25<br/>M32</div></div> | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H24B-SDR-LB-PG16<br>H24B-SDR-LB-PG21<br>H24B-SDR-LB-M20<br>H24B-SDR-LB-M25<br>H24B-SDR-LB-2PG16<br>H24B-SDR-LB-2PG21<br>H24B-SDR-LB-2M20<br>H24B-SDR-LB-2M25<br>H24B-SDRH-LB-PG21<br>H24B-SDRH-LB-PG29<br>H24B-SDRH-LB-M25<br>H24B-SDRH-LB-M32<br>H24B-SDRH-LB-2PG21<br>H24B-SDRH-LB-2PG29<br>H24B-SDRH-LB-2M25<br>H24B-SDRH-LB-2M32 | T1620243116-000<br>T1620243121-000<br>T1620243120-000<br>T1620243125-000<br>T1620243216-000<br>T1620243221-000<br>T1620243220-000<br>T1620243225-000<br>T1660243121-000<br>T1660243129-000<br>T1660243125-000<br>T1660243132-000<br>T1660243221-000<br>T1660243229-000<br>T1660243225-000<br>T1660243232-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                                          |              |            |                 |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
| Low                                                                                 | 56                                                                                                                                                                                                                                                                                         |              |            |                 |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
| Hight                                                                               | 81                                                                                                                                                                                                                                                                                         |              |            |                 |    |       |    |                                                                                                                                                                                                                                            |                                                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |

## HIP.24/64, HIP-K.24/64, EMV-K.24/64 housings

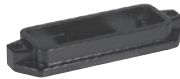
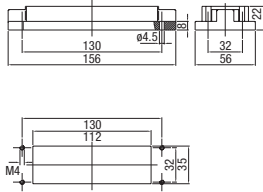
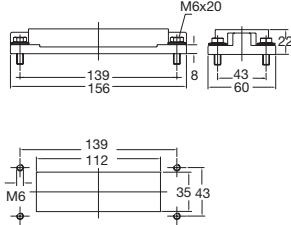
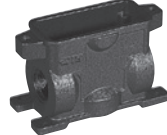
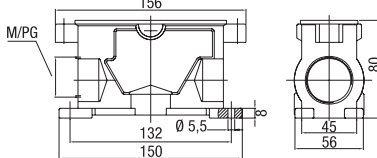
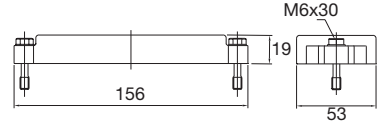
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                               | PG                                                                                              | Type                                                                                                           | Part Number                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface mounted housing: Bottom entry, Standard construction                        |                                                                                     |                                                                                                 |                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                         |
|    |    |                                                                                                 |                                                                                                                | <b>HIP</b><br>HIP.24/64.AG<br>1-1102665-5<br><br><b>HIP-K</b><br>HIP-K.24/64.AG<br>2-1102665-5<br><br><b>EMV-K</b><br>EMV-K.24/64.AG<br>4-1102760-5                                                                                                                                                                                                                                                                     |
|    |   |                                                                                                 |                                                                                                                | <b>HIP</b><br>HIP.24/64.AG.M6<br>1-1102626-5<br><br><b>HIP-K</b><br>HIP-K.24/64.AG.M6<br>2-1102626-5<br>HIP-K.24/64.AG.M6.D<br>2-1102628-5<br>HIP-K-I.24/64.AG.M6.D<br>0-1108533-1<br><br><b>EMV-K</b><br>EMV-K.24/64.AG.M6<br>4-1102736-5                                                                                                                                                                              |
| Surface mounted housing: Side entry, Standard construction                          |                                                                                     |                                                                                                 |                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                         |
|  |  | 2xM40<br><br><br><br><br><br><br><br><br><br>2xM40<br><br><br><br><br><br><br><br><br><br>2xM40 | 29<br>2x29<br><br><br><br><br><br><br><br><br><br>29<br>2x29<br><br><br><br><br><br><br><br><br><br>29<br>2x29 | <b>HIP</b><br>HIP.24/64.SG.1.29.G<br>HIP.24/64.SG.2.29.G<br>HIP.24/64.SG.2.M40.G<br>1-1102624-5<br>1-1102625-5<br>0-1106472-1<br><br><b>HIP-K</b><br>HIP-K.24/64.SG.1.29.G<br>HIP-K.24/64.SG.2.29.G<br>HIP-K.24/64.SG.2.M40.G<br>5-1102624-5<br>2-1102625-5<br>0-1106472-2<br><br><b>EMV-K</b><br>EMV-K.24/64.SG.1.29.G<br>EMV-K.24/64.SG.2.29.G<br>EMV-K.24/64.SG.2.M40.G<br>4-1102734-5<br>4-1102735-5<br>0-1106460-2 |
| Protective cover housings                                                           |                                                                                     |                                                                                                 |                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                         |
|  |  |                                                                                                 |                                                                                                                | <b>HIP</b><br>HIP/EMV.24/64.SKB<br>3-1106204-5<br><br><b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.24/64.SKB<br>4-1106204-5                                                                                                                                                                                                                                                                                                        |



## HIP.24/64, HIP-K.24/64, EMV-K.24/64 housings

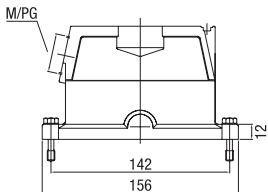
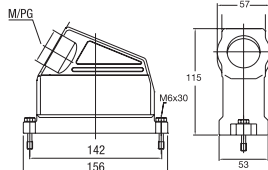
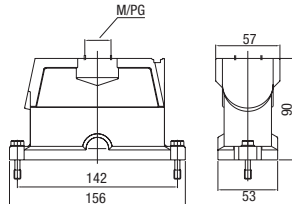
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                                                                                                             | Metr.             | PG       | Type                                                                                                                    | Part Number                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| <b>Hood: Side entry, Standard construction</b>                                                                                                                          |                   |          |                                                                                                                         |                                                          |
|       | M40               | 21<br>29 | <b>HIP</b><br>HIP.24/64.STS.1.21.G<br>HIP.24/64.STS.1.29.G<br>HIP.24/64.STS.1.M40.G                                     | 1-1102658-5<br>1-1102660-5<br>0-1106473-2                |
|                                                                                                                                                                         | M40               | 29       | <b>HIP-K</b><br>HIP-K.24/64.STS.1.29.G<br>HIP-K.24/64.STS.1.M40.G                                                       | 2-1102660-5<br>0-1106473-4                               |
|                                                                                                                                                                         | M25<br>M32<br>M40 | 29       | <b>EMV-K</b><br>EMV-K.24/64.STS.1.29.G<br>EMV-K.24/64.STS.1.M25.G<br>EMV-K.24/64.STS.1.M32.G<br>EMV-K.24/64.STS.1.M40.G | 4-1102755-5<br>0-1102983-1<br>0-1106461-8<br>0-1106461-3 |
|    | M40               | 29<br>36 | <b>HIP</b><br>HIP-KF.24/64.STS.1.29.G<br>HIP-KF.24/64.STS.1.36.G<br>HIP-KF.24/64.STS.1.M40.G                            | 1-1102622-5<br>1-1102623-5<br>0-1106474-1                |
|                                                                                                                                                                         | M40               | 29<br>36 | <b>HIP-K</b><br>HIP-KF/K.24/64.STS.1.29.G<br>HIP-KF/K.24/64.STS.1.36.G<br>HIP-KF/K.24/64.STS.1.M40.G                    | 2-1102622-5<br>2-1102623-5<br>0-1106474-2                |
|                                                                                                                                                                         | M40               | 29<br>36 | <b>EMV-K</b><br>EMV-KF/K.24/64.STS.1.29.G<br>EMV-KF/K.24/64.STS.1.36.G<br>EMV-KF/K.24/64.STS.1.M40.G                    | 4-1102732-5<br>4-1102733-5<br>0-1106462-2                |
| <b>Hood: Top entry, Standard construction</b>                                                                                                                           |                   |          |                                                                                                                         |                                                          |
|   | M40               |          |                                                                                                                         |                                                          |
|                                                                                                                                                                         | 2xM32<br>M40      | 21<br>29 | <b>HIP</b><br>HIP.24/64.STO.1.21.G<br>HIP.24/64.STO.1.29.G<br>HIP.24/64.STO.1.M40.G                                     | 1-1102662-5<br>1-1102664-5<br>0-1106473-1                |
|                                                                                                                                                                         | M40<br>2xM40      | 29       | <b>HIP-K</b><br>HIP-K.24/64.STO.1.29.G<br>HIP-K.24/64.STO.2.M32.G<br>HIP-K.24/64.STO.1.M40.G                            | 2-1102664-5<br>0-1102792-1<br>0-1106473-3                |
|                                                                                                                                                                         | 2xM40             | 29       | <b>EMV-K</b><br>EMV-K.24/64.STO.1.29.G<br>EMV-K.24/64.STO.1.M40.G                                                       | 4-1102759-5<br>0-1106461-4                               |
|                                                                                                                                                                         | 2xM40             |          |                                                                                                                         |                                                          |

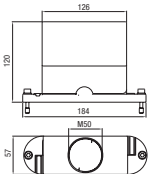
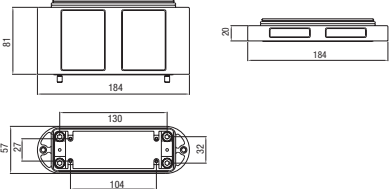
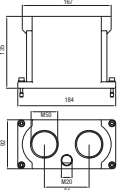
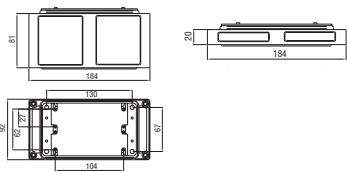
## HF-HIP-K 8/HF-EMV-K 8, HF-HIP-K 12/HF-EMV-K 12 housings

**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

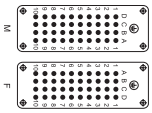
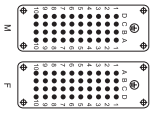
| Description                                                                         |                                                                                     | Metr.                            | PG    | Type                                                                                                 | Part Number                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------|-------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Hood                                                                                |                                                                                     |                                  |       |                                                                                                      |                                                          |
|    |    | 1xM50<br>1xM50<br>2xM40<br>2xM40 |       | HF-HIP-K.8.Sto.1.M50G<br>HF.8.EMV-K.8.Sto.1.M50G<br>HF.HIP-K.8.Sto.2.M40G<br>HF.EMV-K.8.Sto.2.M40G   | O-1102839-4<br>O-1102839-3<br>O-1102839-2<br>O-1102839-1 |
| Housing bottom                                                                      |                                                                                     |                                  |       |                                                                                                      |                                                          |
|    |   | Height                           |       |                                                                                                      |                                                          |
|                                                                                     |                                                                                     | 81 mm                            | 20 mm | HF-HIP-K.8.AG.N<br>HF-EMV-K.8.AG.N                                                                   | O-1102837-2<br>O-1102837-1                               |
|                                                                                     |                                                                                     | 81 mm                            | 20 mm | HF-HIP-K.8.AG<br>HF-EMV-K.8.AG                                                                       | O-1102836-2<br>O-1102836-1                               |
| Hood                                                                                |                                                                                     |                                  |       |                                                                                                      |                                                          |
|  |  | 2xM40<br>2xM40<br>2xM50<br>2xM50 |       | HF-HIP-K.12.Sto.2.M40G<br>HF-EMV-K.12.Sto.2.M40G<br>HF-HIP-K.12.Sto.2.M50G<br>HF-EMV-K.12.Sto.2.M50G | O-1102840-2<br>O-1102840-1<br>O-1102840-4<br>O-1102840-3 |
| Housing bottom                                                                      |                                                                                     |                                  |       |                                                                                                      |                                                          |
|  |  | Height                           |       |                                                                                                      |                                                          |
|                                                                                     |                                                                                     | 81 mm                            | 20 mm | HF-HIP-K.12.AG.N<br>HF-EMV-K.12.AG.N                                                                 | O-1102838-2<br>O-1102838-1                               |
|                                                                                     |                                                                                     | 81 mm                            | 20 mm | HF-HIP-K.12.AG<br>HF-EMV-K.12.AG                                                                     | O-1102192-2<br>O-1102192-1                               |

## HD-080 inserts

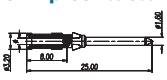
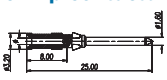
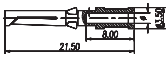
### INSERTS FOR H32B HOOD/HOUSING

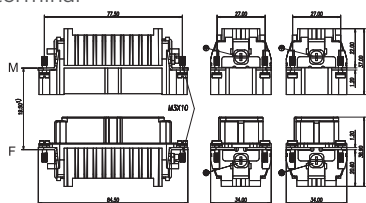
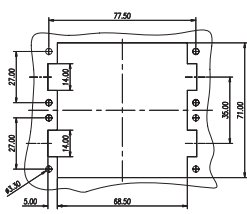
250V 10A

80 (2x40)+ $\oplus$  (machined contacts)

| Dimensions (mm)                                                                   |                                                                                   | Type                              | Part Number                        |                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------|------------------------------------|------------------------------------|
|                                                                                   |                                                                                   |                                   | Male insert                        | Female insert                      |
| Crimp terminal (order crimp contacts separately)                                  | Contact arrangement view from termination side                                    |                                   |                                    |                                    |
|  |  | HD-040-M(1-40)<br>HD-040-M(41-80) | T2020402101-000<br>T2020802101-000 |                                    |
|  |  | HD-040-F(1-40)<br>HD-040-F(41-80) |                                    | T2020402201-000<br>T2020802201-000 |

### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3m\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                               |                                                                                                                     | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
|                                            |                                  | 0.14-0.37       | 26-22 | 8.0                      | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                               |                                                                                                                     | 0.5             | 20    | 8.0                      | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                               |                                                                                                                     | 0.75            | 18    | 8.0                      | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                               |                                                                                                                     | 1.0             | 18    | 8.0                      | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                               |                                                                                                                     | 1.5             | 16    | 8.0                      | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                               |                                                                                                                     | 2.5             | 14    | 6.0                      | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                               |                                                                                                                     |                 |       |                          |                               |                 |                             |                 |
| CDF/Female<br>                             | 10A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 8.0                      | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                               |                                                                                                                     | 0.5             | 20    | 8.0                      | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                               |                                                                                                                     | 0.75            | 18    | 8.0                      | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                               |                                                                                                                     | 1.0             | 18    | 8.0                      | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                               |                                                                                                                     | 1.5             | 16    | 8.0                      | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                               |                                                                                                                     | 2.5             | 14    | 6.0                      | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |
|                                                                                                                               |                                                                                                                     |                 |       |                          |                               |                 |                             |                 |

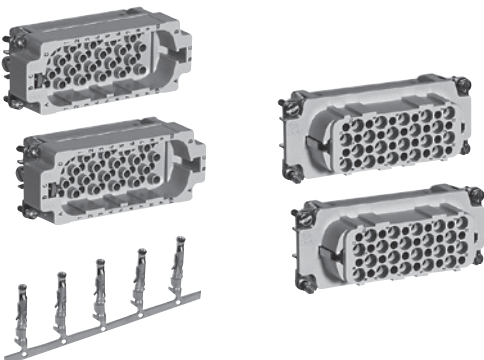
| Distance for contact max. 24mm                                                                        | Panel cut-out for inserts for use without hoods/housings                            |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Crimp terminal<br> |  |

# HD-080 inserts

## INSERTS FOR H32B HOOD/HOUSING

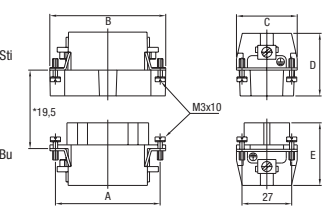
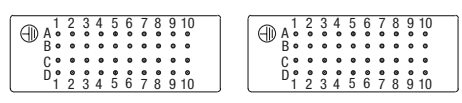
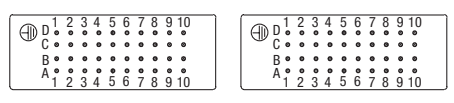
250V 10A

80 (2x40)+ (stamped and formed contacts)

| Description                                                                       |               | Type          | Part Number |               |
|-----------------------------------------------------------------------------------|---------------|---------------|-------------|---------------|
| Male insert                                                                       | Female insert |               | Male insert | Female insert |
| Screw terminal                                                                    |               |               |             |               |
|  |               | 2xHD.40.Sti.C | 2-1103012-3 |               |
|                                                                                   |               | 2xHD.40.Bu.C  |             | 2-1103013-3   |

| Dimensions | A    | B    | C  | D  | E  |
|------------|------|------|----|----|----|
| mm         | 77.5 | 84.5 | 33 | 35 | 35 |

Suitable crimp contacts and crimping tools: see page 111

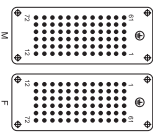
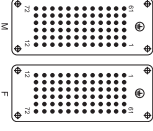
| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                         |
|  |  |  |

## HDD-144 inserts

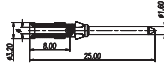
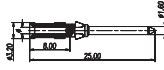
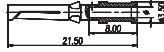
### INSERTS FOR H32B HOOD/HOUSING

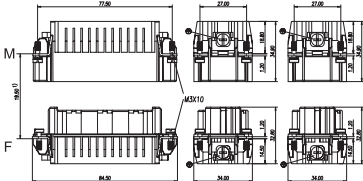
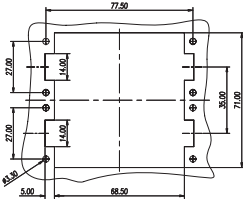
250V 10A

144 (2x72)+⊕ (machined contacts)

| Dimensions (mm)                                                                   |                                                                                   | Type                                 | Part Number                        |                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------|------------------------------------|------------------------------------|
|                                                                                   |                                                                                   |                                      | Male insert                        | Female insert                      |
| Crimp terminal (order crimp contacts separately)                                  | Contact arrangement view from termination side                                    |                                      |                                    |                                    |
|  |  | HDD-072-M(1-72)<br>HDD-072-M(73-144) | T2030722101-000<br>T2031442101-000 |                                    |
|  |  | HDD-072-F(1-72)<br>HDD-072-F(73-144) |                                    | T2030722201-000<br>T2031442201-000 |

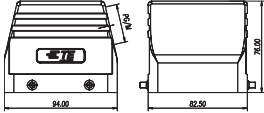
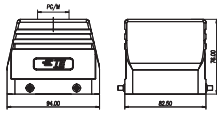
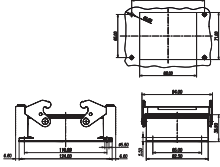
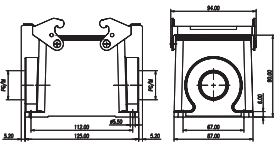
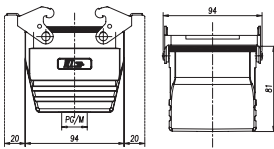
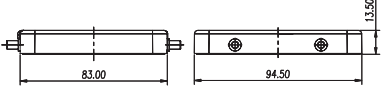
### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                     | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
|                                                   |                                  | 0.14-0.37       | 26-22 | 8.0                      | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                      |                                                                                                                     | 0.5             | 20    | 8.0                      | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                      |                                                                                                                     | 0.75            | 18    | 8.0                      | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                      |                                                                                                                     | 1.0             | 18    | 8.0                      | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                      |                                                                                                                     | 1.5             | 16    | 8.0                      | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                      |                                                                                                                     | 2.5             | 14    | 6.0                      | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
| CDF/Female<br>                                    | 10A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 8.0                      | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                      |                                                                                                                     | 0.5             | 20    | 8.0                      | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                      |                                                                                                                     | 0.75            | 18    | 8.0                      | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                      |                                                                                                                     | 1.0             | 18    | 8.0                      | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                      |                                                                                                                     | 1.5             | 16    | 8.0                      | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                      |                                                                                                                     | 2.5             | 14    | 6.0                      | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

| Distance for contact max. 24mm                                                                        | Panel cut-out for inserts for use without hoods/housings                            |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Crimp terminal<br> |  |

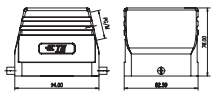
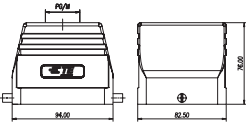
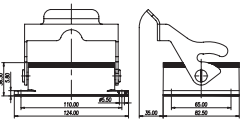
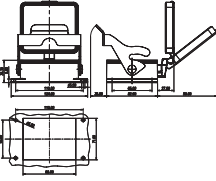
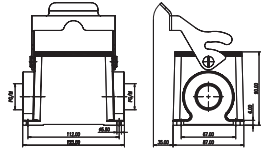
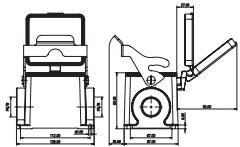
## H32B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                               | PG                                                                                   | Type                                                                                                                                                                                                                                                                                      | Part Number                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|    |    | M32<br>M40                                                                           | PG29<br>PG36<br>H32B-TS-PG29<br>H32B-TS-PG36<br>H32B-TS-M32<br>H32B-TS-M40                                                                                                                                                                                                                | T1210320129-000<br>T1210320136-000<br>T1210320132-000<br>T1210320140-000                                                                                                                                                                                               |
| Hood: Top entry                                                                     |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|    |    | M25<br>M32<br>M40<br>M50                                                             | PG21<br>PG29<br>PG36<br>PG42<br>H32B-TG-PG21<br>H32B-TG-PG29<br>H32B-TG-PG36<br>H32B-TG-PG42<br>H32B-TG-M25<br>H32B-TG-M32<br>H32B-TG-M40<br>H32B-TG-M50                                                                                                                                  | T1220320121-000<br>T1220320129-000<br>T1220320136-000<br>T1220320142-000<br>T1220320125-000<br>T1220320132-000<br>T1220320140-000<br>T1220320150-000                                                                                                                   |
| Bulkhead mounted                                                                    |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|   |   |                                                                                      | H32B-AG                                                                                                                                                                                                                                                                                   | T1410322000-000                                                                                                                                                                                                                                                        |
| Surface mounted: Side entry                                                         |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|  |  | 1 Side entry<br>M32<br>M40<br>M50<br>M63<br>2 Side entry<br>M32<br>M40<br>M50<br>M63 | PG29<br>PG36<br>PG42<br>H32B-SGR-PG29<br>H32B-SGR-PG36<br>H32B-SGR-PG42<br>H32B-SGR-M32<br>H32B-SGR-M40<br>H32B-SGR-M50<br>H32B-SGR-M63<br>PG29<br>PG36<br>PG42<br>H32B-SGR-2PG29<br>H32B-SGR-2PG36<br>H32B-SGR-2PG42<br>H32B-SGR-2M32<br>H32B-SGR-2M40<br>H32B-SGR-2M50<br>H32B-SGR-2M63 | T1440322129-000<br>T1440322136-000<br>T1440322142-000<br>T1440322132-000<br>T1440322140-000<br>T1440322150-000<br>T1440322163-000<br>T1440322229-000<br>T1440322236-000<br>T1440322242-000<br>T1440322232-000<br>T1440322240-000<br>T1440322250-000<br>T1440322263-000 |
| Cable-to-cable hood                                                                 |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|  |  | M32<br>M40<br>M50<br>M63                                                             | PG29<br>PG36<br>PG42<br>H32B-TBF-PG29<br>H32B-TBF-PG36<br>H32B-TBF-PG42<br>H32B-TBF-M32<br>H32B-TBF-M40<br>H32B-TBF-M50<br>H32B-TBF-M63                                                                                                                                                   | T1710322129-000<br>T1710322136-000<br>T1710322142-000<br>T1710322132-000<br>T1710322140-000<br>T1710322150-000<br>T1710322163-000                                                                                                                                      |
| Protection covers for hoods                                                         |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|  |  |                                                                                      | H32B-KDB                                                                                                                                                                                                                                                                                  | T1000321220-000                                                                                                                                                                                                                                                        |

## H32B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

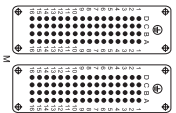
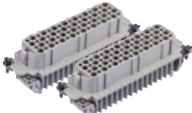
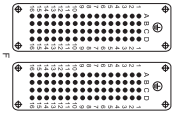
| Dimensions (mm)                                                                     |                                                                                                              | Metr.                                                    | PG                           | Type                                                                                                                                             | Part Number                                                                                                                                          |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|    |                             | M32<br>M40                                               | PG29<br>PG36                 | H32B-TS-RO-PG29<br>H32B-TS-RO-PG36<br>H32B-TS-RO-M32<br>H32B-TS-RO-M40                                                                           | T1310320129-000<br>T1310320136-000<br>T1310320132-000<br>T1310320140-000                                                                             |
| Hood: Top entry                                                                     |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|    |                             | M25<br>M32<br>M40<br>M50                                 | PG21<br>PG29<br>PG36<br>PG42 | H32B-TG-RO-PG21<br>H32B-TG-RO-PG29<br>H32B-TG-RO-PG36<br>H32B-TG-RO-PG42<br>H32B-TG-RO-M25<br>H32B-TG-RO-M32<br>H32B-TG-RO-M40<br>H32B-TG-RO-M50 | T1320320121-000<br>T1320320129-000<br>T1320320136-000<br>T1320320142-000<br>T1320320125-000<br>T1320320132-000<br>T1320320140-000<br>T1320320150-000 |
| Bulkhead mounted                                                                    |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|   |                            |                                                          |                              | H32B-AG-LB                                                                                                                                       | T1500322000-000                                                                                                                                      |
|  | With protection cover<br> |                                                          |                              | H32B-AD-LB                                                                                                                                       | T1510322000-000                                                                                                                                      |
| Surface mounted: Side entry                                                         |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|  |                           | 1 Side entry<br>M32<br>M40<br>2 Side entry<br>M32<br>M40 | PG29<br><br>PG29             | H32B-SGR-LB-PG29<br>H32B-SGR-LB-M32<br>H32B-SGR-LB-M40<br>H32B-SGR-LB-2PG29<br>H32B-SGR-LB-2M32<br>H32B-SGR-LB-2M40                              | T1610322129-000<br>T1610322132-000<br>T1610322140-000<br>T1610322229-000<br>T1610322232-000<br>T1610322240-000                                       |
|  | With protection cover<br> | 1 Side entry<br>M32<br>M40<br>2 Side entry<br>M32<br>M40 | PG29<br><br>PG29             | H32B-SDR-LB-PG29<br>H32B-SDR-LB-M32<br>H32B-SDR-LB-M40<br>H32B-SDR-LB-2PG29<br>H32B-SDR-LB-2M32<br>H32B-SDR-LB-2M40                              | T1620320129-000<br>T1620320132-000<br>T1620320140-000<br>T1620320229-000<br>T1620320232-000<br>T1620320240-000                                       |

## HD-128 inserts

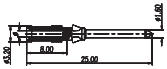
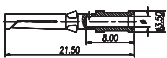
### INSERTS FOR H48B HOOD/HOUSING

250V 10A

128 (2x64)+⊕ (machined contacts)

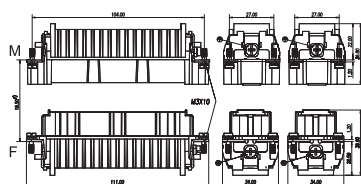
| Dimensions (mm)                                                                   |                                                                                   | Type                               | Part Number                        |                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|
|                                                                                   |                                                                                   |                                    | Male insert                        | Female insert                      |
| Crimp terminal (order crimp contacts separately)                                  | Contact arrangement view from termination side                                    |                                    |                                    |                                    |
|  |  | HD-O64-M(1-64)<br>HD-O64-M(65-128) | T2020642101-000<br>T2021282101-000 |                                    |
|  |  | HD-O64-F(1-64)<br>HD-O64-F(65-128) |                                    | T2020642201-000<br>T2021282201-000 |

### 10A Contact

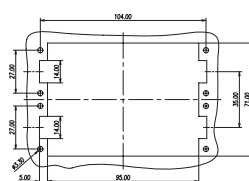
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male crimp contacts<br> | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
|                                                   |                             | 0.14-0.37       | 26-22 | 8.0               | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                      |                                                                                                                | 0.5             | 20    | 8.0               | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                      |                                                                                                                | 0.75            | 18    | 8.0               | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                      |                                                                                                                | 1.0             | 18    | 8.0               | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                      |                                                                                                                | 1.5             | 16    | 8.0               | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                      |                                                                                                                | 2.5             | 14    | 6.0               | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                      |                                                                                                                | 0.14-0.37       | 26-22 | 8.0               | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                      |                                                                                                                | 0.5             | 20    | 8.0               | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                      |                                                                                                                | 0.75            | 18    | 8.0               | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                      |                                                                                                                | 1.0             | 18    | 8.0               | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                      |                                                                                                                | 1.5             | 16    | 8.0               | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                      |                                                                                                                | 2.5             | 14    | 6.0               | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

### Distance for contact max. 24mm

Crimp terminal



### Panel cut-out for inserts for use without hoods/housings



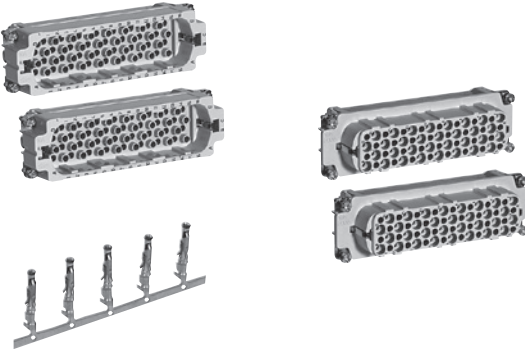


HD.128/HEE 92 contact inserts

INSERTS FOR H48B HOOD/HOUSING

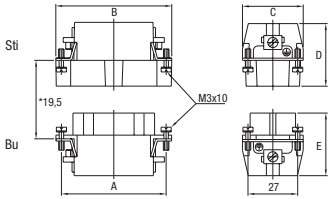
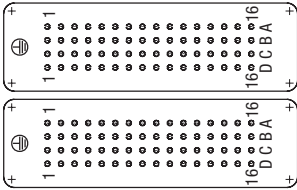
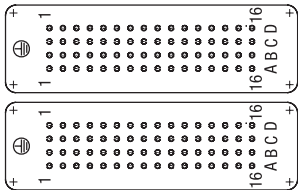
250V 10A

128 (2x64)+ Ⓢ(stamped and formed contacts)

| Description                                                                       |               | Type          | Part Number |               |
|-----------------------------------------------------------------------------------|---------------|---------------|-------------|---------------|
| Male insert                                                                       | Female insert |               | Male insert | Female insert |
| Crimp terminal                                                                    |               |               |             |               |
|  |               | 2xHD.64.Sti.C | 2-1103032-3 |               |
|                                                                                   |               | 2xHD.64.Bu.C  |             | 2-1103033-3   |

| Dimensions | A   | B   | C  | D  | E  |
|------------|-----|-----|----|----|----|
| mm         | 104 | 110 | 33 | 35 | 35 |

Suitable crimp contacts and crimping tools: see page 111

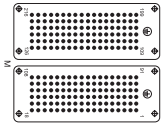
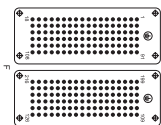
| Dimensions (mm)                                                                     | Contact arrangement                                                                 |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | Male insert                                                                         | Female insert                                                                         |
|  |  |  |

## HDD-216 inserts

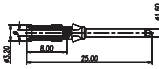
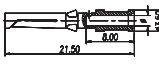
### INSERTS FOR H48B HOOD/HOUSING

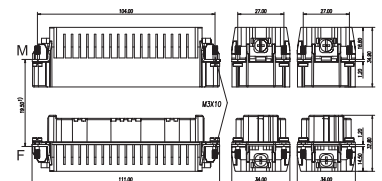
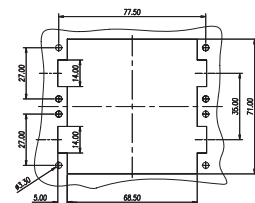
250V 10A

216 (2x108)+⊕ (machined contacts)

| Dimensions (mm)                                                                   |                                                                                   | Type                                   | Part Number                        |                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------|------------------------------------|------------------------------------|
|                                                                                   |                                                                                   |                                        | Male insert                        | Female insert                      |
| Crimp terminal (order crimp contacts separately)                                  | Contact arrangement view from termination side                                    |                                        |                                    |                                    |
|  |  | HDD-108-M(1-108)<br>HDD-108-M(109-216) | T2031082101-000<br>T2032162101-000 |                                    |
|  |  | HDD-108-F(1-108)<br>HDD-108-F(109-216) |                                    | T2031082201-000<br>T2032162201-000 |

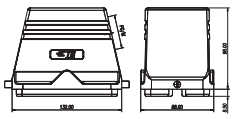
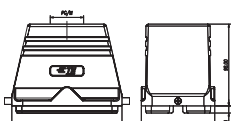
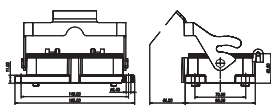
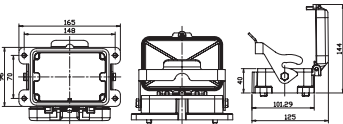
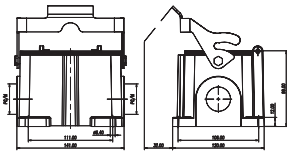
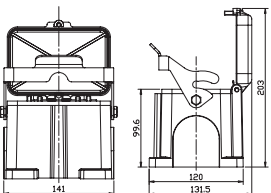
### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male crimp contacts<br> | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
|                                                   |                             | 0.14-0.37       | 26-22 | 8.0                      | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                      |                                                                                                                | 0.5             | 20    | 8.0                      | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                      |                                                                                                                | 0.75            | 18    | 8.0                      | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                      |                                                                                                                | 1.0             | 18    | 8.0                      | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                      |                                                                                                                | 1.5             | 16    | 8.0                      | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                      |                                                                                                                | 2.5             | 14    | 6.0                      | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                      |                                                                                                                |                 |       |                          |                               |                 |                             |                 |
| CDF/Female                                                                                                                           | 10A Female crimp contacts                                                                                      | 0.14-0.37       | 26-22 | 8.0                      | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                      |                                                                                                                | 0.5             | 20    | 8.0                      | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                      |                                                                                                                | 0.75            | 18    | 8.0                      | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                      |                                                                                                                | 1.0             | 18    | 8.0                      | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                      |                                                                                                                | 1.5             | 16    | 8.0                      | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                      |                                                                                                                | 2.5             | 14    | 6.0                      | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

| Distance for contact max. 24mm                                                                        | Panel cut-out for inserts for use without hoods/housings                            |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Crimp terminal<br> |  |

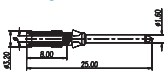
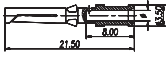
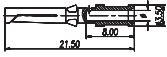
## H48B hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                                                        | PG                                                                     | Type                                                                                                                                                                                                                             | Part Number                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                              |                                                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
|    |                             | M32<br>M40<br>M50<br>M63                                               | PG29<br>PG36<br>PG42<br>H48B-TS-PG29<br>H48B-TS-PG36<br>H48B-TS-PG42<br>H48B-TS-M32<br>H48B-TS-M40<br>H48B-TS-M50<br>H48B-TS-M63                                                                                                 | T1310480129-000<br>T1310480136-000<br>T1310480142-000<br>T1310480132-000<br>T1310480140-000<br>T1310480150-000<br>T1310480163-000                                                                                                |
| Hood: Top entry                                                                     |                                                                                                              |                                                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
|    |                             | M32<br>M40<br>M50<br>M63                                               | PG29<br>PG36<br>PG42<br>H48B-TG-PG29<br>H48B-TG-PG36<br>H48B-TG-PG42<br>H48B-TG-M32<br>H48B-TG-M40<br>H48B-TG-M50<br>H48B-TG-M63                                                                                                 | T1320480129-000<br>T1320480136-000<br>T1320480142-000<br>T1320480132-000<br>T1320480140-000<br>T1320480150-000<br>T1320480163-000                                                                                                |
| Bulkhead mounted                                                                    |                                                                                                              |                                                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
|   |                            |                                                                        |                                                                                                                                                                                                                                  | H48B-AG<br>T1500482000-000                                                                                                                                                                                                       |
|  | With protection cover<br> |                                                                        |                                                                                                                                                                                                                                  | H48B-AD-LB<br>T1510482000-000                                                                                                                                                                                                    |
| Surface mounted: Side entry                                                         |                                                                                                              |                                                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
|  |                           | 1 Side entry<br>M32<br>M40<br>M50<br>2 Side entry<br>M32<br>M40<br>M50 | PG29<br>PG36<br>PG42<br>H48B-SGR-PG29<br>H48B-SGR-PG36<br>H48B-SGR-PG42<br>H48B-SGR-M32<br>H48B-SGR-M40<br>H48B-SGR-M50<br>H48B-SGR-2PG29<br>H48B-SGR-2PG36<br>H48B-SGR-2PG42<br>H48B-SGR-2M32<br>H48B-SGR-2M40<br>H48B-SGR-2M50 | T1610482129-000<br>T1610482136-000<br>T1610482142-000<br>T1610482132-000<br>T1610482140-000<br>T1610482150-000<br>T1610482229-000<br>T1610482236-000<br>T1610482242-000<br>T1610482232-000<br>T1610482240-000<br>T1610482250-000 |
| Surface mounted with cover                                                          |                                                                                                              |                                                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
|  |                           | 1 Side entry<br>M32<br>M40<br>M50<br>2 Side entry<br>M32<br>M40<br>M50 | PG29<br>PG36<br>PG42<br>H48B-SDR-PG29<br>H48B-SDR-PG36<br>H48B-SDR-PG42<br>H48B-SDR-M32<br>H48B-SDR-M40<br>H48B-SDR-M50<br>H48B-SDR-2PG29<br>H48B-SDR-2PG36<br>H48B-SDR-2PG42<br>H48B-SDR-2M32<br>H48B-SDR-2M40<br>H48B-SDR-2M50 | T1620480129-000<br>T1620480136-000<br>T1620480142-000<br>T1620480132-000<br>T1620480140-000<br>T1620480150-000<br>T1620480229-000<br>T1620480236-000<br>T1620480242-000<br>T1620480232-000<br>T1620480240-000<br>T1620480250-000 |

## Crimp contacts HN.D series

### 10A Contact

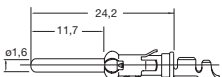
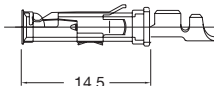
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male<br>crimp contacts<br> | Wire gauge      |       | Strip-<br>ping<br>length<br>mm | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                 | mm <sup>2</sup> | AWG   |                                | Type                          | Part Number     | Type                        | Part Number     |
|                                                     |                                | 0.14-0.37       | 26-22 | 8.0                            | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                      |                                                                                                                 | 0.5             | 20    | 8.0                            | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                      |                                                                                                                 | 0.75            | 18    | 8.0                            | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                      |                                                                                                                 | 1.0             | 18    | 8.0                            | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                      |                                                                                                                 | 1.5             | 16    | 8.0                            | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                      |                                                                                                                 | 2.5             | 14    | 6.0                            | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                     |                                | 0.14-0.37       | 26-22 | 8.0                            | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                      |                                                                                                                 | 0.5             | 20    | 8.0                            | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                      |                                                                                                                 | 0.75            | 18    | 8.0                            | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                      |                                                                                                                 | 1.0             | 18    | 8.0                            | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                      |                                                                                                                 | 1.5             | 16    | 8.0                            | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                      |                                                                                                                 | 2.5             | 14    | 6.0                            | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

## Crimping tools HN.D series

| Description                                                                                                                          |                                                                                     | Type            | Part Number     |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-----------------|
| <b>Crimp tool</b><br><br>Wire range: 0.5-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts                          |  | CRIMPBOX-0.5/4  | T3100000001-000 |
| <b>Crimp tool</b><br><br>Wire range: 0.14-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts<br>with locator and die |  | RSZ.HE-HN.D-HVT | 1-1105851-8     |
| <b>Removal tools</b><br><br>Used for CDM/CDF<br>contact series                                                                       |  | REMOV-HD        | T3100000003-000 |
| <b>M3 screw driver</b><br><br>Used for HA/HE inserts                                                                                 |  | SCREWD-M3       | T3100000009-000 |

## Crimp contacts HD.M series

### 10A Contact

|                                                                                                                                                                                                       |                                                                                   |                                                                                   |                                 |                                           |                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------|-------------------------------------------|------------------------------------|
| <b>Tech data</b><br><b>Material:</b><br>copper alloy<br><br>Finish:<br>tin plated<br>hard gold<br><b>Contact resistance:</b> ≤3mΩ<br><b>Crimp Terminal:</b><br>0.14-2.5 mm <sup>2</sup><br>AWG: 26-14 | <b>Description</b>                                                                |                                                                                   | <b>Type</b>                     | <b>Part Number</b>                        | <b>Dimensions (mm<sup>2</sup>)</b> |
|                                                                                                                                                                                                       | <b>Pin contact</b>                                                                | <b>Socket contact</b>                                                             |                                 |                                           |                                    |
|                                                                                                                                                                                                       |  |  | Pin contact tin plated          | 1-1105000-3<br>2-1105000-3<br>4-1105000-3 | 0.3-0.56<br>0.5-1.5<br>1.5-2.5     |
|                                                                                                                                                                                                       |                                                                                   |                                                                                   | Reel contact/pin tin plated     | 0-0164161-9<br>0-0166824-2                | 0.5-1.5<br>1.5-2.5                 |
|                                                                                                                                                                                                       |                                                                                   |                                                                                   | Pin contact gold plated         | 1-1105000-2<br>3-1105000-2                | 0.3-0.56<br>0.8-1.5                |
|                                                                                                                                                                                                       |                                                                                   |                                                                                   | Reel contact/pin gold plated    | 0-0164160-4<br>0-0164161-4                | 0.3-0.56<br>0.8-1.5                |
|                                                                                                                                                                                                       |                                                                                   |                                                                                   | Socket contact tin plated       | 1-1105001-3<br>2-1105001-3<br>4-1105001-3 | 0.3-0.56<br>0.5-1.5<br>1.5-2.5     |
|                                                                                                                                                                                                       |                                                                                   |                                                                                   | Socket contact gold plated      | 1-1105001-2<br>3-1105001-2                | 0.3-0.56<br>0.8-1.5                |
|                                                                                                                                                                                                       |                                                                                   |                                                                                   | Reel contact/socket gold plated | 1-0163087-1<br>0-0163083-7                | 0.3-0.56<br>0.8-1.5                |

| Type | Wire cross section       | Stripping length |
|------|--------------------------|------------------|
| 1    | 0.2-0.56 mm <sup>2</sup> | 3.5 mm           |
| 2    | 0.5-1.5 mm <sup>2</sup>  | 3.5 mm           |
| 3    | 0.8-1.5 mm <sup>2</sup>  | 3.5 mm           |
| 4    | 1.5-2.5 mm <sup>2</sup>  | 3.5 mm           |

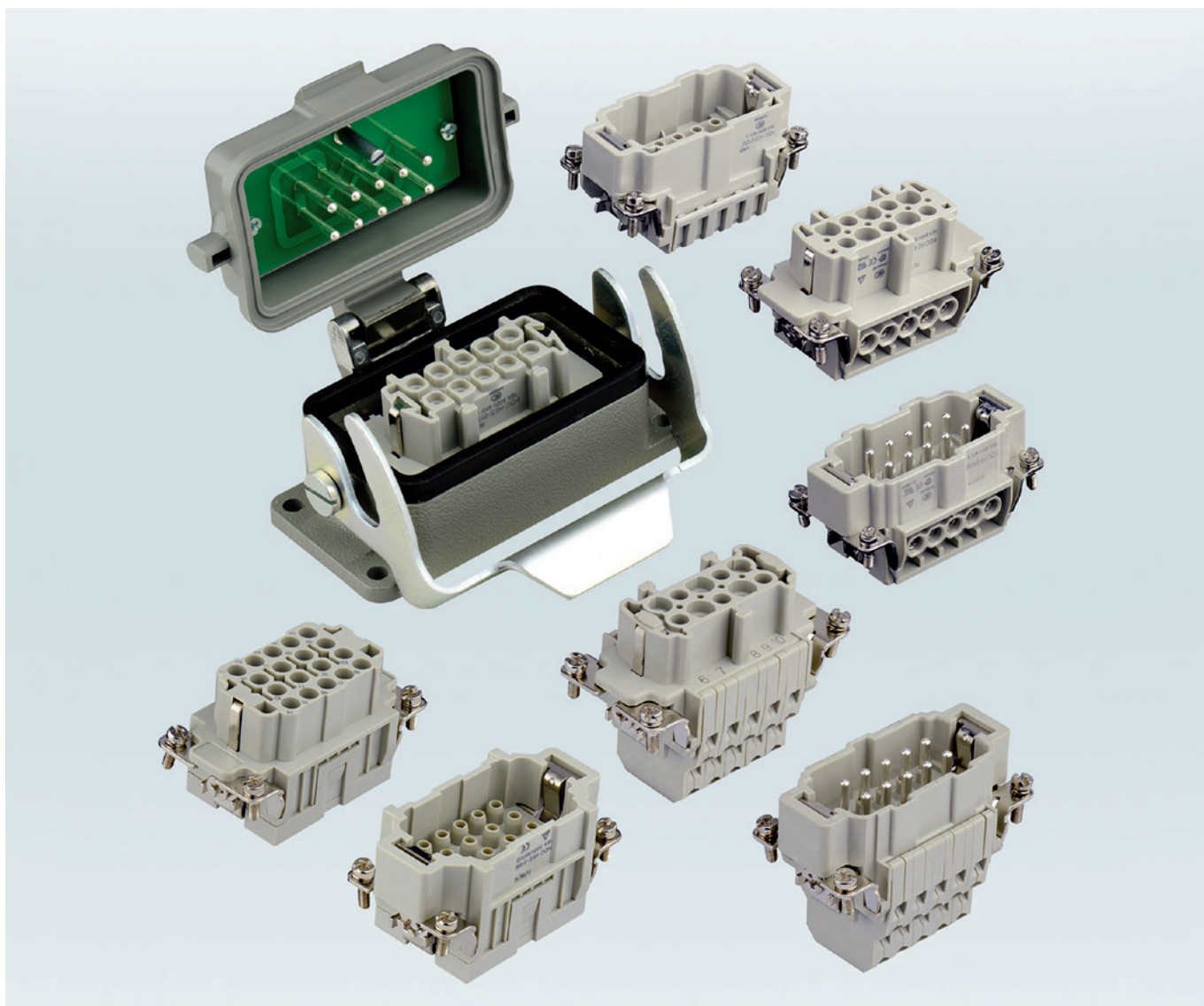
## Crimping tools HD.M series

| Description                           |                                                                                     | Designation   | Part Number | Cross section (mm <sup>2</sup> )          |
|---------------------------------------|-------------------------------------------------------------------------------------|---------------|-------------|-------------------------------------------|
| Crimping tool without locator and die |  | RSZ.BAS       | 539635-1    |                                           |
| Locator and die                       |  | ERGO-DIE XII  | 539742-2    | 0.2-2.5mm <sup>2</sup><br>for contacts PN |
| Extraction tool HD.M                  |  | AWZG-HD.M-RSZ | 0-1102855-1 | all cross sections                        |
| Insertion tool                        |  | EWZG-RSZ      | 0-1102855-6 | below 0.75mm <sup>2</sup>                 |

## Notes

[illegible]

## HE, HEE, HEEE Series



### 1. Specifications

DIN VDE 0110 Concerning clearance and creepage distances

DIN VDE 0627 Connectors and plug devices

### 2. Standards

DIN EN 60 664-1

DIN EN 61 984

### 3. Approvals



## HE technical characteristics

|                          |                      |
|--------------------------|----------------------|
| Specifications .....     | DIN EN 60 664-1      |
| .....                    | DIN EN 61 984        |
| Number of contacts ..... | 6,10,16,24,32(2x16), |
| .....                    | 48(2x24) + PE        |

### INSERTS

|                                             |                      |
|---------------------------------------------|----------------------|
| Working current .....                       | 16A max              |
| (See current carrying capacity)             |                      |
| Working voltage .....                       | 500V                 |
| Test voltage urms .....                     | 6KV                  |
| Pollution degree .....                      | 3                    |
| Insulation resistance .....                 | $\geq 10^{10}\Omega$ |
| Material .....                              | Polycarbonate        |
| Temperature range .....                     | -40°C...+125°C       |
| Flammability acc. to UL94 .....             | V0                   |
| Working voltage acc. to UL/CSA .....        | 600V                 |
| Mechanical working life-mating cycles ..... | $\geq 500$           |

### CONTACTS

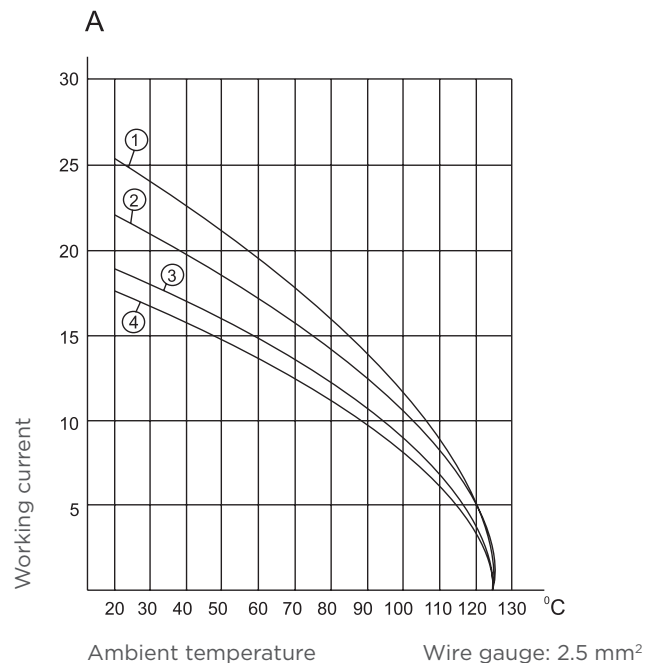
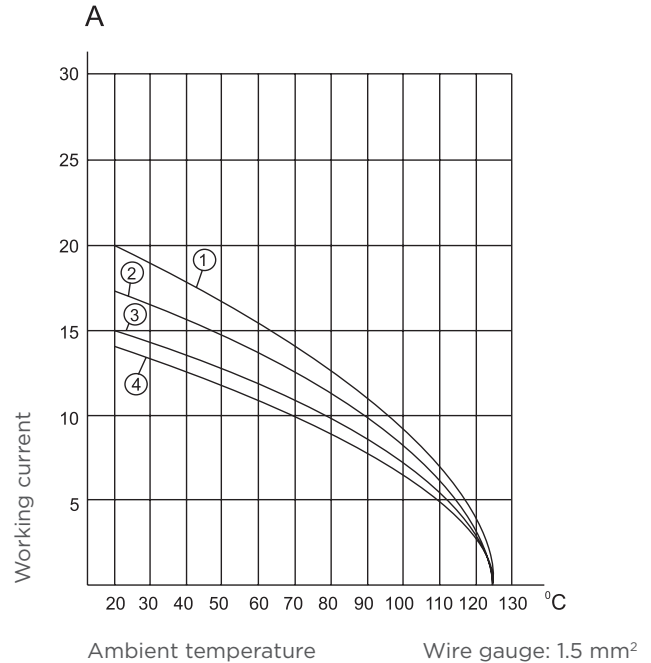
|                                |                        |
|--------------------------------|------------------------|
| Material .....                 | Copper alloy           |
| Surface .....                  | Hard silver-plated     |
| .....                          | Hard gold-plated       |
| Contact resistance .....       | $\leq 1m\Omega$        |
| Terminal .....                 |                        |
| .....                          | Crimp terminal         |
| .....                          | Screw terminal         |
| .....                          | Spring terminal        |
| .....                          | Double Spring terminal |
| -mm <sup>2</sup>               |                        |
| Crimp terminal .....           | 0.14-4.0               |
| Screw terminal .....           | 0.5-2.5                |
| Spring terminal .....          | 0.5-2.5                |
| Double Spring terminal .....   | 0.2-2.5                |
| -AWG                           |                        |
| Crimp terminal .....           | 26-12                  |
| Screw terminal .....           | 20-14                  |
| Spring terminal .....          | 20-14                  |
| Double Spring terminal .....   | 26-14                  |
| - Tightening/test torque ..... | 0.5 Nm                 |

### HOODS, HOUSINGS

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element .....                        | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.



- 1 HDC-HE-006
- 2 HDC-HE-010
- 3 HDC-HE-016
- 4 HDC-HE-024



## HEE technical characteristics

|                          |                       |
|--------------------------|-----------------------|
| Specifications .....     | DIN EN 60 664-1       |
| .....                    | DIN EN 61 984         |
| Number of contacts ..... | 10,18,32,46,64(2x32), |
| .....                    | 92(2x46) + PE         |

### INSERTS

|                                             |                      |
|---------------------------------------------|----------------------|
| Working current .....                       | 16A max              |
| (See current carrying capacity)             |                      |
| Working voltage .....                       | 500V                 |
| Test voltage urms .....                     | 6KV                  |
| Pollution degree .....                      | 3                    |
| Insulation resistance .....                 | $\geq 10^{10}\Omega$ |
| Material .....                              | Polycarbonate        |
| Temperature range .....                     | -40°C... +125°C      |
| Flammability acc. to UL94 .....             | V0                   |
| Working voltage acc. to UL/CSA .....        | 600V                 |
| Mechanical working life-mating cycles ..... | $\geq 500$           |

### CONTACTS

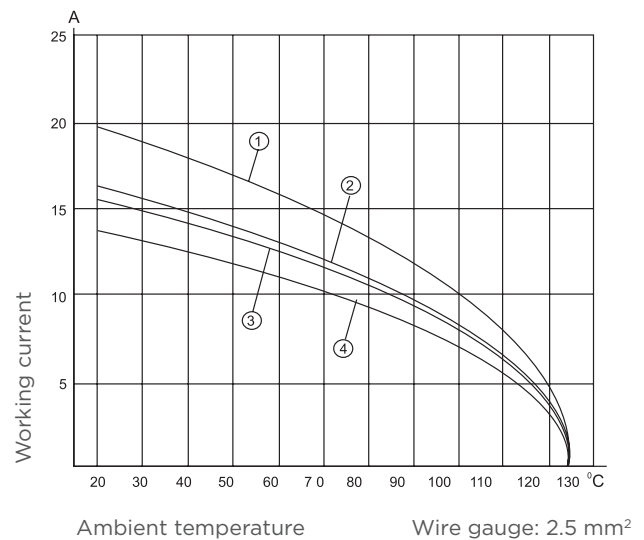
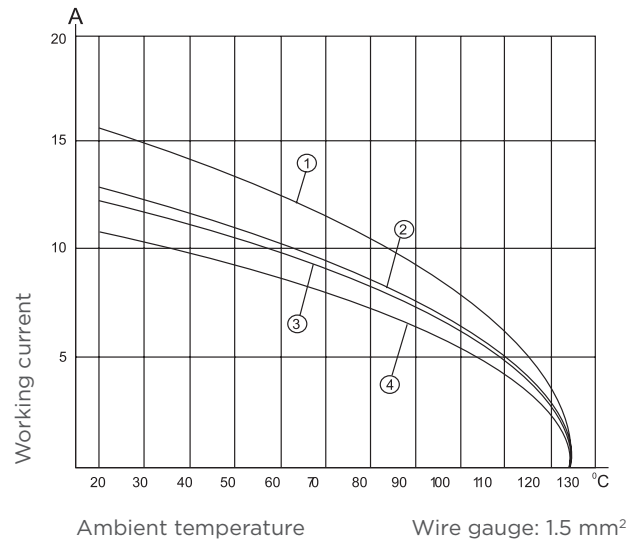
|                          |                         |
|--------------------------|-------------------------|
| Material .....           | Copper alloy            |
| Surface .....            | Hard silver-plated      |
| .....                    | Hard gold-plated        |
| Contact resistance ..... | $\leq 1\text{m}\Omega$  |
| Terminal .....           | Crimp terminal          |
| - mm <sup>2</sup> .....  | 0.14-4.0mm <sup>2</sup> |
| - AWG .....              | 26-12                   |

### HOODS, HOUSINGS

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element .....                        | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.



- 1 HDC-HEE-010
- 2 HDC-HEE-018
- 3 HDC-HEE-032
- 4 HDC-HEE-046

## HEEE technical characteristics

|                          |                                    |
|--------------------------|------------------------------------|
| Specifications .....     | DIN EN 60 664-1                    |
| .....                    | DIN EN 61 984                      |
| Number of contacts ..... | 20,32,40,48,64,72,80(2x40)         |
| .....                    | 96(2x48),128(2x64), 144(2x72) + PE |

### INSERTS

|                                             |                      |
|---------------------------------------------|----------------------|
| Working current .....                       | 16A max              |
| (See current carrying capacity)             |                      |
| Working voltage .....                       |                      |
| HEEE-20,32,48,72,96,144 .....               | 400V                 |
| HEEE-40,64,80,128 .....                     | 500V                 |
| Test voltage urms .....                     | 6KV                  |
| Pollution degree .....                      | 3                    |
| Insulation resistance .....                 | $\geq 10^{10}\Omega$ |
| Material .....                              | Polycarbonate        |
| Temperature range .....                     | -40°C... +125°C      |
| Flammability acc. to UL94 .....             | V0                   |
| Working voltage acc. to UL/CSA .....        | 600V                 |
| Mechanical working life-mating cycles ..... | $\geq 500$           |

### CONTACTS

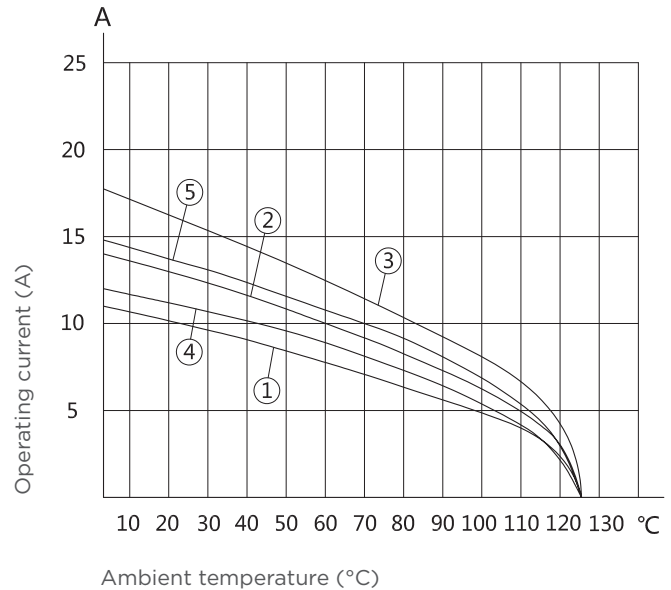
|                          |                         |
|--------------------------|-------------------------|
| Material .....           | Copper alloy            |
| Surface .....            | Hard silver-plated      |
| .....                    | Hard gold-plated        |
| Contact resistance ..... | $\leq 5m\Omega$         |
| Terminal .....           | Crimp terminal          |
| - mm <sup>2</sup> .....  | 0.14-4.0mm <sup>2</sup> |
| - AWG .....              | 26-12                   |

### HOODS, HOUSINGS

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element .....                        | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals  
Control and test procedures according to DIN IEC 60512-3.



- 1 HEEE-064 / 1.5 mm<sup>2</sup>
- 2 HEEE-064 / 2.5 mm<sup>2</sup>
- 3 HEEE-064 / 4.0 mm<sup>2</sup>
- 4 HEEE-040 / 1.5 mm<sup>2</sup>
- 5 HEEE-040 / 2.5 mm<sup>2</sup>

## HE-006 inserts

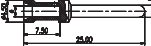
INSERTS FOR H6B HOOD/HOUSING

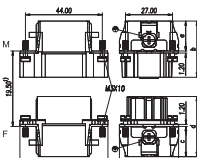
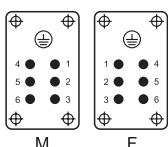
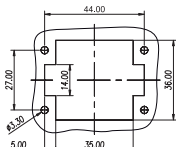
500V MAX. 16A

6+

| Dimension (mm)                                                                      | Type       | Part Number     |                 |
|-------------------------------------------------------------------------------------|------------|-----------------|-----------------|
|                                                                                     |            | Male insert     | Female insert   |
| Screw terminal                                                                      |            |                 |                 |
|    | HE-006-M   | T2040062101-000 |                 |
|                                                                                     | HE-006-F   |                 | T2040062201-000 |
| Spring terminal                                                                     |            |                 |                 |
|    | HE-006-MS  | T2040063101-000 |                 |
|                                                                                     | HE-006-FS  |                 | T2040063201-000 |
| Crimp terminal (Order crimp contacts separately)                                    |            |                 |                 |
|   | HE-006-MC  | T2040064101-000 |                 |
|                                                                                     | HE-006-FC  |                 | T2040064201-000 |
| Spring terminal (Two terminals per contact)                                         |            |                 |                 |
|  | HE-006-MSS | T2040065101-000 |                 |
|                                                                                     | HE-006-FSS |                 | T2040065201-000 |

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male<br><br>CEF/Female<br> | 16A Male crimp contacts<br> | Wire gauge      |       | Stripping length<br>mm | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------|-------|------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | mm <sup>2</sup> | AWG   |                        | Type                          | Part Number     | Type                        | Part Number     |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 0.14-0.37       | 26-22 | 7.5                    | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 0.5             | 20    | 7.5                    | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 0.75            | 18    | 7.5                    | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 1.0             | 18    | 7.5                    | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 1.5             | 16    | 7.5                    | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 2.5             | 14    | 7.5                    | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 4.0             | 12    | 7.5                    | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 0.14-0.37       | 26-22 | 7.5                    | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 0.5             | 20    | 7.5                    | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 0.75            | 18    | 7.5                    | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 1.0             | 18    | 7.5                    | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 1.5             | 16    | 7.5                    | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 2.5             | 14    | 7.5                    | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                                                                                                                                  |                                                                                                                | 4.0             | 12    | 7.5                    | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

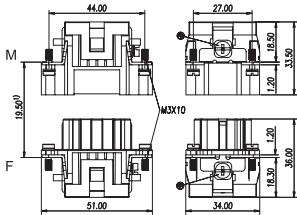
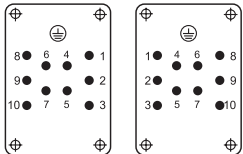
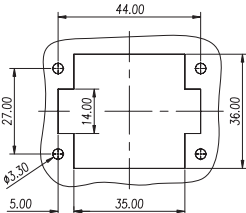
| Distance for contact max. 21mm                                                                                                                                                                                                                                                                                                                                                                               | Contact arrangement view from termination side | Panel cut-out for inserts for use without hoods/housings |    |    |   |    |    |    |    |    |         |    |    |    |    |      |    |    |    |    |                                                                                                |                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------|----|----|---|----|----|----|----|----|---------|----|----|----|----|------|----|----|----|----|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <div><table><thead><tr><th></th><th>a</th><th>b</th><th>c</th><th>d</th></tr></thead><tbody><tr><td>HE</td><td>18</td><td>33</td><td>18</td><td>35</td></tr><tr><td>HES/HEC</td><td>19</td><td>34</td><td>19</td><td>36</td></tr><tr><td>HESS</td><td>34</td><td>49</td><td>32</td><td>49</td></tr></tbody></table></div> |                                                | a                                                        | b  | c  | d | HE | 18 | 33 | 18 | 35 | HES/HEC | 19 | 34 | 19 | 36 | HESS | 34 | 49 | 32 | 49 | <div></div> | <div></div> |
|                                                                                                                                                                                                                                                                                                                                                                                                              | a                                              | b                                                        | c  | d  |   |    |    |    |    |    |         |    |    |    |    |      |    |    |    |    |                                                                                                |                                                                                                  |
| HE                                                                                                                                                                                                                                                                                                                                                                                                           | 18                                             | 33                                                       | 18 | 35 |   |    |    |    |    |    |         |    |    |    |    |      |    |    |    |    |                                                                                                |                                                                                                  |
| HES/HEC                                                                                                                                                                                                                                                                                                                                                                                                      | 19                                             | 34                                                       | 19 | 36 |   |    |    |    |    |    |         |    |    |    |    |      |    |    |    |    |                                                                                                |                                                                                                  |
| HESS                                                                                                                                                                                                                                                                                                                                                                                                         | 34                                             | 49                                                       | 32 | 49 |   |    |    |    |    |    |         |    |    |    |    |      |    |    |    |    |                                                                                                |                                                                                                  |

## HEE-010 inserts

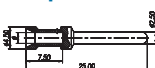
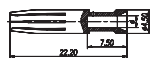
INSERTS FOR H6B HOOD/HOUSING

500V MAX. 16A

10+ 

| Dimensions (mm)                                                                    |                                                                                   | Type                                                                               | Part Number     |                 |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------|-----------------|
|                                                                                    |                                                                                   |                                                                                    | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                   |                                                                                   |                                                                                    |                 |                 |
|   |  | HEE-010-M                                                                          | T2050102101-000 |                 |
|                                                                                    |                                                                                   | HEE-010-F                                                                          |                 | T2050102201-000 |
| Contact arrangement view from termination side                                     |                                                                                   | Panel cut out for inserts for use without hoods/housings                           |                 |                 |
|  |                                                                                   |  |                 |                 |

## 16A Contact

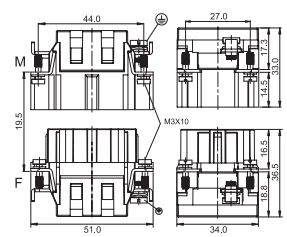
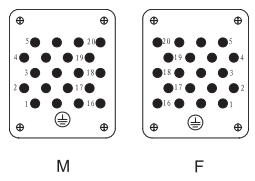
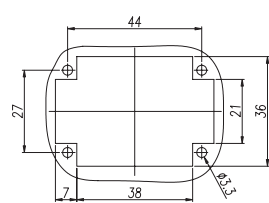
| Tech data                                                                                                                                                                                                             | 16A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                       |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b><br> |                                      | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| <b>CEF/Female</b><br>                                                                                                              | <b>16A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

## HEEE-020 inserts

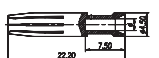
INSERTS FOR H6B HOOD/HOUSING

400V MAX. 16A

20+ 

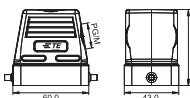
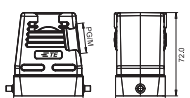
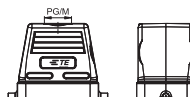
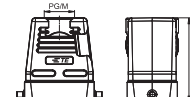
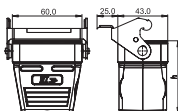
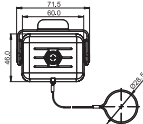
| Dimensions (mm)                                                                                              |                                                                                   | Type                                                                               | Part Number     |                 |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------|-----------------|
|                                                                                                              |                                                                                   |                                                                                    | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                                             |                                                                                   |                                                                                    |                 |                 |
|                             |  | HEEE-020-M                                                                         | T2050202101-000 |                 |
|                                                                                                              |                                                                                   | HEEE-020-F                                                                         |                 | T2050202201-000 |
| Contact arrangement view from termination side                                                               |                                                                                   | Panel cut out for inserts for use without hoods/housings                           |                 |                 |
|  <div>M</div> <div>F</div> |                                                                                   |  |                 |                 |

### 16A Contact

| Tech data                                                                                                                                                                                                          | 16A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                    |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b>  |                                      | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| <b>CEF/Female</b>                                                                                                               | <b>16A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

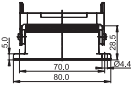
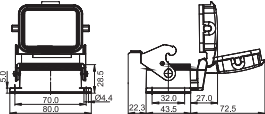
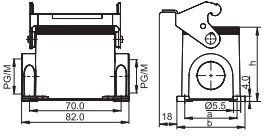
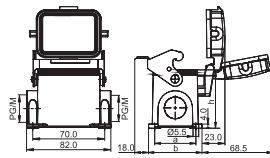
## H6B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                            | Metr.             | PG           | Type                                                                      | Part Number                                                                                 |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                            |                   |              |                                                                           |                                                                                             |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
|    | <div>Low construction</div> <div></div>                                                                                                   | M20<br>M25        | PG16<br>PG21 | H6B-TS-PG16<br>H6B-TS-PG21<br>H6B-TS-M20<br>H6B-TS-M25                    | T1310060116-000<br>T1310060121-000<br>T1310060120-000<br>T1310060125-000                    |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
|    | <div>High construction</div> <div></div>                                                                                                  | M20<br>M25<br>M32 | PG21<br>PG29 | H6B-TSH-PG21<br>H6B-TSH-PG29<br>H6B-TSH-M20<br>H6B-TSH-M25<br>H6B-TSH-M32 | T1330060121-000<br>T1330060129-000<br>T1330060120-000<br>T1330060125-000<br>T1330060132-000 |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                            |                   |              |                                                                           |                                                                                             |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
|   | <div>Low construction</div> <div></div>                                                                                                  | M20<br>M25        | PG16<br>PG21 | H6B-TG-PG16<br>H6B-TG-PG21<br>H6B-TG-M20<br>H6B-TG-M25                    | T1320060116-000<br>T1320060121-000<br>T1320060120-000<br>T1320060125-000                    |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
|  | <div>High construction</div> <div></div>                                                                                                | M20<br>M25<br>M32 | PG21<br>PG29 | H6B-TGH-PG21<br>H6B-TGH-PG29<br>H6B-TGH-M20<br>H6B-TGH-M25<br>H6B-TGH-M32 | T1340060121-000<br>T1340060129-000<br>T1340060120-000<br>T1340060125-000<br>T1340060132-000 |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                            |                   |              |                                                                           |                                                                                             |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                       | 62.5                                                                                        | High | 74.5 | <div>Low construction</div> M20<br>M25<br><div>High construction</div> M20<br>M25<br>M32 | PG16<br><br>PG21<br>PG29 | H6B-TBFS-PG16<br>H6B-TBFS-M20<br>H6B-TBFS-M25<br><br>H6B-TBFHS-PG21<br>H6B-TBFHS-PG29<br>H6B-TBFHS-M20<br>H6B-TBFHS-M25<br>H6B-TBFHS-M32 | T1730062116-000<br>T1730062120-000<br>T1730062125-000<br><br>T1770062121-000<br>T1770062129-000<br>T1770062120-000<br>T1770062125-000<br>T1770062132-000 |
| Construction                                                                        | H                                                                                                                                                                                                                          |                   |              |                                                                           |                                                                                             |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
| Low                                                                                 | 62.5                                                                                                                                                                                                                       |                   |              |                                                                           |                                                                                             |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
| High                                                                                | 74.5                                                                                                                                                                                                                       |                   |              |                                                                           |                                                                                             |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                            |                   |              |                                                                           |                                                                                             |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |
|  |                                                                                                                                         |                   |              | H6B-KDTP                                                                  | T1010061400-000                                                                             |      |      |                                                                                          |                          |                                                                                                                                          |                                                                                                                                                          |

## H6B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                                                                        | Metr.        | PG | Type    | Part Number     |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----|---------|-----------------|-----|----|----|----|-------|----|----|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                                        |              |    |         |                 |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|    |                                                                                                                                                                                                                       |              |    | H6B-AGS | T1500062000-000 |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|    | With protection cover<br>                                                                                                                                                                                             |              |    | H6B-ADS | T1510062100-000 |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                                                                        |              |    |         |                 |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|  | <div><table><tr><th>Construction</th><th>A</th><th>B</th><th>H</th></tr><tr><td>Low</td><td>40</td><td>52</td><td>56</td></tr><tr><td>Hight</td><td>45</td><td>57</td><td>74</td></tr></table></div>                 | Construction | A  | B       | H               | Low | 40 | 52 | 56 | Hight | 45 | 57 | 74 | Low construction<br>1 Side entry<br>M20<br>M25<br>2 Side entry<br>M20<br>M25<br>High construction<br>1 Side entry<br>M25<br>M32<br>2 Side entry<br>M25<br>M32 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H6B-SGRS-PG16<br>H6B-SGRS-PG21<br>H6B-SGRS-M20<br>H6B-SGRS-M25<br>H6B-SGRS-2PG16<br>H6B-SGRS-2PG21<br>H6B-SGRS-2M20<br>H6B-SGRS-2M25<br>H6B-SGRHS-PG21<br>H6B-SGRHS-PG29<br>H6B-SGRHS-M25<br>H6B-SGRHS-M32<br>H6B-SGRHS-2PG21<br>H6B-SGRHS-2PG29<br>H6B-SGRHS-2M25<br>H6B-SGRHS-2M32 | T1610062116-000<br>T1610062121-000<br>T1610062120-000<br>T1610062125-000<br>T1610062216-000<br>T1610062221-000<br>T1610062220-000<br>T1610062225-000<br>T1650062121-000<br>T1650062129-000<br>T1650062125-000<br>T1650062132-000<br>T1650062221-000<br>T1650062229-000<br>T1650062225-000<br>T1650062232-000 |
| Construction                                                                        | A                                                                                                                                                                                                                                                                                                      | B            | H  |         |                 |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
| Low                                                                                 | 40                                                                                                                                                                                                                                                                                                     | 52           | 56 |         |                 |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
| Hight                                                                               | 45                                                                                                                                                                                                                                                                                                     | 57           | 74 |         |                 |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|  | With protection cover<br> <table><tr><th>Construction</th><th>A</th><th>B</th><th>H</th></tr><tr><td>Low</td><td>40</td><td>52</td><td>56</td></tr><tr><td>Hight</td><td>45</td><td>57</td><td>74</td></tr></table> | Construction | A  | B       | H               | Low | 40 | 52 | 56 | Hight | 45 | 57 | 74 | Low construction<br>1 Side entry<br>M20<br>M25<br>2 Side entry<br>M20<br>M25<br>High construction<br>1 Side entry<br>M25<br>M32<br>2 Side entry<br>M25<br>M32 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H6B-SDRS-PG16<br>H6B-SDRS-PG21<br>H6B-SDRS-M20<br>H6B-SDRS-M25<br>H6B-SDRS-2PG16<br>H6B-SDRS-2PG21<br>H6B-SDRS-2M20<br>H6B-SDRS-2M25<br>H6B-SDRHS-PG21<br>H6B-SDRHS-PG29<br>H6B-SDRHS-M25<br>H6B-SDRHS-M32<br>H6B-SDRHS-2PG21<br>H6B-SDRHS-2PG29<br>H6B-SDRHS-2M25<br>H6B-SDRHS-2M32 | T1620062116-000<br>T1620062121-000<br>T1620062120-000<br>T1620062125-000<br>T1620062216-000<br>T1620062221-000<br>T1620062220-000<br>T1620062225-000<br>T1660062121-000<br>T1660062129-000<br>T1660062125-000<br>T1660062132-000<br>T1660062221-000<br>T1660062229-000<br>T1660062225-000<br>T1660062232-000 |
| Construction                                                                        | A                                                                                                                                                                                                                                                                                                      | B            | H  |         |                 |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
| Low                                                                                 | 40                                                                                                                                                                                                                                                                                                     | 52           | 56 |         |                 |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
| Hight                                                                               | 45                                                                                                                                                                                                                                                                                                     | 57           | 74 |         |                 |     |    |    |    |       |    |    |    |                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |

## HIP.6/16, HIP-K.6/16, EMV-K.6/16 housings

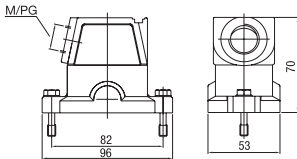
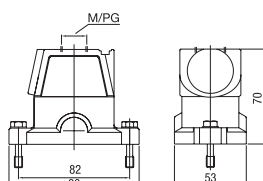
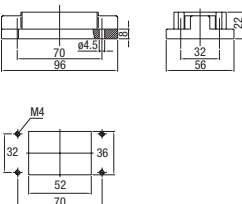
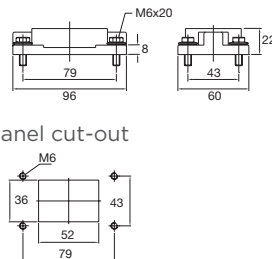
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

IP 68 / IP 69 K

| Description                                                                         |                                                                                                      | Metr.      | PG             | Type                                                                                                        | Part Number                                              |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------|----------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                      |            |                |                                                                                                             |                                                          |
|    |                     | M25        | 16             | HIP<br>HIP.6/16.STS.1.16.G<br>HIP.6/16.STS.1.M25.G                                                          | 1-1102631-5<br>0-1106425-2                               |
|                                                                                     |                                                                                                      | M25        | 16<br>21       | HIP-K<br>HIP-K.6/16.STS.1.16.G<br>HIP-K.6/16.STS.1.21.G<br>HIP-K.6/16.STS.1.M25.G                           | 2-1102631-5<br>2-1102633-5<br>0-1106425-4                |
|                                                                                     |                                                                                                      | M25        | 16             | EMV-K<br>EMV-K.6/16.STS.1.16.G<br>EMV-K.6/16.STS.1.M25.G                                                    | 4-1102704-5<br>0-1106416-4                               |
| Hood: Top entry                                                                     |                                                                                                      |            |                |                                                                                                             |                                                          |
|   |                    | M32        | 16             | HIP<br>HIP.6/16.STO.1.16.G<br>HIP.6/16.STO.1.M32.G                                                          | 1-1102635-5<br>0-1106425-1                               |
|                                                                                     |                                                                                                      | M25<br>M32 | 16<br>21       | HIP-K<br>HIP-K.6/16.STO.1.16.G<br>HIP-K.6/16.STO.1.21.G<br>HIP-K.6/16.STO.1.M25.G<br>HIP-K.6/16.STO.1.M32.G | 2-1102635-5<br>2-1102637-5<br>0-1106425-6<br>0-1106425-3 |
|                                                                                     |                                                                                                      | M32        | 13<br>16<br>21 | EMV-K<br>EMV-K.6/16.STO.1.13.G<br>EMV-K.6/16.STO.1.16.G<br>EMV-K.6/16.STO.1.21.G<br>EMV-K.6/16.STO.1.M32.G  | 0-1108719-1<br>4-1102706-5<br>4-1102707-5<br>0-1106416-3 |
| Surface mounted housing: Bottom entry                                               |                                                                                                      |            |                |                                                                                                             |                                                          |
|  |                   |            |                | HIP<br>HIP.6/16.AG                                                                                          | 1-1102638-5                                              |
|                                                                                     |                                                                                                      |            |                | HIP-K<br>HIP-K.6/16.AG                                                                                      | 2-1102638-5                                              |
|                                                                                     |                                                                                                      |            |                | EMV-K<br>EMV-K.6/16.AG                                                                                      | 4-1102710-5                                              |
|  | <br>Panel cut-out |            |                | HIP<br>HIP.6/16.AG.M6                                                                                       | 1-1102606-5                                              |
|                                                                                     |                                                                                                      |            |                | HIP-K<br>HIP-K.6/16.AG.M6                                                                                   | 2-1102606-5                                              |
|                                                                                     |                                                                                                      |            |                | EMV-K<br>EMV-K.6/16.AG.M6                                                                                   | 4-1102712-5                                              |



## HIP.6/16, HIP-K.6/16, EMV-K.6/16 housings

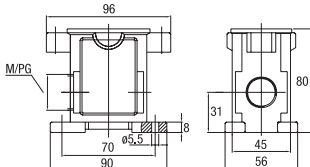
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

IP 68 / IP 69 K

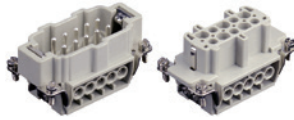
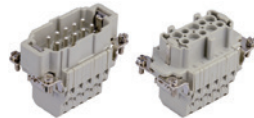
| Description                                                                       | Metr.                                                                             | PG    | Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------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| Surface mounted housing: Side entry                                               |                                                                                   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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|  |  | 2xM32 | 16<br>2x16<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><b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|             |

## HE-010 inserts

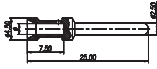
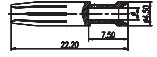
INSERTS FOR H10B HOOD/HOUSING

500V MAX. 16A

10+⊕

| Dimension (mm)                                                                      | Type       | Part Number     |                 |
|-------------------------------------------------------------------------------------|------------|-----------------|-----------------|
|                                                                                     |            | Male insert     | Female insert   |
| Screw terminal                                                                      |            |                 |                 |
|    | HE-010-M   | T2040102101-000 |                 |
|                                                                                     | HE-010-F   |                 | T2040102201-000 |
| Spring terminal                                                                     |            |                 |                 |
|    | HE-010-MS  | T2040103101-000 |                 |
|                                                                                     | HE-010-FS  |                 | T2040103201-000 |
| Crimp terminal (Order crimp contacts separately)                                    |            |                 |                 |
|   | HE-010-MC  | T2040104101-000 |                 |
|                                                                                     | HE-010-FC  |                 | T2040104201-000 |
| Spring terminal (Two terminals per contact)                                         |            |                 |                 |
|  | HE-010-MSS | T2040105101-000 |                 |
|                                                                                     | HE-010-FSS |                 | T2040105201-000 |

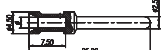
### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: ≤1mΩ<br>Terminal:<br>crimp connection<br>CEM/Male<br> | 16A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                           |                                                                                                                     | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
| CEF/Female<br>                                                                                                         | 16A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5                      | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 0.5             | 20    | 7.5                      | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 0.75            | 18    | 7.5                      | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 1.0             | 18    | 7.5                      | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 1.5             | 16    | 7.5                      | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 2.5             | 14    | 7.5                      | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 4.0             | 12    | 7.5                      | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 0.14-0.37       | 26-22 | 7.5                      | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 0.5             | 20    | 7.5                      | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 0.75            | 18    | 7.5                      | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 1.0             | 18    | 7.5                      | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 1.5             | 16    | 7.5                      | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 2.5             | 14    | 7.5                      | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                           |                                                                                                                     | 4.0             | 12    | 7.5                      | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

| Distance for contact max. 21mm | Contact arrangement view from termination side | Panel cut-out for inserts for use without hoods/housings |
|--------------------------------|------------------------------------------------|----------------------------------------------------------|
| <div></div>                    |                                                |                                                          |

500V MAX. 16A

18+ 

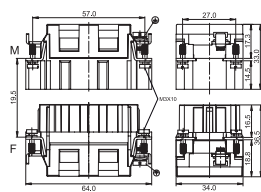
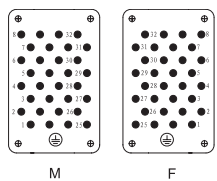
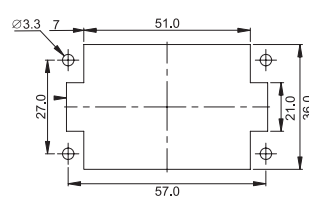
| 16A Contact                                                                                                                                                                                                                               |                                                                                                                         |                   |       |                          |                                      |                 |                                    |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------|-------|--------------------------|--------------------------------------|-----------------|------------------------------------|-----------------|
| <b>Tech data</b><br><b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b><br> | <b>16A Male crimp contacts</b><br>   | <b>Wire gauge</b> |       | <b>Strip-ping length</b> | <b>Crimp contacts, silver-plated</b> |                 | <b>Crimp contacts, gold-plated</b> |                 |
|                                                                                                                                                                                                                                           |                                                                                                                         | mm <sup>2</sup>   | AWG   | mm                       | Type                                 | Part Number     | Type                               | Part Number     |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.14-0.37         | 26-22 | 7.5                      | CEM-0.3                              | T2030001002-000 | DEM-0.3                            | T2030011002-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20    | 7.5                      | CEM-0.5                              | T2030001005-000 | DEM-0.5                            | T2030011005-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18    | 7.5                      | CEM-0.75                             | T2030001008-000 | DEM-0.75                           | T2030011008-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18    | 7.5                      | CEM-1.0                              | T2030001010-000 | DEM-1.0                            | T2030011010-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16    | 7.5                      | CEM-1.5                              | T2030001015-000 | DEM-1.5                            | T2030011015-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14    | 7.5                      | CEM-2.5                              | T2030001025-000 | DEM-2.5                            | T2030011025-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 4.0               | 12    | 7.5                      | CEM-4.0                              | T2030001040-000 | DEM-4.0                            | T2030011040-000 |
| <b>CEF/Female</b><br>                                                                                                                                  | <b>16A Female crimp contacts</b><br> | 0.14-0.37         | 26-22 | 7.5                      | CEF-0.3                              | T2030002002-000 | DEF-0.3                            | T2030012002-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20    | 7.5                      | CEF-0.5                              | T2030002005-000 | DEF-0.5                            | T2030012005-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18    | 7.5                      | CEF-0.75                             | T2030002008-000 | DEF-0.75                           | T2030012008-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18    | 7.5                      | CEF-1.0                              | T2030002010-000 | DEF-1.0                            | T2030012010-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16    | 7.5                      | CEF-1.5                              | T2030002015-000 | DEF-1.5                            | T2030012015-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14    | 7.5                      | CEF-2.5                              | T2030002025-000 | DEF-2.5                            | T2030012025-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 4.0               | 12    | 7.5                      | CEF-4.0                              | T2030002040-000 | DEF-4.0                            | T2030012040-000 |

## HEEE-032 inserts

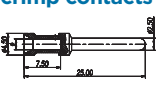
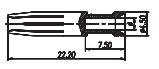
INSERTS FOR H10B HOOD/HOUSING

400V MAX. 16A

32+Ⓢ

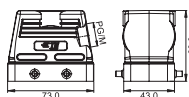
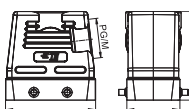
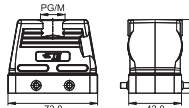
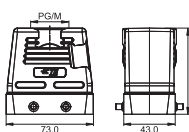
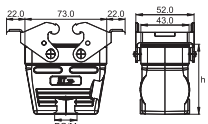
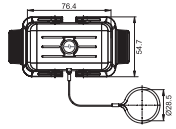
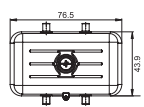
| Dimensions (mm)                                                                    |                                                                                   | Type                                                                               | Part Number     |                 |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------|-----------------|
|                                                                                    |                                                                                   |                                                                                    | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                   |                                                                                   |                                                                                    |                 |                 |
|   |  | HEEE-032-M                                                                         | T2050323101-000 |                 |
|                                                                                    |                                                                                   | HEEE-032-F                                                                         |                 | T2050323201-000 |
| Contact arrangement view from termination side                                     |                                                                                   | Panel cut out for inserts for use without hoods/housings                           |                 |                 |
|  |                                                                                   |  |                 |                 |

## 16A Contact

| Tech data                                                                                                                                                                                                             | 16A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                       |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b><br> |                                      | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| <b>CEF/Female</b><br>                                                                                                              | <b>16A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

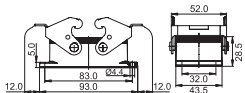
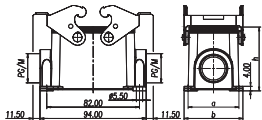
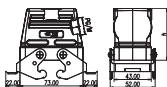
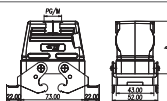
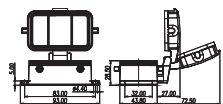
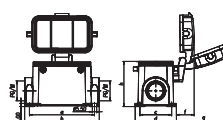
## H10B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                                                                           | Metr.             | PG           | Type                                                                           | Part Number                                                                                 |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                                                                                                           |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|    | <div>Low construction</div> <div></div>                                                                                                                                                                                  | M20<br>M25        | PG16<br>PG21 | H10B-TS-PG16<br>H10B-TS-PG21<br>H10B-TS-M20<br>H10B-TS-M25                     | T1210100116-000<br>T1210100121-000<br>T1210100120-000<br>T1210100125-000                    |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|    | <div>High construction</div> <div></div>                                                                                                                                                                                 | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TSH-PG21<br>H10B-TSH-PG29<br>H10B-TSH-M20<br>H10B-TSH-M25<br>H10B-TSH-M32 | T1230100121-000<br>T1230100129-000<br>T1230100120-000<br>T1230100125-000<br>T1230100132-000 |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                                                                                                           |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|    | <div>Low construction</div> <div></div>                                                                                                                                                                                  | M20<br>M25        | PG16<br>PG21 | H10B-TG-PG16<br>H10B-TG-PG21<br>H10B-TG-M20<br>H10B-TG-M25                     | T1220100116-000<br>T1220100121-000<br>T1220100120-000<br>T1220100125-000                    |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  | <div>High construction</div> <div></div>                                                                                                                                                                               | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TGH-PG21<br>H10B-TGH-PG29<br>H10B-TGH-M20<br>H10B-TGH-M25<br>H10B-TGH-M32 | T1240100121-000<br>T1240100129-000<br>T1240100120-000<br>T1240100125-000<br>T1240100132-000 |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                                                                                                           |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  | <div><div></div><div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>74.5</td></tr></table></div></div> <div>Low construction</div> <div>High construction</div> | Construction      | H            | Low                                                                            | 62.5                                                                                        | High | 74.5 | M20<br>M25<br><br>M25<br>M32 | PG16<br><br>PG21<br>PG29 | H10B-TBFS-PG16<br>H10B-TBFS-M20<br>H10B-TBFS-M25<br><br>H10B-TBFHS-PG21<br>H10B-TBFHS-PG29<br>H10B-TBFHS-M25<br>H10B-TBFHS-M32 | T1710101116-000<br>T1710101120-000<br>T1710101125-000<br><br>T1750101121-000<br>T1750101129-000<br>T1750101125-000<br>T1750101132-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                                                         |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Low                                                                                 | 62.5                                                                                                                                                                                                                                                                                                      |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| High                                                                                | 74.5                                                                                                                                                                                                                                                                                                      |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                                                                                                           |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  |                                                                                                                                                                                                                        |                   |              | H10B-KDTP                                                                      | T1010101400-000                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Housing protection cover                                                            |                                                                                                                                                                                                                                                                                                           |                   |              |                                                                                |                                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  |                                                                                                                                                                                                                        |                   |              | H10B-KDBP                                                                      | T1010102100-000                                                                             |      |      |                              |                          |                                                                                                                                |                                                                                                                                       |

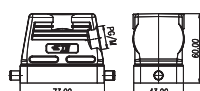
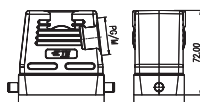
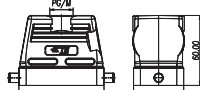
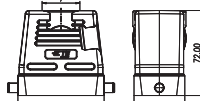
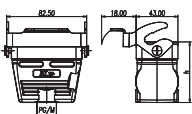
## H10B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                            | Metr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | PG           | Type     | Part Number     |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|-----------------|----|-------|----|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|----|----|----|----|----|----|----|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
|                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              | H10B-AGS | T1410101000-000 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Surface mounted: Side entry                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
|                                                                                           | <div><div><table><tr><td>Construction</td><td>A</td><td>B</td><td>H</td></tr><tr><td>Low</td><td>40</td><td>52</td><td>56</td></tr><tr><td>Hight</td><td>45</td><td>57</td><td>74</td></tr></table></div><div>1 Side entry<br/>Low construction<br/>M20<br/>M25<br/>2 Side entry<br/>M20<br/>M25<br/>1 Side entry<br/>High construction<br/>M25<br/>M32<br/>2 Side entry<br/>M25<br/>M32</div></div>                                                                                                                                                                                                                                           | Construction | A        | B               | H  | Low   | 40 | 52                               | 56                                                                                                                                           | Hight                                                                                                                                                | 45 | 57 | 74 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H10B-SGRS-PG16<br>H10B-SGRS-PG21<br>H10B-SGRS-M20<br>H10B-SGRS-M25<br>H10B-SGRS-2PG16<br>H10B-SGRS-2PG21<br>H10B-SGRS-2M20<br>H10B-SGRS-2M25<br>H10B-SGRHS-PG21<br>H10B-SGRHS-PG29<br>H10B-SGRHS-M25<br>H10B-SGRHS-M32<br>H10B-SGRHS-2PG21<br>H10B-SGRHS-2PG29<br>H10B-SGRHS-2M25<br>H10B-SGRHS-2M32 | T1440101116-000<br>T1440101121-000<br>T1440101120-000<br>T1440101125-000<br>T1440101216-000<br>T1440101221-000<br>T1440101220-000<br>T1440101225-000<br>T1470101121-000<br>T1470101129-000<br>T1470101125-000<br>T1470101132-000<br>T1470101221-000<br>T1470101229-000<br>T1470101225-000<br>T1470101232-000 |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Construction                                                                                                                                                               | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | B            | H        |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                        | 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 52           | 56       |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                      | 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 57           | 74       |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Side entry housing with two levers                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
|                                                                                         | <div><div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>72</td></tr></table></div><div>Low construction<br/>M20<br/>M25<br/>High construction<br/>M25<br/>M32</div></div>                                                                                                                                                                                                                                                                                                                                                                                                             | Construction | H        | Low             | 60 | Hight | 72 | PG16<br>PG21<br><br>PG21<br>PG29 | H10B-TSBS-PG16<br>H10B-TSBS-PG21<br>H10B-TSBS-M20<br>H10B-TSBS-M25<br>H10B-TSBHS-PG21<br>H10B-TSBHS-PG29<br>H10B-TSBHS-M25<br>H10B-TSBHS-M32 | T1250103116-000<br>T1250103121-000<br>T1250103120-000<br>T1250103125-000<br>T1270103121-000<br>T1270103129-000<br>T1270103125-000<br>T1270103132-000 |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                        | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                      | 72                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Top entry housing with two levers                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
|                                                                                         | <div><div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>72</td></tr></table></div><div>Low construction<br/>M20<br/>M25<br/>High construction<br/>M25<br/>M32</div></div>                                                                                                                                                                                                                                                                                                                                                                                                             | Construction | H        | Low             | 60 | Hight | 72 | PG16<br>PG21<br><br>PG21<br>PG29 | H10B-TGBS-PG16<br>H10B-TGBS-PG21<br>H10B-TGBS-M20<br>H10B-TGBS-M25<br>H10B-TGBHS-PG21<br>H10B-TGBHS-PG29<br>H10B-TGBHS-M25<br>H10B-TGBHS-M32 | T1260103116-000<br>T1260103121-000<br>T1260103120-000<br>T1260103125-000<br>T1280103121-000<br>T1280103129-000<br>T1280103125-000<br>T1280103132-000 |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                        | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                      | 72                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Bulkhead mounted with 4 bolts                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| <br> | <div>With protection cover<br/><br/><table><tr><td>Construction</td><td>A</td><td>B</td><td>C</td><td>D</td><td>F</td><td>G</td><td>H</td></tr><tr><td>Low</td><td>82</td><td>94</td><td>40</td><td>52</td><td>22</td><td>67</td><td>54</td></tr><tr><td>Hight</td><td>82</td><td>94</td><td>45</td><td>57</td><td>20</td><td>65</td><td>74</td></tr></table></div> <div>1 Side entry<br/>Low construction<br/>M20<br/>M25<br/>2 Side entry<br/>M20<br/>M25<br/>1 Side entry<br/>High construction<br/>M25<br/>M32<br/>2 Side entry<br/>M25<br/>M32</div> | Construction | A        | B               | C  | D     | F  | G                                | H                                                                                                                                            | Low                                                                                                                                                  | 82 | 94 | 40 | 52                                                                       | 22                                                                                                                                                                                                                                                                                                   | 67                                                                                                                                                                                                                                                                                                           | 54 | Hight | 82 | 94 | 45 | 57 | 20 | 65 | 74 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H10B-AD-BO<br>H10B-SDR-BO-PG16<br>H10B-SDR-BO-PG21<br>H10B-SDR-BO-M20<br>H10B-SDR-BO-M25<br>H10B-SDR-BO-2PG16<br>H10B-SDR-BO-2PG21<br>H10B-SDR-BO-2M20<br>H10B-SDR-BO-2M25<br>H10B-SDRH-BO-PG21<br>H10B-SDRH-BO-PG29<br>H10B-SDRH-BO-M25<br>H10B-SDRH-BO-M32<br>H10B-SDRH-BO-2PG21<br>H10B-SDRH-BO-2PG29<br>H10B-SDRH-BO-2M25<br>H10B-SDRH-BO-2M32 | T1430100000-000<br>T1460100116-000<br>T1460100121-000<br>T1460100120-000<br>T1460100125-000<br>T1460100216-000<br>T1460100221-000<br>T1460100220-000<br>T1460100225-000<br>T1490100121-000<br>T1490100129-000<br>T1490100125-000<br>T1490100132-000<br>T1490100221-000<br>T1490100229-000<br>T1490100225-000<br>T1490100232-000 |
| Construction                                                                                                                                                               | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | B            | C        | D               | F  | G     | H  |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                        | 82                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 94           | 40       | 52              | 22 | 67    | 54 |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                      | 82                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 94           | 45       | 57              | 20 | 65    | 74 |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |

## H10B with 1 lever on the hoods/housings

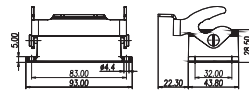
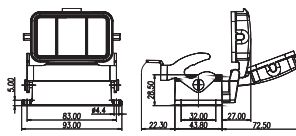
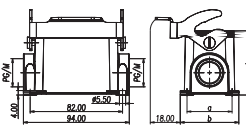
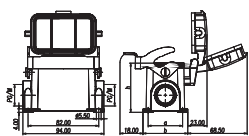
POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                                              | Metr.             | PG           | Type                                                                                          | Part Number                                                                                 |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                                                                              |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|    | Low construction<br>                                                                                                                                                                        | M20<br>M25        | PG16<br>PG21 | H10B-TS-RO-PG16<br>H10B-TS-RO-PG21<br>H10B-TS-RO-M20<br>H10B-TS-RO-M25                        | T1310100116-000<br>T1310100121-000<br>T1310100120-000<br>T1310100125-000                    |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|    | High construction<br>                                                                                                                                                                       | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TSH-RO-PG21<br>H10B-TSH-RO-PG29<br>H10B-TSH-RO-M20<br>H10B-TSH-RO-M25<br>H10B-TSH-RO-M32 | T1330100121-000<br>T1330100129-000<br>T1330100120-000<br>T1330100125-000<br>T1330100132-000 |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                                                                              |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|   | Low construction<br>                                                                                                                                                                       | M20<br>M25        | PG16<br>PG21 | H10B-TG-RO-PG16<br>H10B-TG-RO-PG21<br>H10B-TG-RO-M20<br>H10B-TG-RO-M25                        | T1320100116-000<br>T1320100121-000<br>T1320100120-000<br>T1320100125-000                    |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|  | High construction<br>                                                                                                                                                                     | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TGH-RO-PG21<br>H10B-TGH-RO-PG29<br>H10B-TGH-RO-M20<br>H10B-TGH-RO-M25<br>H10B-TGH-RO-M32 | T1340100121-000<br>T1340100129-000<br>T1340100120-000<br>T1340100125-000<br>T1340100132-000 |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                                                                              |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>74.5</td></tr></table></div> <div>Low construction<br/>High construction</div> | Construction      | H            | Low                                                                                           | 62.5                                                                                        | High | 74.5 | M20<br>M25<br><br>M25<br>M32 | PG16<br><br>PG21<br>PG29 | H10B-TBF-LB-PG16<br>H10B-TBF-LB-M20<br>H10B-TBF-LB-M25<br>H10B-TBFH-LB-PG21<br>H10B-TBFH-LB-PG29<br>H10B-TBFH-LB-M25<br>H10B-TBFH-LB-M32 | T1730103116-000<br>T1730103120-000<br>T1730103125-000<br>T1770103121-000<br>T1770103129-000<br>T1770103125-000<br>T1770103132-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Low                                                                                 | 62.5                                                                                                                                                                                                                                                                         |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| High                                                                                | 74.5                                                                                                                                                                                                                                                                         |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                                                                              |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|  |                                                                                                                                                                                                                                                                              |                   |              | H10B-KDTP-LB                                                                                  | T1010101500-000                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |



## H10B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                                                                                                                                                                                                                                                                                                                                                                                           | PG           | Type                      | Part Number                        |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------------|------------------------------------|---|-----|----|----|----|-------|----|----|----|------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                           |                                    |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|    |                                                                                                                                                                                                                                                                                                                                                                |              | H10B-AG-LB                | T1500103000-000                    |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|    | <p>With protection cover</p>                                                                                                                                                                                                                                                                                                                                   |              | H10B-AD-LB<br>H10B-ADM-LB | T1510103000-000<br>T1510103001-000 |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                           |                                    |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|  | <div><div><div>1 Side entry</div><div>Low construction</div><div>2 Side entry</div><div>High construction</div></div><div><table><tr><th>Construction</th><th>A</th><th>B</th><th>H</th></tr><tr><td>Low</td><td>40</td><td>52</td><td>54</td></tr><tr><td>Hight</td><td>45</td><td>57</td><td>74</td></tr></table></div></div>                              | Construction | A                         | B                                  | H | Low | 40 | 52 | 54 | Hight | 45 | 57 | 74 | M20<br>M25<br><br>M20<br>M25<br><br>M25<br>M32<br><br>M25<br>M32 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H10B-SGR-LB-PG16<br>H10B-SGR-LB-PG21<br>H10B-SGR-LB-M20<br>H10B-SGR-LB-M25<br>H10B-SGR-LB-2PG16<br>H10B-SGR-LB-2PG21<br>H10B-SGR-LB-2M20<br>H10B-SGR-LB-2M25<br><br>H10B-SGRH-LB-PG21<br>H10B-SGRH-LB-PG29<br>H10B-SGRH-LB-M25<br>H10B-SGRH-LB-M32<br>H10B-SGRH-LB-2PG21<br>H10B-SGRH-LB-2PG29<br>H10B-SGRH-LB-2M25<br>H10B-SGRH-LB-2M32 | T1610103116-000<br>T1610103121-000<br>T1610103120-000<br>T1610103125-000<br>T1610103216-000<br>T1610103221-000<br>T1610103220-000<br>T1610103225-000<br><br>T1650103121-000<br>T1650103129-000<br>T1650103125-000<br>T1650103132-000<br>T1650103221-000<br>T1650103229-000<br>T1650103225-000<br>T1650103232-000 |
| Construction                                                                        | A                                                                                                                                                                                                                                                                                                                                                                                                                                               | B            | H                         |                                    |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Low                                                                                 | 40                                                                                                                                                                                                                                                                                                                                                                                                                                              | 52           | 54                        |                                    |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Hight                                                                               | 45                                                                                                                                                                                                                                                                                                                                                                                                                                              | 57           | 74                        |                                    |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|  | <p>With protection cover</p> <div><div><div>1 Side entry</div><div>Low construction</div><div>2 Side entry</div><div>High construction</div></div><div><table><tr><th>Construction</th><th>A</th><th>B</th><th>H</th></tr><tr><td>Low</td><td>40</td><td>52</td><td>54</td></tr><tr><td>Hight</td><td>45</td><td>57</td><td>74</td></tr></table></div></div> | Construction | A                         | B                                  | H | Low | 40 | 52 | 54 | Hight | 45 | 57 | 74 | M20<br>M25<br><br>M20<br>M25<br><br>M25<br>M32<br><br>M25<br>M32 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H10B-SDR-LB-PG16<br>H10B-SDR-LB-PG21<br>H10B-SDR-LB-M20<br>H10B-SDR-LB-M25<br>H10B-SDR-LB-2PG16<br>H10B-SDR-LB-2PG21<br>H10B-SDR-LB-2M20<br>H10B-SDR-LB-2M25<br><br>H10B-SDRH-LB-PG21<br>H10B-SDRH-LB-PG29<br>H10B-SDRH-LB-M25<br>H10B-SDRH-LB-M32<br>H10B-SDRH-LB-2PG21<br>H10B-SDRH-LB-2PG29<br>H10B-SDRH-LB-2M25<br>H10B-SDRH-LB-2M32 | T1620103116-000<br>T1620103121-000<br>T1620103120-000<br>T1620103125-000<br>T1620103216-000<br>T1620103221-000<br>T1620103220-000<br>T1620103225-000<br><br>T1660103121-000<br>T1660103129-000<br>T1660103125-000<br>T1660103132-000<br>T1660103221-000<br>T1660103229-000<br>T1660103225-000<br>T1660103232-000 |
| Construction                                                                        | A                                                                                                                                                                                                                                                                                                                                                                                                                                               | B            | H                         |                                    |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Low                                                                                 | 40                                                                                                                                                                                                                                                                                                                                                                                                                                              | 52           | 54                        |                                    |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Hight                                                                               | 45                                                                                                                                                                                                                                                                                                                                                                                                                                              | 57           | 74                        |                                    |   |     |    |    |    |       |    |    |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |



## HIP.10/24, HIP-K.10/24, EMV-K.10/24 housings

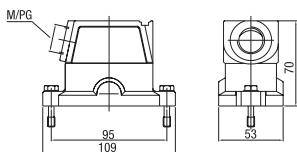
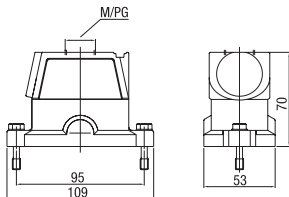
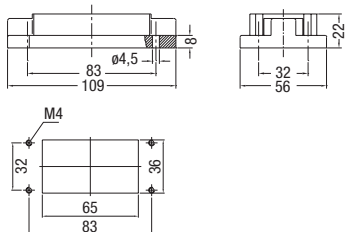
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         |                                                                                     | Metr.      | PG       | Type                                                                                                   | Part Number                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|----------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Hood: Side entry, Standard construction                                             |                                                                                     |            |          |                                                                                                        |                                                   |
|    |    | M25        | 16<br>21 | <b>HIP</b><br>HIP.10/24.STS.1.16.G<br>HIP.10/24.STS.1.21.G<br>HIP.10/24.STS.1.M25.G                    | 1-1102640-5<br>1-1102642-5<br>0-1106436-2         |
|                                                                                     |                                                                                     | M25<br>M32 | 21       | <b>HIP-K</b><br>HIP-K.10/24.STS.1.21.G<br>HIP-K.10/24.STS.1.M25.G<br>HIP-K.10/24.STS.1.M32.G           | 2-1102642-5<br>0-1106436-4<br>0-1106436-6         |
|                                                                                     |                                                                                     | M25<br>M32 | 21       | <b>EMV-K</b><br>EMV-K.10/24.STS.1.21.G<br>EMV-K.10/24.STS.1.M25.G<br>EMV-K.10/24.STS.1.M32.G           | 4-1102714-5<br>0-1106427-3<br>1-1106427-0         |
| Hood: Top entry                                                                     |                                                                                     |            |          |                                                                                                        |                                                   |
|  |  | M25        | 16<br>21 | <b>HIP</b><br>HIP.10/24.STO.1.16.G<br>HIP.10/24.STO.1.21.G<br>HIP.10/24.STO.1.M25.G                    | 1-1102644-5<br>1-1102646-5<br>0-1106436-1         |
|                                                                                     |                                                                                     | M25<br>M32 | 16       | <b>HIP-K</b><br>HIP-K.10/24.STO.1.16.G<br>HIP-K.10/24.STO.1.M25.G<br>HIP-K.10/24.STO.1.M32.G           | 2-1102644-5<br>0-1106436-3<br>0-1106436-5         |
|                                                                                     |                                                                                     | M25        | 21       | <b>EMV-K</b><br>EMV-K.10/24.STO.1.21.G<br>EMV-K.10/24.STO.1.M25.G                                      | 4-1102715-5<br>0-1106427-4                        |
| Surface mounted housing: Bottom entry                                               |                                                                                     |            |          |                                                                                                        |                                                   |
|  |  |            |          | <b>HIP</b><br>HIP.10/24.AG<br><br><b>HIP-K</b><br>HIP-K.10/24.AG<br><br><b>EMV-K</b><br>EMV-K.10/24.AG | 1-1102647-5<br><br>2-1102647-5<br><br>4-1102718-5 |

## HIP.10/24, HIP-K.10/24, EMV-K.10/24 housings

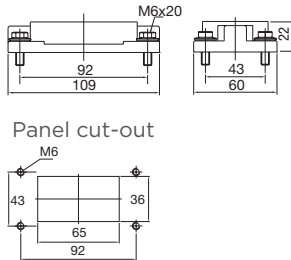
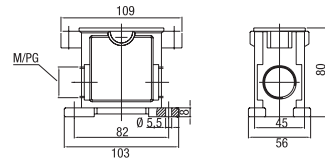
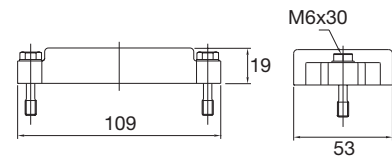
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                               | PG    | Type       | Part Number                                                                                                                                                                                                                                            |                                                                                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Surface mounted housing: Bottom entry                                               |                                                                                     |       |            |                                                                                                                                                                                                                                                        |                                                                                                                              |
|    |    |       |            | <b>HIP</b><br>HIP.10/24.AG.M6<br><br><b>HIP-K</b><br>HIP-K.10/24.AG.M6<br><br><b>EMV-K</b><br>EMV-K.10/24.AG.M6                                                                                                                                        | 1-1102612-5<br><br>2-1102612-5<br><br>4-1102720-5                                                                            |
| Surface mounted housing: Side entry                                                 |                                                                                     |       |            |                                                                                                                                                                                                                                                        |                                                                                                                              |
|   |   | 2xM32 | 21<br>2x21 | <b>HIP</b><br>HIP.10/24.SG.1.21.G<br>HIP.10/24.SG.2.21.G<br>HIP.10/24.SG.2.M32.G<br><br><b>HIP-K</b><br>HIP-K.10/24.SG.1.21.G<br>HIP-K.10/24.SG.2.21.G<br><br><b>EMV-K</b><br>EMV-K.10/24.SG.1.21.G<br>EMV-K.10/24.SG.2.21.G<br>EMV-K.10/24.SG.2.M32.G | 1-1102610-5<br>1-1102611-5<br>0-1106435-1<br><br>5-1102610-5<br>2-1102611-5<br><br>5-1102716-5<br>4-1102717-5<br>0-1106426-2 |
| Protective covers for hoods and housing                                             |                                                                                     |       |            |                                                                                                                                                                                                                                                        |                                                                                                                              |
|  |  |       |            | <b>HIP</b><br>HIP/EMV.10/24.SKB<br><br><b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.10/24.SKB                                                                                                                                                                     | 3-1106202-5<br><br>4-1106202-5                                                                                               |

## HE-016 inserts

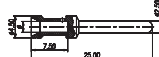
INSERTS FOR H16B HOOD/HOUSING

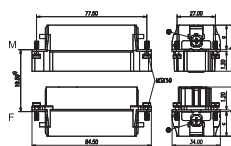
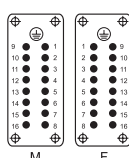
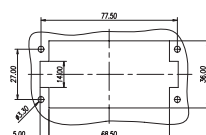
500V MAX. 16A

16+ 

| Dimension (mm)                                   | Type       | Part Number     |                 |
|--------------------------------------------------|------------|-----------------|-----------------|
|                                                  |            | Male insert     | Female insert   |
| Screw terminal                                   |            |                 |                 |
|                                                  | HE-016-M   | T2040162101-000 |                 |
|                                                  | HE-016-F   |                 | T2040162201-000 |
| Spring terminal                                  |            |                 |                 |
|                                                  | HE-016-MS  | T2040163101-000 |                 |
|                                                  | HE-016-FS  |                 | T2040163201-000 |
| Crimp terminal (Order crimp contacts separately) |            |                 |                 |
|                                                  | HE-016-MC  | T2040164101-000 |                 |
|                                                  | HE-016-FC  |                 | T2040164201-000 |
| Spring terminal (Two terminals per contact)      |            |                 |                 |
|                                                  | HE-016-MSS | T2040165101-000 |                 |
|                                                  | HE-016-FSS |                 | T2040165201-000 |

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male<br> | 16A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                             |                                                                                                                     | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
| CEF/Female<br>                                                                                                                           | 16A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5                      | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 0.5             | 20    | 7.5                      | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 0.75            | 18    | 7.5                      | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 1.0             | 18    | 7.5                      | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 1.5             | 16    | 7.5                      | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 2.5             | 14    | 7.5                      | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 4.0             | 12    | 7.5                      | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 0.14-0.37       | 26-22 | 7.5                      | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 0.5             | 20    | 7.5                      | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 0.75            | 18    | 7.5                      | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 1.0             | 18    | 7.5                      | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 1.5             | 16    | 7.5                      | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 2.5             | 14    | 7.5                      | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                             |                                                                                                                     | 4.0             | 12    | 7.5                      | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

| Distance for contact max. 21mm                                                                                                                                                                                                                                                                                                                                                                               | Contact arrangement view<br>from termination side | Panel cut-out for inserts for use<br>without hoods/housings |    |    |   |    |    |    |    |    |         |    |    |    |    |      |    |    |    |    |                                                                                                                        |                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------------|----|----|---|----|----|----|----|----|---------|----|----|----|----|------|----|----|----|----|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <div><table><thead><tr><th></th><th>a</th><th>b</th><th>c</th><th>d</th></tr></thead><tbody><tr><td>HE</td><td>18</td><td>33</td><td>18</td><td>35</td></tr><tr><td>HES/HEC</td><td>19</td><td>34</td><td>19</td><td>36</td></tr><tr><td>HESS</td><td>34</td><td>49</td><td>32</td><td>49</td></tr></tbody></table></div> |                                                   | a                                                           | b  | c  | d | HE | 18 | 33 | 18 | 35 | HES/HEC | 19 | 34 | 19 | 36 | HESS | 34 | 49 | 32 | 49 | <div><div>M</div><div>F</div></div> | <div></div> |
|                                                                                                                                                                                                                                                                                                                                                                                                              | a                                                 | b                                                           | c  | d  |   |    |    |    |    |    |         |    |    |    |    |      |    |    |    |    |                                                                                                                        |                                                                                                  |
| HE                                                                                                                                                                                                                                                                                                                                                                                                           | 18                                                | 33                                                          | 18 | 35 |   |    |    |    |    |    |         |    |    |    |    |      |    |    |    |    |                                                                                                                        |                                                                                                  |
| HES/HEC                                                                                                                                                                                                                                                                                                                                                                                                      | 19                                                | 34                                                          | 19 | 36 |   |    |    |    |    |    |         |    |    |    |    |      |    |    |    |    |                                                                                                                        |                                                                                                  |
| HESS                                                                                                                                                                                                                                                                                                                                                                                                         | 34                                                | 49                                                          | 32 | 49 |   |    |    |    |    |    |         |    |    |    |    |      |    |    |    |    |                                                                                                                        |                                                                                                  |

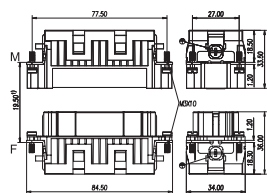
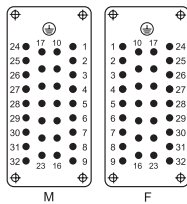
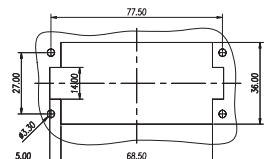
All specifications subject to change. Consult TE Connectivity for latest design specifications.  
Contact TE for assistance with any part number configuration.

## HEE-032 inserts

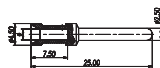
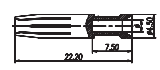
INSERTS FOR H16B HOOD/HOUSING

500V MAX. 16A

32+⊕

| Dimensions (mm)                                                                    |                                                                                    | Type      | Part Number     |                 |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                    |                                                                                    |           | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                   |                                                                                    |           |                 |                 |
|   |   | HEE-032-M | T2050322101-000 |                 |
|                                                                                    |                                                                                    | HEE-032-F |                 | T2050322201-000 |
| Contact arrangement view<br>from termination side                                  | Panel cut out for inserts for<br>use without hoods/housings                        |           |                 |                 |
|  |  |           |                 |                 |

## 16A Contact

| Tech data                                                                                                                                                                                                             | 16A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                       |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b><br> |                                      | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| <b>CEF/Female</b><br>                                                                                                              | <b>16A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

## HEEE-040 inserts

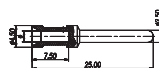
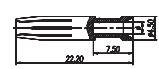
INSERTS FOR H16B HOOD/HOUSING

500V MAX. 16A

40+ 

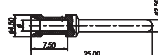
| Dimensions (mm)                                                                   | Type | Part Number |               |
|-----------------------------------------------------------------------------------|------|-------------|---------------|
|                                                                                   |      | Male insert | Female insert |
| Crimp terminal (order crimp contacts separately)                                  |      |             |               |
|  |      |             |               |

## 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male<br> | 16A Male crimp contacts<br>   | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                             |                                                                                                                  | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| CEF/Female<br>                                                                                                                           | 16A Female crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

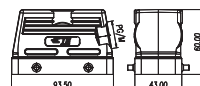
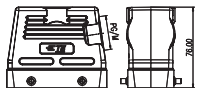
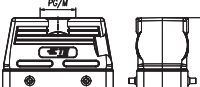
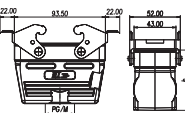
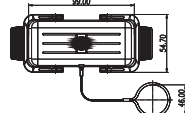
400V MAX. 16A

48+

| 16A Contact                                                                                                                                                                                                                               |                                                                                                                         |                   |            |                          |                                      |                    |                                    |                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------|------------|--------------------------|--------------------------------------|--------------------|------------------------------------|--------------------|
| <b>Tech data</b><br><b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b><br> | <b>16A Male crimp contacts</b><br>   | <b>Wire gauge</b> |            | <b>Strip-ping length</b> | <b>Crimp contacts, silver-plated</b> |                    | <b>Crimp contacts, gold-plated</b> |                    |
|                                                                                                                                                                                                                                           |                                                                                                                         | <b>mm²</b>        | <b>AWG</b> | <b>mm</b>                | <b>Type</b>                          | <b>Part Number</b> | <b>Type</b>                        | <b>Part Number</b> |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.14-0.37         | 26-22      | 7.5                      | CEM-0.3                              | T2030001002-000    | DEM-0.3                            | T2030011002-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20         | 7.5                      | CEM-0.5                              | T2030001005-000    | DEM-0.5                            | T2030011005-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18         | 7.5                      | CEM-0.75                             | T2030001008-000    | DEM-0.75                           | T2030011008-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18         | 7.5                      | CEM-1.0                              | T2030001010-000    | DEM-1.0                            | T2030011010-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16         | 7.5                      | CEM-1.5                              | T2030001015-000    | DEM-1.5                            | T2030011015-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14         | 7.5                      | CEM-2.5                              | T2030001025-000    | DEM-2.5                            | T2030011025-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 4.0               | 12         | 7.5                      | CEM-4.0                              | T2030001040-000    | DEM-4.0                            | T2030011040-000    |
| <b>CEF/Female</b><br>                                                                                                                                  | <b>16A Female crimp contacts</b><br> | 0.14-0.37         | 26-22      | 7.5                      | CEF-0.3                              | T2030002002-000    | DEF-0.3                            | T2030012002-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20         | 7.5                      | CEF-0.5                              | T2030002005-000    | DEF-0.5                            | T2030012005-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18         | 7.5                      | CEF-0.75                             | T2030002008-000    | DEF-0.75                           | T2030012008-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18         | 7.5                      | CEF-1.0                              | T2030002010-000    | DEF-1.0                            | T2030012010-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16         | 7.5                      | CEF-1.5                              | T2030002015-000    | DEF-1.5                            | T2030012015-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14         | 7.5                      | CEF-2.5                              | T2030002025-000    | DEF-2.5                            | T2030012025-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 4.0               | 12         | 7.5                      | CEF-4.0                              | T2030002040-000    | DEF-4.0                            | T2030012040-000    |

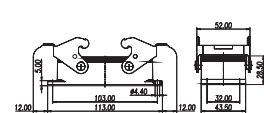
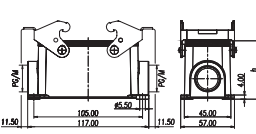
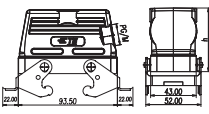
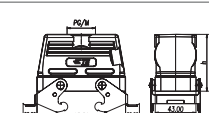
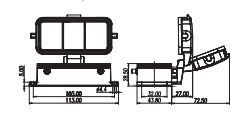
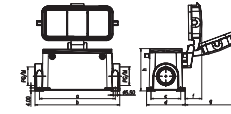
## H16B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                             | Metr.             | PG           | Type                                                                           | Part Number                                                                                 |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------|------|---------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | Low construction<br>                                                                                                                       | M20<br>M25<br>M32 | PG16<br>PG21 | H16B-TS-PG16<br>H16B-TS-PG21<br>H16B-TS-M20<br>H16B-TS-M25<br>H16B-TS-M32      | T1210160116-000<br>T1210160121-000<br>T1210160120-000<br>T1210160125-000<br>T1210160132-000 |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | High construction<br>                                                                                                                      | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TSH-PG21<br>H16B-TSH-PG29<br>H16B-TSH-M25<br>H16B-TSH-M32<br>H16B-TSH-M40 | T1230160121-000<br>T1230160129-000<br>T1230060125-000<br>T1230160132-000<br>T1230160140-000 |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|   | Low construction<br>                                                                                                                      | M25<br>M32        | PG16<br>PG21 | H16B-TG-PG16<br>H16B-TG-PG21<br>H16B-TG-M25<br>H16B-TG-M32                     | T1220160116-000<br>T1220160121-000<br>T1220160125-000<br>T1220160132-000                    |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | High construction<br>                                                                                                                    | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TGH-PG21<br>H16B-TGH-PG29<br>H16B-TGH-M25<br>H16B-TGH-M32<br>H16B-TGH-M40 | T1240160121-000<br>T1240160129-000<br>T1240160125-000<br>T1240160132-000<br>T1240160140-000 |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>Hight</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                            | 62.5                                                                                        | Hight | 74.5 | <div>Low construction</div> M25<br>M32 <div>High construction</div> M25<br>M32<br>M40 | PG21<br><br>PG21<br>PG29 | H16B-TBFS-PG21<br>H16B-TBFS-M25<br>H16B-TBFS-M32<br><br>H16B-TBFHS-PG21<br>H16B-TBFHS-PG29<br>H16B-TBFHS-M25<br>H16B-TBFHS-M32<br>H16B-TBFHS-M40 | T1710161121-000<br>T1710161125-000<br>T1710161132-000<br><br>T1750161121-000<br>T1750161129-000<br>T1750161125-000<br>T1750161132-000<br>T1750161140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                           |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Low                                                                                 | 62.5                                                                                                                                                                                                                        |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hight                                                                               | 74.5                                                                                                                                                                                                                        |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                          |                   |              | H16B-KDTP                                                                      | T1010161400-000                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Housing protection cover                                                            |                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                          |                   |              | H16B-KDBP                                                                      | T1010162100-000                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |

## H16B with 2 levers on the hoods/housings

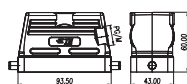
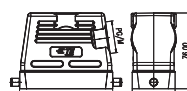
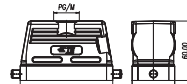
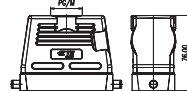
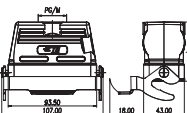
POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                            | Metr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | PG           | Type     | Part Number     |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|-----------------|----|-------|----|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|----|----|-------|-----|-----|----|----|----|----|----|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              | H16B-AGS | T1410161000-000 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Surface mounted: Side entry                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                           |  <table border="1" data-bbox="317 848 533 949"><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table>                                                                                                                                                                                                                                                                                                                         | Construction | H        | Low             | 56 | Hight | 81 | 1 Side entry<br>Low construction<br>M25<br>M25<br>2 Side entry<br>High construction<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29<br>PG21<br>PG29<br>PG21<br>PG29<br>PG21<br>PG29 | H16B-SGRS-PG21<br>H16B-SGRS-M25<br>H16B-SGRS-2PG21<br>H16B-SGRS-2M25<br>H16B-SGRHS-PG21<br>H16B-SGRHS-PG29<br>H16B-SGRHS-M25<br>H16B-SGRHS-M32<br>H16B-SGRHS-2PG21<br>H16B-SGRHS-2PG29<br>H16B-SGRHS-2M25<br>H16B-SGRHS-2M32 | T1440161121-000<br>T1440161125-000<br>T1440161221-000<br>T1440161225-000<br>T1470161121-000<br>T1470161129-000<br>T1470161125-000<br>T1470161132-000<br>T1470161221-000<br>T1470161229-000<br>T1470161225-000<br>T1470161232-000 |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Side entry housing with two levers                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                         |  <table border="1" data-bbox="317 1184 533 1285"><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>76</td></tr></table>                                                                                                                                                                                                                                                                                                                     | Construction | H        | Low             | 60 | Hight | 76 | Low construction<br>M20<br>M25<br>High construction<br>M25<br>M32                                               | PG16<br>PG21<br>PG21<br>PG29                                                                 | H16B-TSBS-PG16<br>H16B-TSBS-PG21<br>H16B-TSBS-M20<br>H16B-TSBS-M25<br>H16B-TSBHS-PG21<br>H16B-TSBHS-PG29<br>H16B-TSBHS-M25<br>H16B-TSBHS-M32                                                                                 | T1250163116-000<br>T1250163121-000<br>T1250163120-000<br>T1250163125-000<br>T1270163121-000<br>T1270163129-000<br>T1270163125-000<br>T1270163132-000                                                                             |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Top entry housing with two levers                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                         |  <table border="1" data-bbox="317 1476 533 1576"><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>76</td></tr></table>                                                                                                                                                                                                                                                                                                                     | Construction | H        | Low             | 60 | Hight | 76 | Low construction<br>M20<br>M25<br>High construction<br>M25<br>M32                                               | PG16<br>PG21<br>PG21<br>PG29                                                                 | H16B-TGBS-PG16<br>H16B-TGBS-PG21<br>H16B-TGBS-M20<br>H16B-TGBS-M25<br>H16B-TGBHS-PG21<br>H16B-TGBHS-PG29<br>H16B-TGBHS-M25<br>H16B-TGBHS-M32                                                                                 | T1260163116-000<br>T1260163121-000<br>T1260163120-000<br>T1260163125-000<br>T1280163121-000<br>T1280163129-000<br>T1280163125-000<br>T1280163132-000                                                                             |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Bulkhead mounted with 4 bolts                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |          |                 |    |       |    |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| <br> | With protection cover<br><br> <table border="1" data-bbox="308 1933 691 2013"><tr><td>Construction</td><td>A</td><td>B</td><td>C</td><td>D</td><td>F</td><td>G</td><td>H</td></tr><tr><td>Low</td><td>105</td><td>117</td><td>45</td><td>57</td><td>20</td><td>65</td><td>56</td></tr><tr><td>Hight</td><td>105</td><td>117</td><td>45</td><td>57</td><td>20</td><td>65</td><td>81</td></tr></table> | Construction | A        | B               | C  | D     | F  | G                                                                                                               | H                                                                                            | Low                                                                                                                                                                                                                          | 105                                                                                                                                                                                                                              | 117 | 45 | 57 | 20 | 65 | 56 | Hight | 105 | 117 | 45 | 57 | 20 | 65 | 81 | 1 Side entry<br>Low construction<br>M25<br>M25<br>2 Side entry<br>High construction<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H16B-AD-BO<br>H16B-SDR-BO-PG21<br>H16B-SDR-BO-M25<br>H16B-SDR-BO-2PG21<br>H16B-SDR-BO-2M25<br>H16B-SDRH-BO-PG21<br>H16B-SDRH-BO-PG29<br>H16B-SDRH-BO-M25<br>H16B-SDRH-BO-M32<br>H16B-SDRH-BO-2PG21<br>H16B-SDRH-BO-2PG29<br>H16B-SDRH-BO-2M25<br>H16B-SDRH-BO-2M32 | T1430160000-000<br>T1460160121-000<br>T1460160125-000<br>T1460160221-000<br>T1460160225-000<br>T1490160121-000<br>T1490160129-000<br>T1490160125-000<br>T1490160132-000<br>T1490160221-000<br>T1490160229-000<br>T1490160225-000<br>T1490160232-000 |
| Construction                                                                                                                                                               | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | B            | C        | D               | F  | G     | H  |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 105                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 117          | 45       | 57              | 20 | 65    | 56 |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 105                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 117          | 45       | 57              | 20 | 65    | 81 |                                                                                                                 |                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |     |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                                                                 |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |



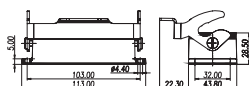
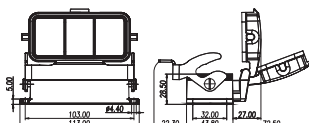
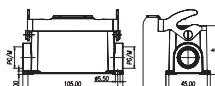
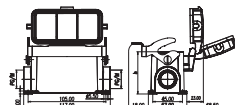
## H16B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                            | Metr.             | PG           | Type                                                                                          | Part Number                                                                                 |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------|------|-------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|    | Low construction<br>                                                                                                                                                      | M25<br>M32        | PG21<br>PG29 | H16B-TS-RO-PG21<br>H16B-TS-RO-PG29<br>H16B-TS-RO-M25<br>H16B-TS-RO-M32                        | T1310160121-000<br>T1310160129-000<br>T1310160125-000<br>T1310160132-000                    |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|    | High construction<br>                                                                                                                                                     | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TSH-RO-PG21<br>H16B-TSH-RO-PG29<br>H16B-TSH-RO-M25<br>H16B-TSH-RO-M32<br>H16B-TSH-RO-M40 | T1330160121-000<br>T1330160129-000<br>T1330160125-000<br>T1330160132-000<br>T1330160140-000 |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|   | Low construction<br>                                                                                                                                                     | M25<br>M32        | PG21<br>PG29 | H16B-TG-RO-PG21<br>H16B-TG-RO-PG29<br>H16B-TG-RO-M25<br>H16B-TG-RO-M32                        | T1320160121-000<br>T1320160129-000<br>T1320160125-000<br>T1320160132-000                    |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  | High construction<br>                                                                                                                                                   | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TGH-RO-PG21<br>H16B-TGH-RO-PG29<br>H16B-TGH-RO-M25<br>H16B-TGH-RO-M32<br>H16B-TGH-RO-M40 | T1340160121-000<br>T1340160129-000<br>T1340160125-000<br>T1340160132-000<br>T1340160140-000 |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  | <div></div> <table><thead><tr><th>Construction</th><th>H</th></tr></thead><tbody><tr><td>Low</td><td>62.5</td></tr><tr><td>Hight</td><td>74.5</td></tr></tbody></table> | Construction      | H            | Low                                                                                           | 62.5                                                                                        | Hight | 74.5 | M25<br>M32<br><br>M25<br>M32<br>M40 | PG21<br>PG29<br><br>PG21<br>PG29 | H16B-TBF-LB-PG21<br>H16B-TBF-LB-PG29<br>H16B-TBF-LB-M25<br>H16B-TBF-LB-M32<br><br>H16B-TBFH-LB-PG21<br>H16B-TBFH-LB-PG29<br>H16B-TBFH-LB-M25<br>H16B-TBFH-LB-M32<br>H16B-TBFH-LB-M40 | T1730163121-000<br>T1730163129-000<br>T1730163125-000<br>T1730163132-000<br><br>T1770163121-000<br>T1770163129-000<br>T1770163125-000<br>T1770163132-000<br>T1770163140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                          |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Low                                                                                 | 62.5                                                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Hight                                                                               | 74.5                                                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  |                                                                                                                                                                                                                                                            |                   |              | H16B-KDTP-LB                                                                                  | T1010161500-000                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |

## H16B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                  | Metr.                                                                                                                    | PG                               | Type | Part Number  |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------|------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----------------------------------|-----|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                                                 |                                                                                                                          |                                  |      |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                 |                                         |                                  |      | H16B-AG-LB   | T1500163000-000                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|  <p>With protection cover</p>   |                                         |                                  |      | H16B-AD-LB   | T1510163000-000                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
| Surface mounted: Side entry                                                                                      |                                                                                                                          |                                  |      |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                               |                                       | 1 Side entry<br>Low construction | M20  | PG16<br>PG21 | H16B-SGR-LB-PG16<br>H16B-SGR-LB-PG21<br>H16B-SGR-LB-M20<br>H16B-SGR-LB-M25<br>H16B-SGR-LB-2PG16<br>H16B-SGR-LB-2PG21<br>H16B-SGR-LB-2M20<br>H16B-SGR-LB-2M25 | T1610163116-000<br>T1610163121-000<br>T1610163120-000<br>T1610163125-000<br>T1610163216-000<br>T1610163221-000<br>T1610163220-000<br>T1610163225-000 |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          |                                  | M25  |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          |                                  | M20  |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          |                                  | M25  |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  | <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>High</td><td>81</td></tr></table> | Construction                     | H    | Low          | 56                                                                                                                                                           | High                                                                                                                                                 | 81 | 1 Side entry<br>High construction | M25 | PG21<br>PG29 | H16B-SGRH-LB-PG21<br>H16B-SGRH-LB-PG29<br>H16B-SGRH-LB-M25<br>H16B-SGRH-LB-M32<br>H16B-SGRH-LB-2PG21<br>H16B-SGRH-LB-2PG29<br>H16B-SGRH-LB-2M25<br>H16B-SGRH-LB-2M32 | T1650163121-000<br>T1650163129-000<br>T1650163125-000<br>T1650163132-000<br>T1650163221-000<br>T1650163229-000<br>T1650163225-000<br>T1650163232-000 |
|                                                                                                                  |                                                                                                                          | Construction                     | H    |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          | Low                              | 56   |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          | High                             | 81   |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
| M32                                                                                                              |                                                                                                                          |                                  |      |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
| M25                                                                                                              |                                                                                                                          |                                  |      |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
| M32                                                                                                              |                                                                                                                          |                                  |      |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|  <p>With protection cover</p> |                                       | 1 Side entry<br>Low construction | M20  | PG16<br>PG21 | H16B-SDR-LB-PG16<br>H16B-SDR-LB-PG21<br>H16B-SDR-LB-M20<br>H16B-SDR-LB-M25<br>H16B-SDR-LB-2PG16<br>H16B-SDR-LB-2PG21<br>H16B-SDR-LB-2M20<br>H16B-SDR-LB-2M25 | T1620163116-000<br>T1620163121-000<br>T1620163120-000<br>T1620163125-000<br>T1620163216-000<br>T1620163221-000<br>T1620163220-000<br>T1620163225-000 |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          |                                  | M25  |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          |                                  | M20  |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          |                                  | M25  |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  | <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>High</td><td>81</td></tr></table> | Construction                     | H    | Low          | 56                                                                                                                                                           | High                                                                                                                                                 | 81 | 1 Side entry<br>High construction | M25 | PG21<br>PG29 | H16B-SDRH-LB-PG21<br>H16B-SDRH-LB-PG29<br>H16B-SDRH-LB-M25<br>H16B-SDRH-LB-M32<br>H16B-SDRH-LB-2PG21<br>H16B-SDRH-LB-2PG29<br>H16B-SDRH-LB-2M25<br>H16B-SDRH-LB-2M32 | T1660163121-000<br>T1660163129-000<br>T1660163125-000<br>T1660163132-000<br>T1660163221-000<br>T1660163229-000<br>T1660163225-000<br>T1660163232-000 |
|                                                                                                                  |                                                                                                                          | Construction                     | H    |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          | Low                              | 56   |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          | High                             | 81   |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          | M32                              |      |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          | M25                              |      |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |
|                                                                                                                  |                                                                                                                          | M32                              |      |              |                                                                                                                                                              |                                                                                                                                                      |    |                                   |     |              |                                                                                                                                                                      |                                                                                                                                                      |

## HIP.16/40, HIP-K.16/40, EMV-K.16/40 housings

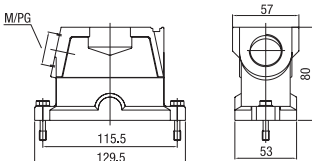
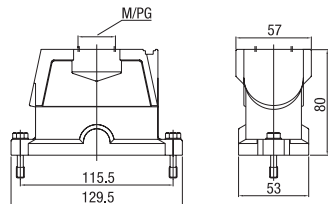
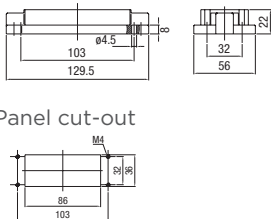
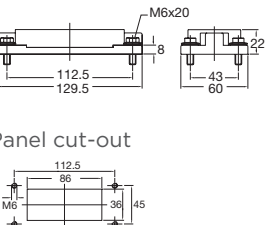
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         |                                                                                     | Metr. | PG       | Type                                                                                        | Part Number                               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|----------|---------------------------------------------------------------------------------------------|-------------------------------------------|
| Hood: Side entry                                                                    |                                                                                     |       |          |                                                                                             |                                           |
|    |    | M32   | 21<br>29 | <b>HIP</b><br>HIP.16/40.STS.1.21.G<br>HIP.16/40.STS.1.29.G<br>HIP.16/40.STS.1.M32.G         | 1-1102649-5<br>1-1102651-5<br>0-1106454-2 |
|                                                                                     |                                                                                     | M32   | 29       | <b>HIP-K</b><br>HIP-K.16/40.STS.1.29.G<br>HIP-K.16/40.STS.1.M32.G                           | 2-1102651-5<br>0-1106444-2                |
|                                                                                     |                                                                                     | M32   | 29<br>21 | <b>EMV-K</b><br>EMV-K.16/40.STS.1.29.G<br>EMV-K.16/40.STS.1.M32.G<br>EMV-K.16/40.STS.1.21.G | 4-1102723-5<br>0-1106446-4<br>4-1102722-5 |
| Hood: Top entry                                                                     |                                                                                     |       |          |                                                                                             |                                           |
|  |   | M32   | 21<br>29 | <b>HIP</b><br>HIP.16/40.STO.1.21.G<br>HIP.16/40.STO.1.29.G<br>HIP.16/40.STO.1.M32.G         | 1-1102653-5<br>1-1102655-5<br>0-1106454-1 |
|                                                                                     |                                                                                     | M32   | 21<br>29 | <b>HIP-K</b><br>HIP-K.16/40.STO.2.21.G<br>HIP-K.16/40.STO.1.29.G<br>HIP-K.16/40.STO.1.M32.G | 0-1108534-1<br>2-1102655-5<br>0-1106444-1 |
|                                                                                     |                                                                                     | M32   | 29       | <b>EMV-K</b><br>EMV-K.16/40.STO.1.29.G<br>EMV-K.16/40.STO.1.M32.G                           | 4-1102725-5<br>0-1106446-3                |
| Surface mounted housing: Bottom entry                                               |                                                                                     |       |          |                                                                                             |                                           |
|  |  |       |          | <b>HIP</b><br>HIP.16/40.AG                                                                  | 1-1102656-5                               |
|                                                                                     |                                                                                     |       |          | <b>HIP-K</b><br>HIP-K.16/40.AG                                                              | 2-1102656-5                               |
|                                                                                     |                                                                                     |       |          | <b>EMV-K</b><br>EMV-K.16/40.AG                                                              | 4-1102728-5                               |
|  |  |       |          | <b>HIP</b><br>HIP.16/40.AG.M6                                                               | 1-1102618-5                               |
|                                                                                     |                                                                                     |       |          | <b>HIP-K</b><br>HIP-K.16/40.AG.M6                                                           | 2-1102618-5                               |
|                                                                                     |                                                                                     |       |          | <b>EMV-K</b><br>EMV-K.16/40.AG.M6                                                           | 4-1102730-5                               |

## HIP.16/40, HIP-K.16/40, EMV-K.16/40 housings

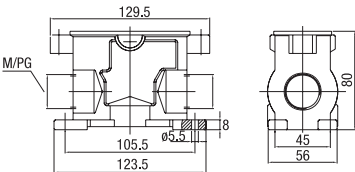
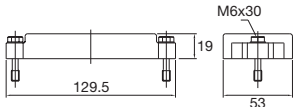
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                       | Metr.                                                                               | PG                                                                                  | Type                                                                                     | Part Number                                                                              |                                           |             |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------|-------------|
| Surface mounted housing: Side entry                                               |                                                                                     |                                                                                     |                                                                                          |                                                                                          |                                           |             |
|  |    | 2xM32                                                                               | 21<br>2x21                                                                               | <b>HIP</b><br>HIP.16/40.SG.1.21.G<br>HIP.16/40.SG.2.21.G<br>HIP.16/40.SG.2.M32.G         | 1-1102616-5<br>1-1102617-5<br>0-1106453-1 |             |
|                                                                                   |                                                                                     | 2xM32                                                                               | 21<br>2x21                                                                               | <b>HIP-K</b><br>HIP-K.16/40.SG.1.21.G<br>HIP-K.16/40.SG.2.21.G<br>HIP-K.16/40.SG.2.M32.G | 5-1102616-5<br>2-1102617-5<br>0-1106443-1 |             |
|                                                                                   | 2xM32                                                                               | 21<br>2x21                                                                          | <b>EMV-K</b><br>EMV-K.16/40.SG.1.21.Z<br>EMV-K.16/40.SG.2.21.Z<br>EMV-K.16/40.SG.2.M32.G | 4-1102726-5<br>4-1102727-5<br>0-1106445-2                                                |                                           |             |
|                                                                                   | Protective covers for housings                                                      |                                                                                     |                                                                                          |                                                                                          |                                           |             |
|                                                                                   |  |  |                                                                                          |                                                                                          | <b>HIP</b><br>HIP/EMV.16/40.SKB           | 3-1106203-5 |
|                                                                                   |                                                                                     |                                                                                     |                                                                                          |                                                                                          | <b>HIP-K</b><br>HIP-K.16/40.SKB           | 4-1106203-5 |

## HE-024 inserts

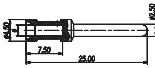
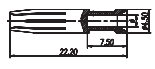
INSERTS FOR H24B HOOD/HOUSING

500V MAX. 16A

24+ Ⓢ

| Dimension (mm)                                   | Type       | Part Number     |                 |
|--------------------------------------------------|------------|-----------------|-----------------|
|                                                  |            | Male insert     | Female insert   |
| Screw terminal                                   |            |                 |                 |
|                                                  | HE-024-M   | T2040242101-000 |                 |
|                                                  | HE-024-F   |                 | T2040242201-000 |
| Spring terminal                                  |            |                 |                 |
|                                                  | HE-024-MS  | T2040243101-000 |                 |
|                                                  | HE-024-FS  |                 | T2040243201-000 |
| Crimp terminal (Order crimp contacts separately) |            |                 |                 |
|                                                  | HE-024-MC  | T2040244101-000 |                 |
|                                                  | HE-024-FC  |                 | T2040244201-000 |
| Spring terminal (Two terminals per contact)      |            |                 |                 |
|                                                  | HE-024-MSS | T2040245101-000 |                 |
|                                                  | HE-024-FSS |                 | T2040245201-000 |

## 16A Contact

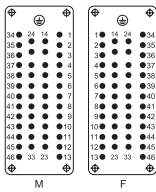
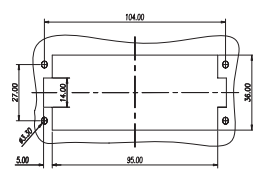
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: ≤1mΩ<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length<br>mm | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                    |                                                                                                                     | mm <sup>2</sup> | AWG   |                                | Type                          | Part Number     | Type                        | Part Number     |
|                                 |                                                                                                                     | 0.14-0.37       | 26-22 | 7.5                            | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                    |                                                                                                                     | 0.5             | 20    | 7.5                            | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                    |                                                                                                                     | 0.75            | 18    | 7.5                            | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                    |                                                                                                                     | 1.0             | 18    | 7.5                            | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                    |                                                                                                                     | 1.5             | 16    | 7.5                            | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                    |                                                                                                                     | 2.5             | 14    | 7.5                            | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                    |                                                                                                                     | 4.0             | 12    | 7.5                            | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| CEF/Female<br>                  | 16A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5                            | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                    |                                                                                                                     | 0.5             | 20    | 7.5                            | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                    |                                                                                                                     | 0.75            | 18    | 7.5                            | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                    |                                                                                                                     | 1.0             | 18    | 7.5                            | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                    |                                                                                                                     | 1.5             | 16    | 7.5                            | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                    |                                                                                                                     | 2.5             | 14    | 7.5                            | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                    |                                                                                                                     | 4.0             | 12    | 7.5                            | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

## HEE-046 inserts

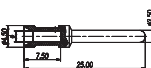
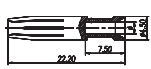
INSERTS FOR H24B HOOD/HOUSING

500V MAX. 16A

46+ 

| Dimensions (mm)                                                                    | Type                                                                               | Part Number     |                 |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------|-----------------|
|                                                                                    |                                                                                    | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                   |                                                                                    |                 |                 |
|   | HEE-046-M                                                                          | T2050462101-000 |                 |
|                                                                                    | HEE-046-F                                                                          |                 | T2050462201-000 |
| Contact arrangement view from termination side                                     | Panel cut out for inserts for use without hoods/housings                           |                 |                 |
|  |  |                 |                 |

## 16A Contact

| Tech data                                                                                                                                                                                                             | 16A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                       |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b><br> |                                      | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| <b>CEF/Female</b><br>                                                                                                              | <b>16A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                       |                                                                                                                         | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

## HEEE-064 inserts

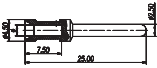
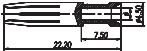
INSERTS FOR H24B HOOD/HOUSING

500V MAX. 16A

64+ (⊕)

| Dimensions (mm)                                                                   | Type | Part Number |               |
|-----------------------------------------------------------------------------------|------|-------------|---------------|
|                                                                                   |      | Male insert | Female insert |
| Crimp terminal (order crimp contacts separately)                                  |      |             |               |
|  |      |             |               |

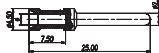
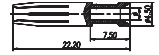
## 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: ≤1mΩ<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length<br>mm | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                    |                                                                                                                     | mm <sup>2</sup> | AWG   |                                | Type                          | Part Number     | Type                        | Part Number     |
|                                 |                                                                                                                     | 0.14-0.37       | 26-22 | 7.5                            | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                    |                                                                                                                     | 0.5             | 20    | 7.5                            | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                    |                                                                                                                     | 0.75            | 18    | 7.5                            | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                    |                                                                                                                     | 1.0             | 18    | 7.5                            | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                    |                                                                                                                     | 1.5             | 16    | 7.5                            | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                    |                                                                                                                     | 2.5             | 14    | 7.5                            | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                    |                                                                                                                     | 4.0             | 12    | 7.5                            | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| CEF/Female<br>                  | 16A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5                            | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                    |                                                                                                                     | 0.5             | 20    | 7.5                            | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                    |                                                                                                                     | 0.75            | 18    | 7.5                            | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                    |                                                                                                                     | 1.0             | 18    | 7.5                            | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                    |                                                                                                                     | 1.5             | 16    | 7.5                            | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                    |                                                                                                                     | 2.5             | 14    | 7.5                            | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                    |                                                                                                                     | 4.0             | 12    | 7.5                            | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

400V MAX. 16A

72+ 

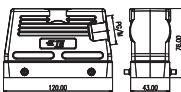
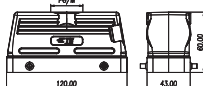
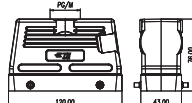
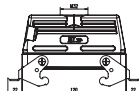
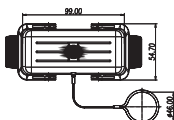
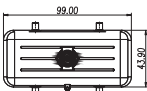
## 16A Contact

|                                                                                                                                                                                                                                           |                                                                                                                         |                   |       |                          |                                      |                 |                                    |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------|-------|--------------------------|--------------------------------------|-----------------|------------------------------------|-----------------|
| <b>Tech data</b><br><b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b><br> | <b>16A Male crimp contacts</b><br>   | <b>Wire gauge</b> |       | <b>Strip-ping length</b> | <b>Crimp contacts, silver-plated</b> |                 | <b>Crimp contacts, gold-plated</b> |                 |
|                                                                                                                                                                                                                                           |                                                                                                                         | mm²               | AWG   | mm                       | Type                                 | Part Number     | Type                               | Part Number     |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.14-0.37         | 26-22 | 7.5                      | CEM-0.3                              | T2030001002-000 | DEM-0.3                            | T2030011002-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20    | 7.5                      | CEM-0.5                              | T2030001005-000 | DEM-0.5                            | T2030011005-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18    | 7.5                      | CEM-0.75                             | T2030001008-000 | DEM-0.75                           | T2030011008-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18    | 7.5                      | CEM-1.0                              | T2030001010-000 | DEM-1.0                            | T2030011010-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16    | 7.5                      | CEM-1.5                              | T2030001015-000 | DEM-1.5                            | T2030011015-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14    | 7.5                      | CEM-2.5                              | T2030001025-000 | DEM-2.5                            | T2030011025-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 4.0               | 12    | 7.5                      | CEM-4.0                              | T2030001040-000 | DEM-4.0                            | T2030011040-000 |
| <b>CEF/Female</b><br>                                                                                                                                  | <b>16A Female crimp contacts</b><br> | 0.14-0.37         | 26-22 | 7.5                      | CEF-0.3                              | T2030002002-000 | DEF-0.3                            | T2030012002-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20    | 7.5                      | CEF-0.5                              | T2030002005-000 | DEF-0.5                            | T2030012005-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18    | 7.5                      | CEF-0.75                             | T2030002008-000 | DEF-0.75                           | T2030012008-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18    | 7.5                      | CEF-1.0                              | T2030002010-000 | DEF-1.0                            | T2030012010-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16    | 7.5                      | CEF-1.5                              | T2030002015-000 | DEF-1.5                            | T2030012015-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14    | 7.5                      | CEF-2.5                              | T2030002025-000 | DEF-2.5                            | T2030012025-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 4.0               | 12    | 7.5                      | CEF-4.0                              | T2030002040-000 | DEF-4.0                            | T2030012040-000 |



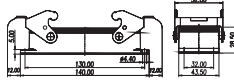
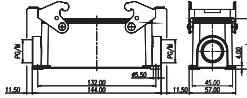
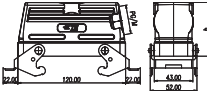
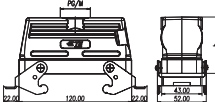
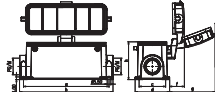
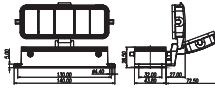
## H24B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                            | Metr.             | PG           | Type                                                                           | Part Number                                                                                 |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|-------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | Low construction<br>                                                                                                                      | M25<br>M32        | PG16<br>PG21 | H24B-TS-PG16<br>H24B-TS-PG21<br>H24B-TS-M25<br>H24B-TS-M32                     | T1210240116-000<br>T1210240121-000<br>T1210240125-000<br>T1210240132-000                    |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | High construction<br>                                                                                                                     | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TSH-PG21<br>H24B-TSH-PG29<br>H24B-TSH-M25<br>H24B-TSH-M32<br>H24B-TSH-M40 | T1230240121-000<br>T1230240129-000<br>T1230240125-000<br>T1230240132-000<br>T1230240140-000 |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|   | Low construction<br>                                                                                                                     | M25<br>M32        | PG16<br>PG21 | H24B-TG-PG16<br>H24B-TG-PG21<br>H24B-TG-M25<br>H24B-TG-M32                     | T1220240116-000<br>T1220240121-000<br>T1220240125-000<br>T1220240132-000                    |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | High construction<br>                                                                                                                   | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TGH-PG21<br>H24B-TGH-PG29<br>H24B-TGH-M25<br>H24B-TGH-M32<br>H24B-TGH-M40 | T1240240121-000<br>T1240240129-000<br>T1240240125-000<br>T1240240132-000<br>T1240240140-000 |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>78.5</td></tr></table></div> | Construction      | H            | Low                                                                            | 62.5                                                                                        | High | 78.5 | M25<br>M32<br><br>M25<br>M32<br>M40 | PG21<br><br>PG21<br>PG29 | H24B-TBFS-PG21<br>H24B-TBFS-M25<br>H24B-TBFS-M32<br><br>H24B-TBFHS-PG21<br>H24B-TBFHS-PG29<br>H24B-TBFHS-M25<br>H24B-TBFHS-M32<br>H24B-TBFHS-M40 | T1710241121-000<br>T1710241125-000<br>T1710241132-000<br><br>T1750241121-000<br>T1750241129-000<br>T1750241125-000<br>T1750241132-000<br>T1750241140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                          |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| Low                                                                                 | 62.5                                                                                                                                                                                                                       |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| High                                                                                | 78.5                                                                                                                                                                                                                       |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                         |                   |              | H24B-KDTP                                                                      | T1010241400-000                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| Housing protection cover                                                            |                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                         |                   |              | H24B-KDBP                                                                      | T1010242100-000                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |

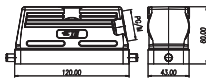
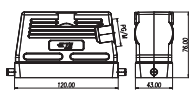
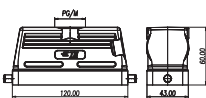
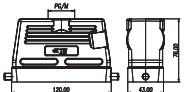
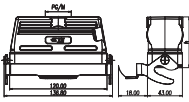
## H24B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Metr.        | PG | Type     | Part Number     |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----|----------|-----------------|------|----|----------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|----|----|------|-----|-----|----|----|----|----|----|----------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
|                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |    | H24B-AGS | T1410241000-000 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Surface mounted: Side entry                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
|                                                                                                  | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>High</td><td>81</td></tr></table></div> <div>1 Side entry<br/>Low construction<br/>2 Side entry<br/>High construction</div>                                                                                                                                                                                                                                                                                                                           | Construction | H  | Low      | 56              | High | 81 | M25<br><br>M25<br><br>M25<br>M32<br><br>M25<br>M32 | PG21<br><br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H24B-SGRS-PG21<br>H24B-SGRS-M25<br>H24B-SGRS-2PG21<br>H24B-SGRS-2M25<br><br>H24B-SGRHS-PG21<br>H24B-SGRHS-PG29<br>H24B-SGRHS-M25<br>H24B-SGRHS-M32<br>H24B-SGRHS-2PG21<br>H24B-SGRHS-2PG29<br>H24B-SGRHS-2M25<br>H24B-SGRHS-2M32 | T1440241121-000<br>T1440241125-000<br>T1440241221-000<br>T1440241225-000<br><br>T1470241121-000<br>T1470241129-000<br>T1470241125-000<br>T1470241132-000<br>T1470241221-000<br>T1470241229-000<br>T1470241225-000<br>T1470241232-000 |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Construction                                                                                                                                                                      | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Low                                                                                                                                                                               | 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| High                                                                                                                                                                              | 81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Side entry housing with two levers                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
|                                                                                                | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>High</td><td>76</td></tr></table></div> <div>Low construction<br/><br/><br/><br/>High construction</div>                                                                                                                                                                                                                                                                                                                                            | Construction | H  | Low      | 60              | High | 76 | M20<br>M25<br><br>M25<br>M32                       | PG16<br>PG21<br><br>PG21<br>PG29                         | H24B-TSBS-PG16<br>H24B-TSBS-PG21<br>H24B-TSBS-M20<br>H24B-TSBS-M25<br><br>H24B-TSBHS-PG21<br>H24B-TSBHS-PG29<br>H24B-TSBHS-M25<br>H24B-TSBHS-M32                                                                                 | T1250243116-000<br>T1250243121-000<br>T1250243120-000<br>T1250243125-000<br><br>T1270243121-000<br>T1270243129-000<br>T1270243125-000<br>T1270243132-000                                                                             |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Construction                                                                                                                                                                      | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Low                                                                                                                                                                               | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| High                                                                                                                                                                              | 76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Top entry housing with two levers                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
|                                                                                                | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>High</td><td>76</td></tr></table></div> <div>Low construction<br/><br/><br/><br/>High construction</div>                                                                                                                                                                                                                                                                                                                                            | Construction | H  | Low      | 60              | High | 76 | M20<br>M25<br><br>M25<br>M32                       | PG16<br>PG21<br><br>PG21<br>PG29                         | H24B-TGBS-PG16<br>H24B-TGBS-PG21<br>H24B-TGBS-M20<br>H24B-TGBS-M25<br><br>H24B-TGBHS-PG21<br>H24B-TGBHS-PG29<br>H24B-TGBHS-M25<br>H24B-TGBHS-M32                                                                                 | T1260243116-000<br>T1260243121-000<br>T1260243120-000<br>T1260243125-000<br><br>T1280243121-000<br>T1280243129-000<br>T1280243125-000<br>T1280243132-000                                                                             |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Construction                                                                                                                                                                      | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Low                                                                                                                                                                               | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| High                                                                                                                                                                              | 76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Bulkhead mounted with 4 bolts                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |    |          |                 |      |    |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| <div></div> | <div>With protection cover</div> <div><table><tr><td>Construction</td><td>A</td><td>B</td><td>C</td><td>D</td><td>F</td><td>G</td><td>H</td></tr><tr><td>Low</td><td>132</td><td>144</td><td>45</td><td>57</td><td>20</td><td>65</td><td>56</td></tr><tr><td>High</td><td>132</td><td>144</td><td>45</td><td>57</td><td>20</td><td>65</td><td>81</td></tr></table></div> <div>1 Side entry<br/>Low construction<br/>2 Side entry<br/>High construction</div> | Construction | A  | B        | C               | D    | F  | G                                                  | H                                                        | Low                                                                                                                                                                                                                              | 132                                                                                                                                                                                                                                  | 144 | 45 | 57 | 20 | 65 | 56 | High | 132 | 144 | 45 | 57 | 20 | 65 | 81 | M25<br><br>M25<br><br>M25<br>M32<br><br>M25<br>M32 | PG21<br><br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H24B-AD-BO<br><br>H24B-SDR-BO-PG21<br>H24B-SDR-BO-M25<br>H24B-SDR-BO-2PG21<br>H24B-SDR-BO-2M25<br><br>H24B-SDRH-BO-PG21<br>H24B-SDRH-BO-PG29<br>H24B-SDRH-BO-M25<br>H24B-SDRH-BO-M32<br>H24B-SDRH-BO-2PG21<br>H24B-SDRH-BO-2PG29<br>H24B-SDRH-BO-2M25<br>H24B-SDRH-BO-2M32 | T1430240000-000<br><br>T1460240121-000<br>T1460240125-000<br>T1460240221-000<br>T1460240225-000<br><br>T1490240121-000<br>T1490240129-000<br>T1490240125-000<br>T1490240132-000<br>T1490240221-000<br>T1490240229-000<br>T1490240225-000<br>T1490240232-000 |
| Construction                                                                                                                                                                      | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | B            | C  | D        | F               | G    | H  |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| Low                                                                                                                                                                               | 132                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 144          | 45 | 57       | 20              | 65   | 56 |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |
| High                                                                                                                                                                              | 132                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 144          | 45 | 57       | 20              | 65   | 81 |                                                    |                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                    |                                                          |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                             |

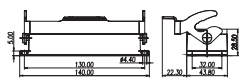
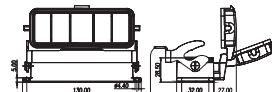
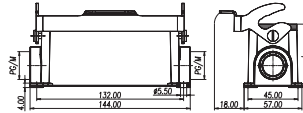
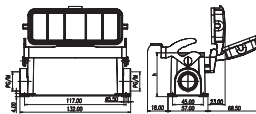
## H24B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                             | Metr.             | PG           | Type                                                                                          | Part Number                                                                                 |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------|------|---------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                             |                   |              |                                                                                               |                                                                                             |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|    | Low construction<br>                                                                                                                       | M25<br>M32        | PG21<br>PG29 | H24B-TS-RO-PG21<br>H24B-TS-RO-PG29<br>H24B-TS-RO-M25<br>H24B-TS-RO-M32                        | T1310240121-000<br>T1310240129-000<br>T1310240125-000<br>T1310240132-000                    |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|    | High construction<br>                                                                                                                      | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TSH-RO-PG21<br>H24B-TSH-RO-PG29<br>H24B-TSH-RO-M25<br>H24B-TSH-RO-M32<br>H24B-TSH-RO-M40 | T1330240121-000<br>T1330240129-000<br>T1330240125-000<br>T1330240132-000<br>T1330240140-000 |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                             |                   |              |                                                                                               |                                                                                             |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|   | Low construction<br>                                                                                                                      | M25<br>M32        | PG21<br>PG29 | H24B-TG-RO-PG21<br>H24B-TG-RO-PG29<br>H24B-TG-RO-M25<br>H24B-TG-RO-M32                        | T1320240121-000<br>T1320240129-000<br>T1320240125-000<br>T1320240132-000                    |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  | High construction<br>                                                                                                                    | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TGH-RO-PG21<br>H24B-TGH-RO-PG29<br>H24B-TGH-RO-M25<br>H24B-TGH-RO-M32<br>H24B-TGH-RO-M40 | T1340240121-000<br>T1340240129-000<br>T1340240125-000<br>T1340240132-000<br>T1340240140-000 |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                             |                   |              |                                                                                               |                                                                                             |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>Hight</td><td>78.5</td></tr></table></div> | Construction      | H            | Low                                                                                           | 62.5                                                                                        | Hight | 78.5 | <div>Low construction</div> M25<br>M32 <div>High construction</div> M25<br>M32<br>M40 | PG21<br>PG29<br><br>PG21<br>PG29 | H24B-TBF-LB-PG21<br>H24B-TBF-LB-PG29<br>H24B-TBF-LB-M25<br>H24B-TBF-LB-M32<br><br>H24B-TBFH-LB-PG21<br>H24B-TBFH-LB-PG29<br>H24B-TBFH-LB-M25<br>H24B-TBFH-LB-M32<br>H24B-TBFH-LB-M40 | T1730242121-000<br>T1730242129-000<br>T1730242125-000<br>T1730242132-000<br><br>T1770243121-000<br>T1770243129-000<br>T1770243125-000<br>T1770243132-000<br>T1770243140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                           |                   |              |                                                                                               |                                                                                             |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Low                                                                                 | 62.5                                                                                                                                                                                                                        |                   |              |                                                                                               |                                                                                             |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Hight                                                                               | 78.5                                                                                                                                                                                                                        |                   |              |                                                                                               |                                                                                             |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                             |                   |              |                                                                                               |                                                                                             |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  |                                                                                                                                                                                                                             |                   |              | H24B-KDTP-LB                                                                                  | T1010241500-000                                                                             |       |      |                                                                                       |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |

## H24B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                                                                                                                                                                                                                                                                                                                       | PG           | Type       | Part Number     |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------|----|-------|----|------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                                                                                                             |              |            |                 |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|    |                                                                                                                                                                                                                                                                                            |              | H24B-AG-LB | T1500243000-000 |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|    | With protection cover<br>                                                                                                                                                                                                                                                                  |              | H24B-AD-LB | T1510243000-000 |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                                                                                                                                             |              |            |                 |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|  | <div><div>1 Side entry</div><div>Low construction</div><div>2 Side entry</div><div>1 Side entry</div><div>High construction</div><div>2 Side entry</div></div>  <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table> | Construction | H          | Low             | 56 | Hight | 81 | M20<br>M25<br><br>M20<br>M25<br><br>M25<br>M32<br><br>M25<br>M32 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H24B-SGR-LB-PG16<br>H24B-SGR-LB-PG21<br>H24B-SGR-LB-M20<br>H24B-SGR-LB-M25<br>H24B-SGR-LB-2PG16<br>H24B-SGR-LB-2PG21<br>H24B-SGR-LB-2M20<br>H24B-SGR-LB-2M25<br><br>H24B-SGRH-LB-PG21<br>H24B-SGRH-LB-PG29<br>H24B-SGRH-LB-M25<br>H24B-SGRH-LB-M32<br>H24B-SGRH-LB-2PG21<br>H24B-SGRH-LB-2PG29<br>H24B-SGRH-LB-2M25<br>H24B-SGRH-LB-2M32 | T1610243116-000<br>T1610243121-000<br>T1610243120-000<br>T1610243125-000<br>T1610243216-000<br>T1610243221-000<br>T1610243220-000<br>T1610243225-000<br><br>T1650243121-000<br>T1650243129-000<br>T1650243125-000<br>T1650243132-000<br>T1650243221-000<br>T1650243229-000<br>T1650243225-000<br>T1650243232-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                                                                                                                           |              |            |                 |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Low                                                                                 | 56                                                                                                                                                                                                                                                                                                                                                                          |              |            |                 |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Hight                                                                               | 81                                                                                                                                                                                                                                                                                                                                                                          |              |            |                 |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|  | With protection cover<br> <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table>                                                                                                                                      | Construction | H          | Low             | 56 | Hight | 81 | M20<br>M25<br><br>M20<br>M25<br><br>M25<br>M32<br><br>M25<br>M32 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H24B-SDR-LB-PG16<br>H24B-SDR-LB-PG21<br>H24B-SDR-LB-M20<br>H24B-SDR-LB-M25<br>H24B-SDR-LB-2PG16<br>H24B-SDR-LB-2PG21<br>H24B-SDR-LB-2M20<br>H24B-SDR-LB-2M25<br><br>H24B-SDRH-LB-PG21<br>H24B-SDRH-LB-PG29<br>H24B-SDRH-LB-M25<br>H24B-SDRH-LB-M32<br>H24B-SDRH-LB-2PG21<br>H24B-SDRH-LB-2PG29<br>H24B-SDRH-LB-2M25<br>H24B-SDRH-LB-2M32 | T1620243116-000<br>T1620243121-000<br>T1620243120-000<br>T1620243125-000<br>T1620243216-000<br>T1620243221-000<br>T1620243220-000<br>T1620243225-000<br><br>T1660243121-000<br>T1660243129-000<br>T1660243125-000<br>T1660243132-000<br>T1660243221-000<br>T1660243229-000<br>T1660243225-000<br>T1660243232-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                                                                                                                           |              |            |                 |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Low                                                                                 | 56                                                                                                                                                                                                                                                                                                                                                                          |              |            |                 |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Hight                                                                               | 81                                                                                                                                                                                                                                                                                                                                                                          |              |            |                 |    |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |

## HIP.24/64, HIP-K.24/64, EMV-K.24/64 housings

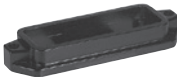
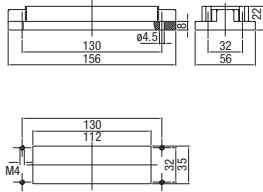
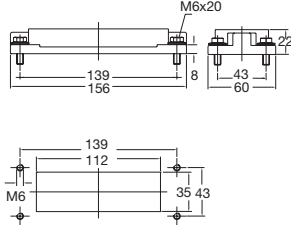
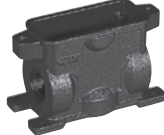
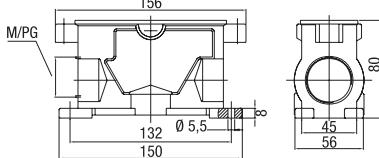
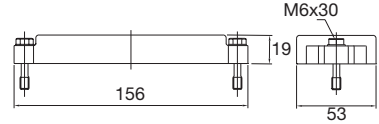
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                               | PG    | Type                                                                              | Part Number                                                                              |                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------|
| Surface mounted housing: Bottom entry, Standard construction                        |                                                                                     |       |                                                                                   |                                                                                          |                                           |
|    |    |       | <b>HIP</b><br>HIP.24/64.AG                                                        | 1-1102665-5                                                                              |                                           |
|                                                                                     |                                                                                     |       | <b>HIP-K</b><br>HIP-K.24/64.AG                                                    | 2-1102665-5                                                                              |                                           |
|                                                                                     |                                                                                     |       | <b>EMV-K</b><br>EMV-K.24/64.AG                                                    | 4-1102760-5                                                                              |                                           |
|    |   |       | <b>HIP</b><br>HIP.24/64.AG.M6                                                     | 1-1102626-5                                                                              |                                           |
|                                                                                     |                                                                                     |       | <b>HIP-K</b><br>HIP-K.24/64.AG.M6<br>HIP-K.24/64.AG.M6.D<br>HIP-K-I.24/64.AG.M6.D | 2-1102626-5<br>2-1102628-5<br>0-1108533-1                                                |                                           |
|                                                                                     |                                                                                     |       | <b>EMV-K</b><br>EMV-K.24/64.AG.M6                                                 | 4-1102736-5                                                                              |                                           |
| Surface mounted housing: Side entry, Standard construction                          |                                                                                     |       |                                                                                   |                                                                                          |                                           |
|  |  | 2xM40 | 29<br>2x29                                                                        | <b>HIP</b><br>HIP.24/64.SG.1.29.G<br>HIP.24/64.SG.2.29.G<br>HIP.24/64.SG.2.M40.G         | 1-1102624-5<br>1-1102625-5<br>0-1106472-1 |
|                                                                                     |                                                                                     | 2xM40 | 29<br>2x29                                                                        | <b>HIP-K</b><br>HIP-K.24/64.SG.1.29.G<br>HIP-K.24/64.SG.2.29.G<br>HIP-K.24/64.SG.2.M40.G | 5-1102624-5<br>2-1102625-5<br>0-1106472-2 |
|                                                                                     |                                                                                     | 2xM40 | 29<br>2x29                                                                        | <b>EMV-K</b><br>EMV-K.24/64.SG.1.29.G<br>EMV-K.24/64.SG.2.29.G<br>EMV-K.24/64.SG.2.M40.G | 4-1102734-5<br>4-1102735-5<br>0-1106460-2 |
| Protective cover housings                                                           |                                                                                     |       |                                                                                   |                                                                                          |                                           |
|  |  |       | <b>HIP</b><br>HIP/EMV.24/64.SKB                                                   | 3-1106204-5                                                                              |                                           |
|                                                                                     |                                                                                     |       | <b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.24/64.SKB                                       | 4-1106204-5                                                                              |                                           |

## HIP.24/64, HIP-K.24/64, EMV-K.24/64 housings

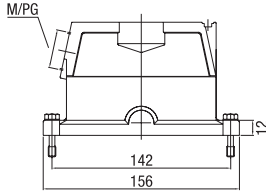
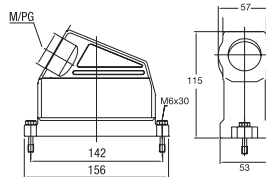
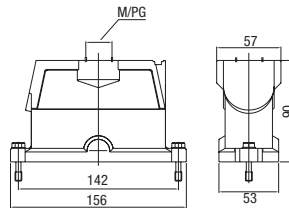
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         |                                                                                     | Metr.             | PG       | Type                                                                                                                    | Part Number                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------|----------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Hood: Side entry, Standard construction                                             |                                                                                     |                   |          |                                                                                                                         |                                                          |
|    |    | M40               | 21<br>29 | <b>HIP</b><br>HIP.24/64.STS.1.21.G<br>HIP.24/64.STS.1.29.G<br>HIP.24/64.STS.1.M40.G                                     | 1-1102658-5<br>1-1102660-5<br>0-1106473-2                |
|                                                                                     |                                                                                     | M40               | 29       | <b>HIP-K</b><br>HIP-K.24/64.STS.1.29.G<br>HIP-K.24/64.STS.1.M40.G                                                       | 2-1102660-5<br>0-1106473-4                               |
|                                                                                     |                                                                                     | M25<br>M32<br>M40 | 29       | <b>EMV-K</b><br>EMV-K.24/64.STS.1.29.G<br>EMV-K.24/64.STS.1.M25.G<br>EMV-K.24/64.STS.1.M32.G<br>EMV-K.24/64.STS.1.M40.G | 4-1102755-5<br>0-1102983-1<br>0-1106461-8<br>0-1106461-3 |
|  |   | M40               | 29<br>36 | <b>HIP</b><br>HIP-KF.24/64.STS.1.29.G<br>HIP-KF.24/64.STS.1.36.G<br>HIP-KF.24/64.STS.1.M40.G                            | 1-1102622-5<br>1-1102623-5<br>0-1106474-1                |
|                                                                                     |                                                                                     | M40               | 29<br>36 | <b>HIP-K</b><br>HIP-KF/K.24/64.STS.1.29.G<br>HIP-KF/K.24/64.STS.1.36G<br>HIP-KF/K.24/64.STS.1.M40.G                     | 2-1102622-5<br>2-1102623-5<br>0-1106474-2                |
|                                                                                     |                                                                                     | M40               | 29<br>36 | <b>EMV-K</b><br>EMV-KF/K.24/64.STS.1.29.G<br>EMV-KF/K.24/64.STS.1.36.G<br>EMV-KF/K.24/64.STS.1.M40.G                    | 4-1102732-5<br>4-1102733-5<br>0-1106462-2                |
| Hood: Top entry, Standard construction                                              |                                                                                     |                   |          |                                                                                                                         |                                                          |
|  |  | M40               |          |                                                                                                                         |                                                          |
|                                                                                     |                                                                                     | 2xM32<br>M40      | 21<br>29 | <b>HIP</b><br>HIP.24/64.STO.1.21.G<br>HIP.24/64.STO.1.29.G<br>HIP.24/64.STO.1.M40.G                                     | 1-1102662-5<br>1-1102664-5<br>0-1106473-1                |
|                                                                                     |                                                                                     | M40<br>2xM40      | 29       | <b>HIP-K</b><br>HIP-K.24/64.STO.1.29.G<br>HIP-K.24/64.STO.2.M32.G<br>HIP-K.24/64.STO.1.M40.G                            | 2-1102664-5<br>0-1102792-1<br>0-1106473-3                |
|                                                                                     |                                                                                     | 2xM40             | 29       | <b>EMV-K</b><br>EMV-K.24/64.STO.1.29.G<br>EMV-K.24/64.STO.1.M40.G                                                       | 4-1102759-5<br>0-1106461-4                               |
|                                                                                     |                                                                                     | 2xM40             |          |                                                                                                                         |                                                          |

**HIP:** Pressure-tight, silver-grey  
**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h  
**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

| Description                                                                         |                                                                                     | Metr.                            | PG             | Type                                                                                                 | Part Number                                                               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------|----------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Hood                                                                                |                                                                                     |                                  |                |                                                                                                      |                                                                           |
|    |    | 1xM50<br>1xM50<br>2xM40<br>2xM40 |                | HF-HIP-K.8.Sto.1.M50G<br>HF.8.EMV-K.8.Sto.1.M50G<br>HF.HIP-K.8.Sto.2.M40G<br>HF.EMV-K.8.Sto.2.M40G   | O-1102839-4<br>O-1102839-3<br>O-1102839-2<br>O-1102839-1                  |
| Housing bottom                                                                      |                                                                                     |                                  |                |                                                                                                      |                                                                           |
|    |   | 81 mm<br>81 mm                   | <b>Height</b>  |                                                                                                      | HF-HIP-K.8.AG.N<br>HF-EMV-K.8.AG.N<br>HF-HIP-K.8.AG<br>HF-EMV-K.8.AG      |
|                                                                                     |                                                                                     |                                  | 20 mm<br>20 mm |                                                                                                      |                                                                           |
|                                                                                     |                                                                                     |                                  |                |                                                                                                      | O-1102837-2<br>O-1102837-1<br>O-1102836-2<br>O-1102836-1                  |
| Hood                                                                                |                                                                                     |                                  |                |                                                                                                      |                                                                           |
|  |  | 2xM40<br>2xM40<br>2xM50<br>2xM50 |                | HF-HIP-K.12.Sto.2.M40G<br>HF-EMV-K.12.Sto.2.M40G<br>HF-HIP-K.12.Sto.2.M50G<br>HF-EMV-K.12.Sto.2.M50G | O-1102840-2<br>O-1102840-1<br>O-1102840-4<br>O-1102840-3                  |
| Housing bottom                                                                      |                                                                                     |                                  |                |                                                                                                      |                                                                           |
|  |  | 81 mm<br>81 mm                   | <b>Height</b>  |                                                                                                      | HF-HIP-K.12.AG.N<br>HF-EMV-K.12.AG.N<br>HF-HIP-K.12.AG<br>HF-EMVK-K.12.AG |
|                                                                                     |                                                                                     |                                  | 20 mm<br>20 mm |                                                                                                      |                                                                           |
|                                                                                     |                                                                                     |                                  |                |                                                                                                      | O-1102838-2<br>O-1102838-1<br>O-1102192-2<br>O-1102192-1                  |

## HE-032 inserts

INSERTS FOR H32B HOOD/HOUSING

500V MAX. 16A

32 (2x16)+⊕

| Dimension (mm)                                   | Type              | Part Number     |                 |
|--------------------------------------------------|-------------------|-----------------|-----------------|
|                                                  |                   | Male insert     | Female insert   |
| Screw terminal                                   |                   |                 |                 |
|                                                  | HE-016-M(1-16)    | T2040162101-000 |                 |
|                                                  | HE-016-M(17-32)   | T2040322101-000 |                 |
|                                                  | HE-016-F(1-16)    |                 | T2040162201-000 |
|                                                  | HE-016-F(17-32)   |                 | T2040322201-000 |
| Spring terminal                                  |                   |                 |                 |
|                                                  | HE-016-MS(1-16)   | T2040163101-000 |                 |
|                                                  | HE-016-MS(17-32)  | T2040323101-000 |                 |
|                                                  | HE-016-FS(1-16)   |                 | T2040163201-000 |
|                                                  | HE-016-FS(17-32)  |                 | T2040323201-000 |
| Crimp terminal (Order crimp contacts separately) |                   |                 |                 |
|                                                  | HE-016-MC(1-16)   | T2040164101-000 |                 |
|                                                  | HE-016-MC(17-32)  | T2040324101-000 |                 |
|                                                  | HE-016-FC(1-16)   |                 | T2040164201-000 |
|                                                  | HE-016-FC(17-32)  |                 | T2040324201-000 |
| Spring terminal (Two terminals per contact)      |                   |                 |                 |
|                                                  | HE-016-MSS(1-16)  | T2040165101-000 |                 |
|                                                  | HE-016-MSS(17-32) | T2040325101-000 |                 |
|                                                  | HE-016-FSS(1-16)  |                 | T2040165201-000 |
|                                                  | HE-016-FSS(17-32) |                 | T2040325201-000 |

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: ≤1mΩ<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length<br>mm | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------|-------|--------------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                    |                                  | mm <sup>2</sup> | AWG   |                                | Type                          | Part Number     | Type                        | Part Number     |
|                                                                                                                    |                                  | 0.14-0.37       | 26-22 | 7.5                            | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                    |                                  | 0.5             | 20    | 7.5                            | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                    |                                  | 0.75            | 18    | 7.5                            | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                    |                                  | 1.0             | 18    | 7.5                            | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                    |                                  | 1.5             | 16    | 7.5                            | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                    |                                  | 2.5             | 14    | 7.5                            | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                    |                                  | 4.0             | 12    | 7.5                            | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| CEF/Female<br>                                                                                                     | 16A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5                            | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                    |                                  | 0.5             | 20    | 7.5                            | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                    |                                  | 0.75            | 18    | 7.5                            | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                    |                                  | 1.0             | 18    | 7.5                            | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                    |                                  | 1.5             | 16    | 7.5                            | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                    |                                  | 2.5             | 14    | 7.5                            | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                    |                                  | 4.0             | 12    | 7.5                            | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

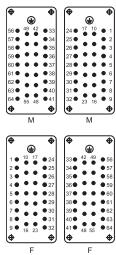
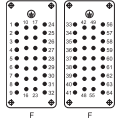


## HEE-064 inserts

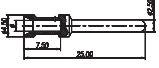
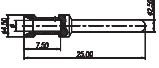
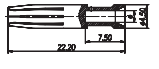
INSERTS FOR H32B HOOD/HOUSING

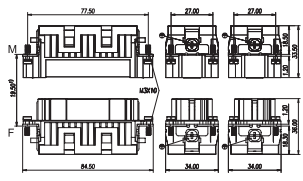
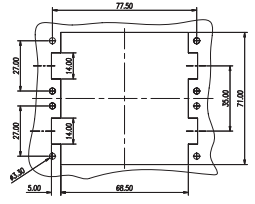
500V MAX. 16A

64 (2x32)+

| Dimensions (mm)                                                                   |                                                                                   | Type                                | Part Number                        |                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------|------------------------------------|------------------------------------|
|                                                                                   |                                                                                   |                                     | Male insert                        | Female insert                      |
| Crimp terminal (order crimp contacts separately)                                  | Contact arrangement view from termination side                                    |                                     |                                    |                                    |
|  |  | HEE-032-M(1-32)<br>HEE-032-M(33-64) | T2050322101-000<br>T2050642101-000 |                                    |
|                                                                                   |  | HEE-032-F(1-32)<br>HEE-032-F(33-64) |                                    | T2050322201-000<br>T2050642201-000 |

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: ≤1mΩ<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                    |                                                                                                                     | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
|                                 |                                  | 0.14-0.37       | 26-22 | 7.5                      | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                    |                                                                                                                     | 0.5             | 20    | 7.5                      | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                    |                                                                                                                     | 0.75            | 18    | 7.5                      | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                    |                                                                                                                     | 1.0             | 18    | 7.5                      | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                    |                                                                                                                     | 1.5             | 16    | 7.5                      | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                    |                                                                                                                     | 2.5             | 14    | 7.5                      | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                    |                                                                                                                     | 4.0             | 12    | 7.5                      | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| CEF/Female<br>                  | 16A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5                      | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                    |                                                                                                                     | 0.5             | 20    | 7.5                      | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                    |                                                                                                                     | 0.75            | 18    | 7.5                      | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                    |                                                                                                                     | 1.0             | 18    | 7.5                      | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                    |                                                                                                                     | 1.5             | 16    | 7.5                      | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                    |                                                                                                                     | 2.5             | 14    | 7.5                      | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                    |                                                                                                                     | 4.0             | 12    | 7.5                      | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

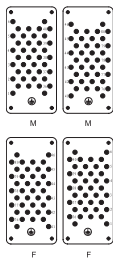
| Distance for contact max. 21mm                                                                        | Panel cut-out for inserts for use without hoods/housings                            |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Crimp terminal<br> |  |

## HEEE-080 inserts

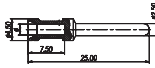
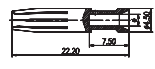
INSERTS FOR H32B HOOD/HOUSING

500V MAX. 16A

80+ ( )

| Dimensions (mm)                                                                   |                                                                                   | Type                                  | Part Number                        |                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------|------------------------------------|------------------------------------|
|                                                                                   |                                                                                   |                                       | Male insert                        | Female insert                      |
| Crimp terminal (order crimp contacts separately)                                  | Contact arrangement view from termination side                                    |                                       |                                    |                                    |
|  |  | HEEE-040-M(1-40)<br>HEEE-040-M(41-80) | T2050402101-000<br>T2050802101-000 |                                    |
|                                                                                   |                                                                                   | HEEE-040-F(1-40)<br>HEEE-040-F(41-80) |                                    | T2050402201-000<br>T2050802201-000 |

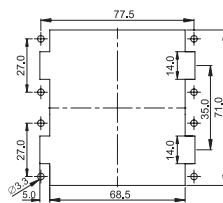
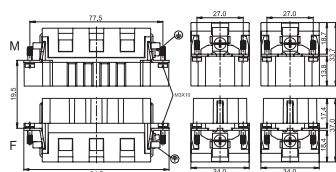
### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: ≤1mΩ<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male<br>crimp contacts<br>           | Wire gauge |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                    |                                                                                                                             | mm²        | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
| <br><b>CEF/Female</b>           | <b>16A Female<br/>crimp contacts</b><br> | 0.14-0.37  | 26-22 | 7.5                      | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                    |                                                                                                                             | 0.5        | 20    | 7.5                      | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                    |                                                                                                                             | 0.75       | 18    | 7.5                      | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                    |                                                                                                                             | 1.0        | 18    | 7.5                      | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                    |                                                                                                                             | 1.5        | 16    | 7.5                      | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                    |                                                                                                                             | 2.5        | 14    | 7.5                      | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                    |                                                                                                                             | 4.0        | 12    | 7.5                      | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                    |                                                                                                                             |            |       |                          |                               |                 |                             |                 |
|                                                                                                                    |                                                                                                                             | 0.14-0.37  | 26-22 | 7.5                      | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                    |                                                                                                                             | 0.5        | 20    | 7.5                      | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                    |                                                                                                                             | 0.75       | 18    | 7.5                      | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                    |                                                                                                                             | 1.0        | 18    | 7.5                      | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                    |                                                                                                                             | 1.5        | 16    | 7.5                      | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                    |                                                                                                                             | 2.5        | 14    | 7.5                      | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                    |                                                                                                                             | 4.0        | 12    | 7.5                      | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |
|                                                                                                                    |                                                                                                                             |            |       |                          |                               |                 |                             |                 |

Distance for contact max. 21mm

Panel cut-out for inserts for use without hoods/housings

Crimp terminal

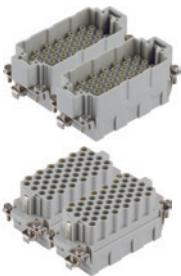
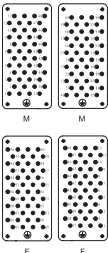


## HEEE-096 inserts

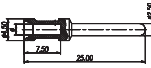
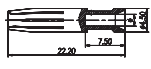
INSERTS FOR H32B HOOD/HOUSING

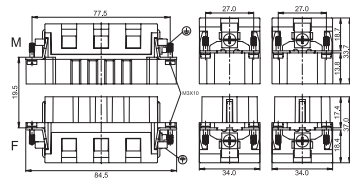
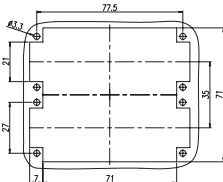
400V MAX. 16A

96+ 

| Dimensions (mm)                                                                   |                                                                                   | Type                                  | Part Number                        |                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------|------------------------------------|------------------------------------|
|                                                                                   |                                                                                   |                                       | Male insert                        | Female insert                      |
| Crimp terminal (order crimp contacts separately)                                  | Contact arrangement view from termination side                                    |                                       |                                    |                                    |
|  |  | HEEE-048-M(1-48)<br>HEEE-048-M(49-96) | T2050482101-000<br>T2050962101-000 |                                    |
|                                                                                   |                                                                                   | HEEE-048-F(1-48)<br>HEEE-048-F(49-96) |                                    | T2050482201-000<br>T2050962201-000 |

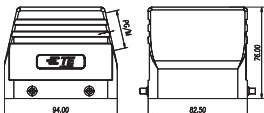
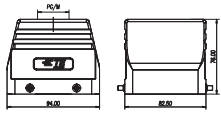
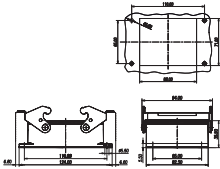
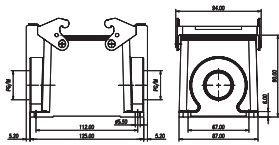
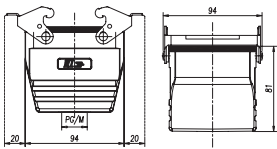
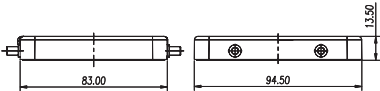
### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                     | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
| <br>CEF/Female                                    | 16A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5                      | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                      |                                                                                                                     | 0.5             | 20    | 7.5                      | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                      |                                                                                                                     | 0.75            | 18    | 7.5                      | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                      |                                                                                                                     | 1.0             | 18    | 7.5                      | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                      |                                                                                                                     | 1.5             | 16    | 7.5                      | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                      |                                                                                                                     | 2.5             | 14    | 7.5                      | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                      |                                                                                                                     | 4.0             | 12    | 7.5                      | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                      |                                                                                                                     | 0.14-0.37       | 26-22 | 7.5                      | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                      |                                                                                                                     | 0.5             | 20    | 7.5                      | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                      |                                                                                                                     | 0.75            | 18    | 7.5                      | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                      |                                                                                                                     | 1.0             | 18    | 7.5                      | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                      |                                                                                                                     | 1.5             | 16    | 7.5                      | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                      |                                                                                                                     | 2.5             | 14    | 7.5                      | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                      |                                                                                                                     | 4.0             | 12    | 7.5                      | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

| Distance for contact max. 21mm                                                                        | Panel cut-out for inserts for use without hoods/housings                            |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Crimp terminal<br> |  |

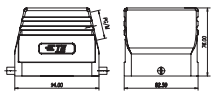
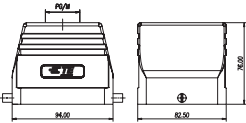
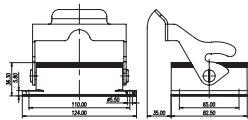
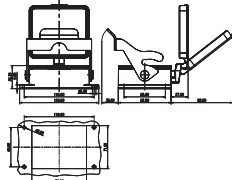
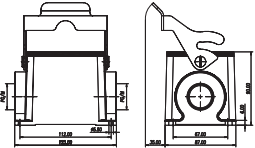
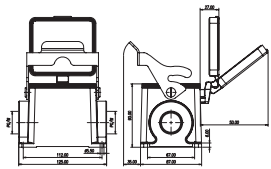
## H32B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                         | Metr.                                                                                    | PG                                                   | Type                                                                                                                                                                                                                                          | Part Number                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                                                                                                        |                                                                                          |                                                      |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                            |
|       | M32<br>M40                                                                               | PG29<br>PG36                                         | H32B-TS-PG29<br>H32B-TS-PG36<br>H32B-TS-M32<br>H32B-TS-M40                                                                                                                                                                                    | T1210320129-000<br>T1210320136-000<br>T1210320132-000<br>T1210320140-000                                                                                                                                                                                                   |
| Hood: Top entry                                                                                                                                                         |                                                                                          |                                                      |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                            |
|       | M25<br>M32<br>M40<br>M50                                                                 | PG21<br>PG29<br>PG36<br>PG42                         | H32B-TG-PG21<br>H32B-TG-PG29<br>H32B-TG-PG36<br>H32B-TG-PG42<br>H32B-TG-M25<br>H32B-TG-M32<br>H32B-TG-M40<br>H32B-TG-M50                                                                                                                      | T1220320121-000<br>T1220320129-000<br>T1220320136-000<br>T1220320142-000<br>T1220320125-000<br>T1220320132-000<br>T1220320140-000<br>T1220320150-000                                                                                                                       |
| Bulkhead mounted                                                                                                                                                        |                                                                                          |                                                      |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                            |
|     |                                                                                          |                                                      | H32B-AG                                                                                                                                                                                                                                       | T1410322000-000                                                                                                                                                                                                                                                            |
| Surface mounted: Side entry                                                                                                                                             |                                                                                          |                                                      |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                            |
|   | 1 Side entry<br>M32<br>M40<br>M50<br>M63<br><br>2 Side entry<br>M32<br>M40<br>M50<br>M63 | PG29<br>PG36<br>PG42<br><br><br>PG29<br>PG36<br>PG42 | H32B-SGR-PG29<br>H32B-SGR-PG36<br>H32B-SGR-PG42<br>H32B-SGR-M32<br>H32B-SGR-M40<br>H32B-SGR-M50<br>H32B-SGR-M63<br><br>H32B-SGR-2PG29<br>H32B-SGR-2PG36<br>H32B-SGR-2PG42<br>H32B-SGR-2M32<br>H32B-SGR-2M40<br>H32B-SGR-2M50<br>H32B-SGR-2M63 | T1440322129-000<br>T1440322136-000<br>T1440322142-000<br>T1440322132-000<br>T1440322140-000<br>T1440322150-000<br>T1440322163-000<br><br>T1440322229-000<br>T1440322236-000<br>T1440322242-000<br>T1440322232-000<br>T1440322240-000<br>T1440322250-000<br>T1440322263-000 |
| Cable-to-cable hood                                                                                                                                                     |                                                                                          |                                                      |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                            |
|   | M32<br>M40<br>M50<br>M63                                                                 | PG29<br>PG36<br>PG42                                 | H32B-TBF-PG29<br>H32B-TBF-PG36<br>H32B-TBF-PG42<br>H32B-TBF-M32<br>H32B-TBF-M40<br>H32B-TBF-M50<br>H32B-TBF-M63                                                                                                                               | T1710322129-000<br>T1710322136-000<br>T1710322142-000<br>T1710322132-000<br>T1710322140-000<br>T1710322150-000<br>T1710322163-000                                                                                                                                          |
| Protection covers for hoods                                                                                                                                             |                                                                                          |                                                      |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                            |
|   |                                                                                          |                                                      | H32B-KDB                                                                                                                                                                                                                                      | T1000321220-000                                                                                                                                                                                                                                                            |

## H32B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                              | Metr.                                                    | PG                           | Type                                                                                                                                             | Part Number                                                                                                                                          |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|    |                             | M32<br>M40                                               | PG29<br>PG36                 | H32B-TS-RO-PG29<br>H32B-TS-RO-PG36<br>H32B-TS-RO-M32<br>H32B-TS-RO-M40                                                                           | T1310320129-000<br>T1310320136-000<br>T1310320132-000<br>T1310320140-000                                                                             |
| Hood: Top entry                                                                     |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|    |                             | M25<br>M32<br>M40<br>M50                                 | PG21<br>PG29<br>PG36<br>PG42 | H32B-TG-RO-PG21<br>H32B-TG-RO-PG29<br>H32B-TG-RO-PG36<br>H32B-TG-RO-PG42<br>H32B-TG-RO-M25<br>H32B-TG-RO-M32<br>H32B-TG-RO-M40<br>H32B-TG-RO-M50 | T1320320121-000<br>T1320320129-000<br>T1320320136-000<br>T1320320142-000<br>T1320320125-000<br>T1320320132-000<br>T1320320140-000<br>T1320320150-000 |
| Bulkhead mounted                                                                    |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|   |                            |                                                          |                              | H32B-AG-LB                                                                                                                                       | T1500322000-000                                                                                                                                      |
|  | With protection cover<br> |                                                          |                              | H32B-AD-LB                                                                                                                                       | T1510322000-000                                                                                                                                      |
| Surface mounted: Side entry                                                         |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|  |                           | 1 Side entry<br>M32<br>M40<br>2 Side entry<br>M32<br>M40 | PG29<br><br>PG29             | H32B-SGR-LB-PG29<br>H32B-SGR-LB-M32<br>H32B-SGR-LB-M40<br>H32B-SGR-LB-2PG29<br>H32B-SGR-LB-2M32<br>H32B-SGR-LB-2M40                              | T1610322129-000<br>T1610322132-000<br>T1610322140-000<br>T1610322229-000<br>T1610322232-000<br>T1610322240-000                                       |
|  | With protection cover<br> | 1 Side entry<br>M32<br>M40<br>2 Side entry<br>M32<br>M40 | PG29<br><br>PG29             | H32B-SDR-LB-PG29<br>H32B-SDR-LB-M32<br>H32B-SDR-LB-M40<br>H32B-SDR-LB-2PG29<br>H32B-SDR-LB-2M32<br>H32B-SDR-LB-2M40                              | T1620320129-000<br>T1620320132-000<br>T1620320140-000<br>T1620320229-000<br>T1620320232-000<br>T1620320240-000                                       |

## HE-048 inserts

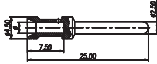
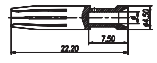
INSERTS FOR H48B HOOD/HOUSING

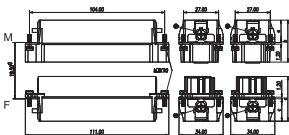
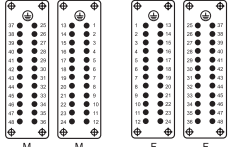
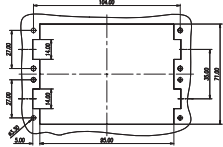
500V MAX. 16A

48 (2x24)+

| Dimension (mm)                                   | Type              | Part Number     |                 |
|--------------------------------------------------|-------------------|-----------------|-----------------|
|                                                  |                   | Male insert     | Female insert   |
| Screw terminal                                   |                   |                 |                 |
|                                                  | HE-024-M(1-24)    | T2040242101-000 |                 |
|                                                  | HE-024-M(25-48)   | T2040482101-000 |                 |
|                                                  | HE-024-F(1-24)    |                 | T2040242201-000 |
|                                                  | HE-024-F(25-18)   |                 | T2040482201-000 |
| Spring terminal                                  |                   |                 |                 |
|                                                  | HE-024-MS(1-24)   | T2040243101-000 |                 |
|                                                  | HE-024-MS(25-48)  | T2040483101-000 |                 |
|                                                  | HE-024-FS(1-24)   |                 | T2040243201-000 |
|                                                  | HE-024-FS(25-48)  |                 | T2040483201-000 |
| Crimp terminal (Order crimp contacts separately) |                   |                 |                 |
|                                                  | HE-024-MC(1-24)   | T2040244101-000 |                 |
|                                                  | HE-024-MC(25-48)  | T2040484101-000 |                 |
|                                                  | HE-024-FC(1-24)   |                 | T2040244201-000 |
|                                                  | HE-024-FC(25-48)  |                 | T2040484201-000 |
| Spring terminal (Two terminals per contact)      |                   |                 |                 |
|                                                  | HE-024-MSS(1-24)  | T2040245101-000 |                 |
|                                                  | HE-024-MSS(25-48) | T2040485101-000 |                 |
|                                                  | HE-024-FSS(1-24)  |                 | T2040245201-000 |
|                                                  | HE-024-FSS(25-48) |                 | T2040485201-000 |

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male<br> | 16A Male crimp contacts<br>   | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                             |                                                                                                                  | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                                                                                                             |                                                                                                                  |                 |       |                   |                               |                 |                             |                 |
| CEF/Female<br>                                                                                                                           | 16A Female crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |
|                                                                                                                                                                                                                             |                                                                                                                  |                 |       |                   |                               |                 |                             |                 |

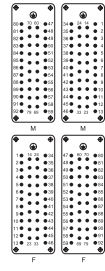
| Distance for contact max. 21mm                                                      | Contact arrangement view from termination side                                      | Panel cut-out for inserts for use without hoods/housings                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |  |

## HEE-092 inserts

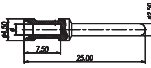
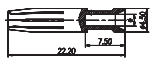
INSERTS FOR H48B HOOD/HOUSING

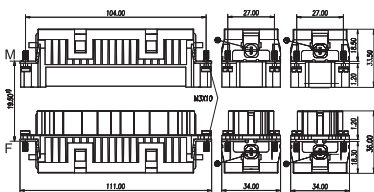
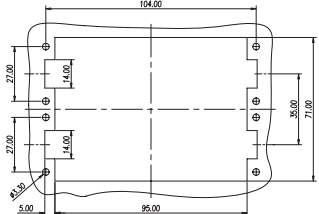
500V MAX. 16A

92 (2x46)+

| Dimensions (mm)                                                                   |                                                                                   | Type                                | Part Number                        |                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------|------------------------------------|------------------------------------|
|                                                                                   |                                                                                   |                                     | Male insert                        | Female insert                      |
| Crimp terminal (order crimp contacts separately)                                  | Contact arrangement view from termination side                                    |                                     |                                    |                                    |
|  |  | HEE-046-M(1-46)<br>HEE-046-M(47-92) | T2050462101-000<br>T2050922101-000 |                                    |
|                                                                                   |                                                                                   | HEE-046-F(1-46)<br>HEE-046-F(47-92) |                                    | T2050462201-000<br>T2050922201-000 |

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male<br> | 16A Male crimp contacts<br>   | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                             |                                                                                                                  | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                                                                                                             |                                                                                                                  |                 |       |                   |                               |                 |                             |                 |
| CEF/Female<br>                                                                                                                           | 16A Female crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |
|                                                                                                                                                                                                                             |                                                                                                                  |                 |       |                   |                               |                 |                             |                 |

| Distance for contact max. 21mm                                                                        | Panel cut-out for inserts for use without hoods/housings                            |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Crimp terminal<br> |  |



500V MAX. 16A

128+ 

## 16A Contact

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Distance for contact max. 21mm</b></p> <p>Crimp terminal</p>  <p>Technical drawing of the crimp terminal. The side view shows a length of 104.0 and a height of 10.5. The front view shows a width of 111.0 and a height of 13.0. The crimp terminal is shown in two positions: crimped and uncrimped. The crimped position shows a crimp depth of 27.0 and a crimp width of 27.0. The uncrimped position shows a crimp depth of 27.0 and a crimp width of 27.0. The crimp terminal is shown in two positions: crimped and uncrimped. The crimped position shows a crimp depth of 27.0 and a crimp width of 27.0. The uncrimped position shows a crimp depth of 27.0 and a crimp width of 27.0.</p> | <p><b>Panel cut-out for inserts for use without hoods/housings</b></p>  <p>Technical drawing of the panel cut-out for inserts. The drawing shows a rectangular panel with a central cut-out. The overall width is 104.0 and the overall height is 71.0. The cut-out has a width of 95.0 and a height of 36.0. The panel has a thickness of 27.0. The cut-out is centered horizontally and vertically. The panel has a central cut-out with a width of 95.0 and a height of 36.0. The panel has a thickness of 27.0. The cut-out is centered horizontally and vertically.</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

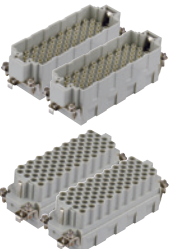
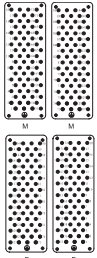


## HEEE-144 inserts

## INSERTS FOR H48B HOOD/HOUSING

400V MAX. 16A

144+Ⓢ

| Dimensions (mm)                                                                   |                                                                                   | Type                                   | Part Number                        |                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------|------------------------------------|------------------------------------|
|                                                                                   |                                                                                   |                                        | Male insert                        | Female insert                      |
| Crimp terminal (order crimp contacts separately)                                  | Contact arrangement view from termination side                                    |                                        |                                    |                                    |
|  |  | HEEE-072-M(1-72)<br>HEEE-144-M(73-144) | T2050722101-000<br>T2051442101-000 |                                    |
|                                                                                   |                                                                                   | HEEE-072-F(1-72)<br>HEEE-144-F(73-144) |                                    | T2050722201-000<br>T2051442201-000 |

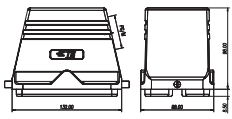
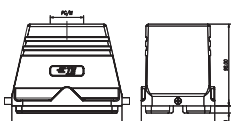
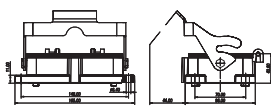
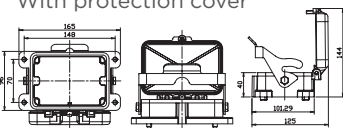
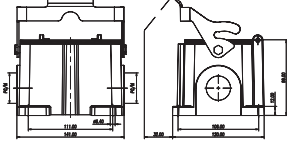
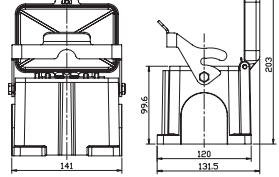
## 16A Contact

|                                                                                                                                                                                                                                           |                                                                                                                         |                   |       |                          |                                      |                 |                                    |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------|-------|--------------------------|--------------------------------------|-----------------|------------------------------------|-----------------|
| <b>Tech data</b><br><b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b><br> | <b>16A Male crimp contacts</b><br>   | <b>Wire gauge</b> |       | <b>Strip-ping length</b> | <b>Crimp contacts, silver-plated</b> |                 | <b>Crimp contacts, gold-plated</b> |                 |
|                                                                                                                                                                                                                                           |                                                                                                                         | mm²               | AWG   | mm                       | Type                                 | Part Number     | Type                               | Part Number     |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.14-0.37         | 26-22 | 7.5                      | CEM-0.3                              | T2030001002-000 | DEM-0.3                            | T2030011002-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20    | 7.5                      | CEM-0.5                              | T2030001005-000 | DEM-0.5                            | T2030011005-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18    | 7.5                      | CEM-0.75                             | T2030001008-000 | DEM-0.75                           | T2030011008-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18    | 7.5                      | CEM-1.0                              | T2030001010-000 | DEM-1.0                            | T2030011010-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16    | 7.5                      | CEM-1.5                              | T2030001015-000 | DEM-1.5                            | T2030011015-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14    | 7.5                      | CEM-2.5                              | T2030001025-000 | DEM-2.5                            | T2030011025-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 4.0               | 12    | 7.5                      | CEM-4.0                              | T2030001040-000 | DEM-4.0                            | T2030011040-000 |
| <b>CEF/Female</b><br>                                                                                                                                  | <b>16A Female crimp contacts</b><br> | 0.14-0.37         | 26-22 | 7.5                      | CEF-0.3                              | T2030002002-000 | DEF-0.3                            | T2030012002-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20    | 7.5                      | CEF-0.5                              | T2030002005-000 | DEF-0.5                            | T2030012005-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18    | 7.5                      | CEF-0.75                             | T2030002008-000 | DEF-0.75                           | T2030012008-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18    | 7.5                      | CEF-1.0                              | T2030002010-000 | DEF-1.0                            | T2030012010-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16    | 7.5                      | CEF-1.5                              | T2030002015-000 | DEF-1.5                            | T2030012015-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14    | 7.5                      | CEF-2.5                              | T2030002025-000 | DEF-2.5                            | T2030012025-000 |
|                                                                                                                                                                                                                                           |                                                                                                                         | 4.0               | 12    | 7.5                      | CEF-4.0                              | T2030002040-000 | DEF-4.0                            | T2030012040-000 |

[illegible]

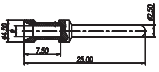
## H48B hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                                                        | PG                                                                     | Type                                                                                                                                                                                                                             | Part Number                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                              |                                                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
|    |                             | M32<br>M40<br>M50<br>M63                                               | PG29<br>PG36<br>PG42<br>H48B-TS-PG29<br>H48B-TS-PG36<br>H48B-TS-PG42<br>H48B-TS-M32<br>H48B-TS-M40<br>H48B-TS-M50<br>H48B-TS-M63                                                                                                 | T1310480129-000<br>T1310480136-000<br>T1310480142-000<br>T1310480132-000<br>T1310480140-000<br>T1310480150-000<br>T1310480163-000                                                                                                |
| Hood: Top entry                                                                     |                                                                                                              |                                                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
|    |                             | M32<br>M40<br>M50<br>M63                                               | PG29<br>PG36<br>PG42<br>H48B-TG-PG29<br>H48B-TG-PG36<br>H48B-TG-PG42<br>H48B-TG-M32<br>H48B-TG-M40<br>H48B-TG-M50<br>H48B-TG-M63                                                                                                 | T1320480129-000<br>T1320480136-000<br>T1320480142-000<br>T1320480132-000<br>T1320480140-000<br>T1320480150-000<br>T1320480163-000                                                                                                |
| Bulkhead mounted                                                                    |                                                                                                              |                                                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
|   |                            |                                                                        |                                                                                                                                                                                                                                  | H48B-AG<br>T1500482000-000                                                                                                                                                                                                       |
|  | With protection cover<br> |                                                                        |                                                                                                                                                                                                                                  | H48B-AD-LB<br>T1510482000-000                                                                                                                                                                                                    |
| Surface mounted: Side entry                                                         |                                                                                                              |                                                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
|  |                           | 1 Side entry<br>M32<br>M40<br>M50<br>2 Side entry<br>M32<br>M40<br>M50 | PG29<br>PG36<br>PG42<br>H48B-SGR-PG29<br>H48B-SGR-PG36<br>H48B-SGR-PG42<br>H48B-SGR-M32<br>H48B-SGR-M40<br>H48B-SGR-M50<br>H48B-SGR-2PG29<br>H48B-SGR-2PG36<br>H48B-SGR-2PG42<br>H48B-SGR-2M32<br>H48B-SGR-2M40<br>H48B-SGR-2M50 | T1610482129-000<br>T1610482136-000<br>T1610482142-000<br>T1610482132-000<br>T1610482140-000<br>T1610482150-000<br>T1610482229-000<br>T1610482236-000<br>T1610482242-000<br>T1610482232-000<br>T1610482240-000<br>T1610482250-000 |
| Surface mounted with cover                                                          |                                                                                                              |                                                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
|  |                           | 1 Side entry<br>M32<br>M40<br>M50<br>2 Side entry<br>M32<br>M40<br>M50 | PG29<br>PG36<br>PG42<br>H48B-SDR-PG29<br>H48B-SDR-PG36<br>H48B-SDR-PG42<br>H48B-SDR-M32<br>H48B-SDR-M40<br>H48B-SDR-M50<br>H48B-SDR-2PG29<br>H48B-SDR-2PG36<br>H48B-SDR-2PG42<br>H48B-SDR-2M32<br>H48B-SDR-2M40<br>H48B-SDR-2M50 | T1620480129-000<br>T1620480136-000<br>T1620480142-000<br>T1620480132-000<br>T1620480140-000<br>T1620480150-000<br>T1620480229-000<br>T1620480236-000<br>T1620480242-000<br>T1620480232-000<br>T1620480240-000<br>T1620480250-000 |

## Crimp contacts HE/HA series

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male<br>crimp contacts<br> | Wire gauge      |       | Strip-<br>ping<br>length<br>mm | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                 | mm <sup>2</sup> | AWG   |                                | Type                          | Part Number     | Type                        | Part Number     |
|                                                     |                                | 0.14-0.37       | 26-22 | 7.5                            | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                      |                                                                                                                 | 0.5             | 20    | 7.5                            | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                      |                                                                                                                 | 0.75            | 18    | 7.5                            | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                      |                                                                                                                 | 1.0             | 18    | 7.5                            | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                      |                                                                                                                 | 1.5             | 16    | 7.5                            | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                      |                                                                                                                 | 2.5             | 14    | 7.5                            | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                      |                                                                                                                 | 4.0             | 12    | 7.5                            | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                      |                                                                                                                 |                 |       |                                |                               |                 |                             |                 |
| CEF/Female<br>                                      |                                | 0.14-0.37       | 26-22 | 7.5                            | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                      |                                                                                                                 | 0.5             | 20    | 7.5                            | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                      |                                                                                                                 | 0.75            | 18    | 7.5                            | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                      |                                                                                                                 | 1.0             | 18    | 7.5                            | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                      |                                                                                                                 | 1.5             | 16    | 7.5                            | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                      |                                                                                                                 | 2.5             | 14    | 7.5                            | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                      |                                                                                                                 | 4.0             | 12    | 7.5                            | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |
|                                                                                                                                      |                                                                                                                 |                 |       |                                |                               |                 |                             |                 |

## Crimping tools HE/HA series

| Description                                                                                                                          |                                                                                     | Type            | Part Number     |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-----------------|
| <b>Crimp tool</b><br><br>Wire range: 0.5-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts                          |  | CRIMPBOX-0.5/4  | T3100000001-000 |
| <b>Crimp tool</b><br><br>Wire range: 0.14-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts<br>with locator and die |  | RSZ.HE-HN.D-HVT | 1-1105851-8     |
| <b>Removal tools</b><br><br>Used for CEM/CEF<br>contact series                                                                       |  | REMOV-HEE       | T3100000002-000 |
| <b>M3 screw driver</b><br><br>Used for HA/HE inserts                                                                                 |  | SCREWD-M3       | T3100000009-000 |

## HVE technical characteristics

|                          |                       |
|--------------------------|-----------------------|
| Specifications .....     | DIN EN 60 664-1       |
| .....                    | DIN EN 61 984         |
| Number of contacts ..... | 3+PE+2,6+PE+2,10+PE+2 |

### INSERTS

|                                             |                      |
|---------------------------------------------|----------------------|
| Working current .....                       | 16A max              |
| (See current carrying capacity)             |                      |
| Working voltage .....                       | 830V                 |
| Test voltage urms .....                     | 8KV                  |
| Pollution degree .....                      | 3                    |
| Insulation resistance .....                 | $\geq 10^{10}\Omega$ |
| Material .....                              | Polycarbonate        |
| Temperature range .....                     | -40°C... +125°C      |
| Flammability acc. to UL94 .....             | V0                   |
| Working voltage acc. to UL/CSA .....        | 600V                 |
| Mechanical working life-mating cycles ..... | $\geq 500$           |

### CONTACTS

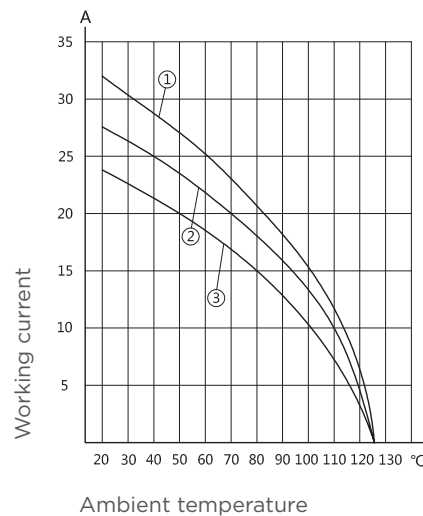
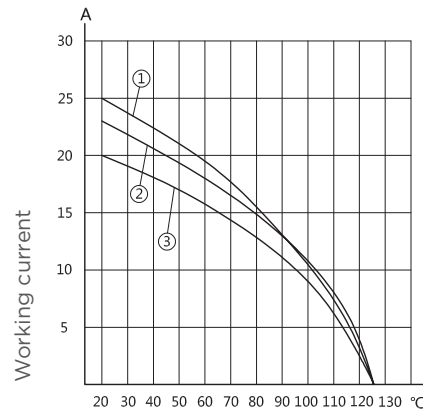
|                                |                        |
|--------------------------------|------------------------|
| Material .....                 | Copper alloy           |
| Surface .....                  | Hard silver-plated     |
| .....                          | Hard gold-plated       |
| Contact resistance .....       | $\leq 5m\Omega$        |
| Terminal .....                 | Screw terminal         |
| .....                          | Crimp terminal         |
| .....                          | Spring terminal        |
| - mm <sup>2</sup>              |                        |
| Screw terminal .....           | 0.5-2.5mm <sup>2</sup> |
| Crimp terminal .....           | 0.14-4mm <sup>2</sup>  |
| Spring terminal .....          | 0.5-2.5mm <sup>2</sup> |
| - AWG                          |                        |
| Screw terminal .....           | 20-14                  |
| Crimp terminal .....           | 26-12                  |
| Spring terminal .....          | 20-14                  |
| - Tightening/test torque ..... | 0.5 Nm                 |

### HOODS, HOUSINGS

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element.....                         | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.



- 1 HVE-003
- 2 HVE-006
- 3 HVE-010

HEE series (high voltage) inserts

MODIFIED CONTACT ARRANGEMENT

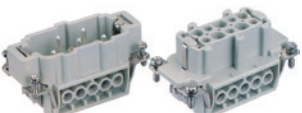
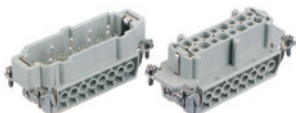
The connector series HEE equipped with all contacts may be used for voltages up to 500V-insulation group C. A modified contact loading arrangement permits use up to 1000V-also in insulation group C.

|                                           |                                                |                 |              |               |
|-------------------------------------------|------------------------------------------------|-----------------|--------------|---------------|
| Series HEE<br>690V~<br>Insulation group C | Contact arrangement view from termination side |                 |              |               |
|                                           | 4+                                             | 8+              | 14+          | 20+           |
|                                           | <br>M      F                                   | <br>M      F    | <br>M      F | <br>M      F  |
| 1000V~<br>Insulation group C              | 2+                                             | 4+              | 8+           | 12+           |
|                                           | <br>M      F                                   | <br>M      F    | <br>M      F | <br>M      F  |
|                                           | Working contact                                | Without contact | Male insert  | Female insert |

# HVE series

INSERTS FOR H10B, H16B, H24B HOOD/HOUSING

830V MAX. 16A

| Dimension (mm)                                                                                             | Type      | Part Number     |                 |
|------------------------------------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                                            |           | Male insert     | Female insert   |
| 3+  +2<br>Screw terminal  |           |                 |                 |
|                           | HVE-003-M | T2300033101-000 |                 |
|                                                                                                            | HVE-003-F |                 | T2300033201-000 |
| 6+  +2<br>Screw terminal  |           |                 |                 |
|                           | HVE-006-M | T2300063101-000 |                 |
|                                                                                                            | HVE-006-F |                 | T2300063201-000 |
| 10+  +2<br>Screw terminal |           |                 |                 |
|                         | HVE-010-M | T2300103101-000 |                 |
|                                                                                                            | HVE-010-F |                 | T2300103201-000 |

## HSB Series



### 1. Specifications

DIN VDE 0110 Concerning clearance and creepage distances

DIN VDE 0627 Connectors and plug devices

### 2. Standards

DIN EN 60 664-1

DIN EN 61 984

### 3. Approvals



## HSB technical characteristics

Specifications ..... DIN EN 60 664-1  
..... DIN EN 61 984  
Number of contacts ..... 6,12(2x6) + PE

### INSERTS

Working current ..... 35A max  
(See current carrying capacity)  
Working voltage  
Conductor - ground ..... 400 V  
Conductor - conductor ..... 690 V  
Test voltage urms ..... 6KV  
Pollution degree ..... 3  
Insulation resistance .....  $\geq 10^{10} \Omega$   
Material ..... Polycarbonate  
Temperature range ..... -40°C... +125°C  
Flammability acc. to UL94 ..... V0  
Working voltage acc. to UL/CSA ..... 600V  
Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

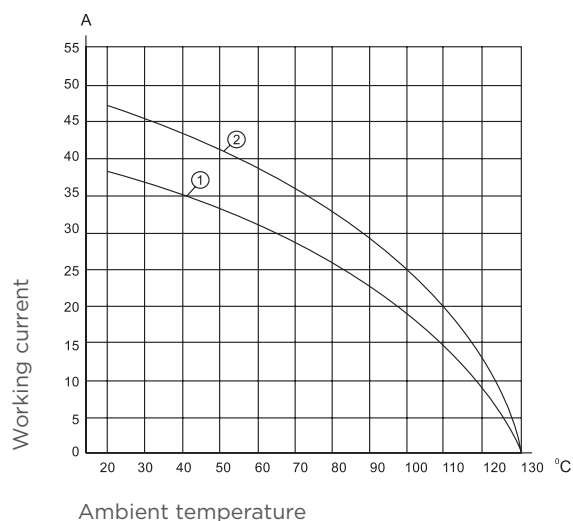
Material ..... Copper alloy  
Surface ..... Hard silver-plated  
Contact resistance .....  $\leq 1m\Omega$   
Terminal ..... Screw terminal  
- mm<sup>2</sup> ..... 1.5-6mm<sup>2</sup>  
- AWG ..... 16-10  
- Tightening/test torque ..... 1.2 Nm

### HOODS, HOUSINGS

Material ..... Die cast aluminium  
Surface ..... Powder-coated (RAL 7037)  
Locking element ..... Stainless steel, steel-zinc plated  
Temperature range ..... -40°C... +125°C  
Degree of protection acc. to DIN40 050 ..... IP65

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.



- 1 Wire gauge: 4.0mm<sup>2</sup>  
2 Wire gauge: 6.0mm<sup>2</sup>

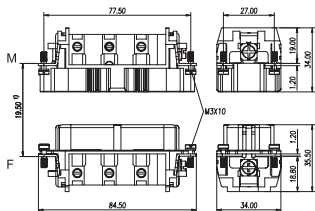
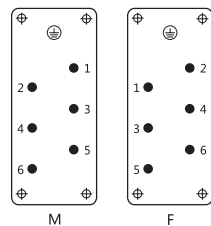
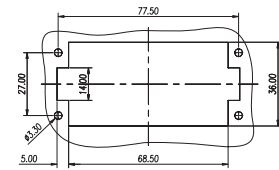


HSB-006 inserts

INSERTS FOR H16B HOOD/HOUSING

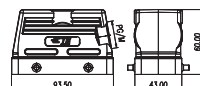
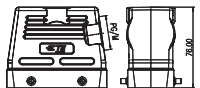
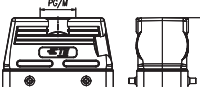
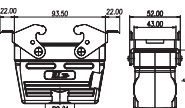
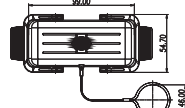
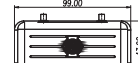
690V 35A

6+ 

| Dimensions (mm)                                                                    |                                                                                    | Type      | Part Number     |                 |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                    |                                                                                    |           | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                   |                                                                                    |           |                 |                 |
|   |   | HSB-006-M | T2060062101-000 |                 |
|                                                                                    |                                                                                    | HSB-006-F |                 | T2060062201-000 |
| Contact arrangement view from termination side                                     | Panel cut out for inserts for use without hoods/housings                           |           |                 |                 |
|  |  |           |                 |                 |

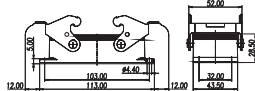
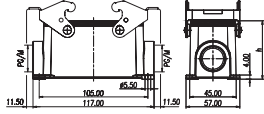
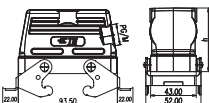
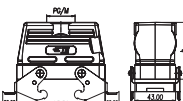
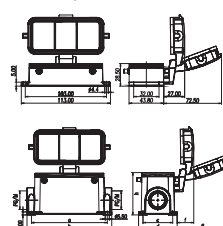
## H16B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                         | Metr.             | PG           | Type                                                                           | Part Number                                                                                 |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------|------|------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                                         |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | <div>Low construction</div> <div></div>                                                                                                                | M20<br>M25<br>M32 | PG16<br>PG21 | H16B-TS-PG16<br>H16B-TS-PG21<br>H16B-TS-M20<br>H16B-TS-M25<br>H16B-TS-M32      | T1210160116-000<br>T1210160121-000<br>T1210160120-000<br>T1210160125-000<br>T1210160132-000 |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | <div>High construction</div> <div></div>                                                                                                               | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TSH-PG21<br>H16B-TSH-PG29<br>H16B-TSH-M25<br>H16B-TSH-M32<br>H16B-TSH-M40 | T1230160121-000<br>T1230160129-000<br>T1230060125-000<br>T1230160132-000<br>T1230160140-000 |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                                         |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|   | <div>Low construction</div> <div></div>                                                                                                               | M25<br>M32        | PG16<br>PG21 | H16B-TG-PG16<br>H16B-TG-PG21<br>H16B-TG-M25<br>H16B-TG-M32                     | T1220160116-000<br>T1220160121-000<br>T1220160125-000<br>T1220160132-000                    |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | <div>High construction</div> <div></div>                                                                                                             | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TGH-PG21<br>H16B-TGH-PG29<br>H16B-TGH-M25<br>H16B-TGH-M32<br>H16B-TGH-M40 | T1240160121-000<br>T1240160129-000<br>T1240160125-000<br>T1240160132-000<br>T1240160140-000 |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                                         |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | <div></div> <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>Hight</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                            | 62.5                                                                                        | Hight | 74.5 | <div>Low construction</div> M25<br>M32<br><div>High construction</div> M25<br>M32<br>M40 | PG21<br><br>PG21<br>PG29 | H16B-TBFS-PG21<br>H16B-TBFS-M25<br>H16B-TBFS-M32<br><br>H16B-TBFHS-PG21<br>H16B-TBFHS-PG29<br>H16B-TBFHS-M25<br>H16B-TBFHS-M32<br>H16B-TBFHS-M40 | T1710161121-000<br>T1710161125-000<br>T1710161132-000<br><br>T1750161121-000<br>T1750161129-000<br>T1750161125-000<br>T1750161132-000<br>T1750161140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                       |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Low                                                                                 | 62.5                                                                                                                                                                                                                                    |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hight                                                                               | 74.5                                                                                                                                                                                                                                    |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                                         |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                                      |                   |              | H16B-KDTP                                                                      | T1010161400-000                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
| Housing protection cover                                                            |                                                                                                                                                                                                                                         |                   |              |                                                                                |                                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                                      |                   |              | H16B-KDBP                                                                      | T1010162100-000                                                                             |       |      |                                                                                          |                          |                                                                                                                                                  |                                                                                                                                                          |

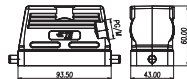
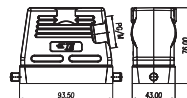
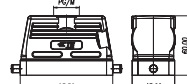
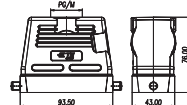
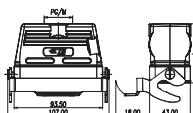
## H16B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                            | Metr.        | PG | Type     | Part Number     |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----|----------|-----------------|-------|----|--------------------------------------------------------------------|----------------------------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|-------|-----|-----|----|----|----|----|----|--------------------------------------------------------------------|----------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                           |                                                                                                                                                                                                                                                                                                                                                           |              |    | H16B-AGS | T1410161000-000 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Surface mounted: Side entry                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                           |  <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table>                                                                                                                                                                                                                                | Construction | H  | Low      | 56              | Hight | 81 | 1 Side entry 2 Side entry<br>Low construction<br>High construction | M25<br>M25<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H16B-SGRS-PG21<br>H16B-SGRS-M25<br>H16B-SGRS-2PG21<br>H16B-SGRS-2M25<br>H16B-SGRHS-PG21<br>H16B-SGRHS-PG29<br>H16B-SGRHS-M25<br>H16B-SGRHS-M32<br>H16B-SGRHS-2PG21<br>H16B-SGRHS-2PG29<br>H16B-SGRHS-2M25<br>H16B-SGRHS-2M32 | T1440161121-000<br>T1440161125-000<br>T1440161221-000<br>T1440161225-000<br>T1470161121-000<br>T1470161129-000<br>T1470161125-000<br>T1470161132-000<br>T1470161221-000<br>T1470161229-000<br>T1470161225-000<br>T1470161232-000 |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 56                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 81                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Side entry housing with two levers                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                         |  <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>76</td></tr></table>                                                                                                                                                                                                                              | Construction | H  | Low      | 60              | Hight | 76 | Low construction<br>High construction                              | M20<br>M25<br>M25<br>M32               | PG16<br>PG21<br>PG21<br>PG29                 | H16B-TSBS-PG16<br>H16B-TSBS-PG21<br>H16B-TSBS-M20<br>H16B-TSBS-M25<br>H16B-TSBHS-PG21<br>H16B-TSBHS-PG29<br>H16B-TSBHS-M25<br>H16B-TSBHS-M32                                                                                 | T1250163116-000<br>T1250163121-000<br>T1250163120-000<br>T1250163125-000<br>T1270163121-000<br>T1270163129-000<br>T1270163125-000<br>T1270163132-000                                                                             |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 60                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 76                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Top entry housing with two levers                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                         |  <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>76</td></tr></table>                                                                                                                                                                                                                              | Construction | H  | Low      | 60              | Hight | 76 | Low construction<br>High construction                              | M20<br>M25<br>M25<br>M32               | PG16<br>PG21<br>PG21<br>PG29                 | H16B-TGBS-PG16<br>H16B-TGBS-PG21<br>H16B-TGBS-M20<br>H16B-TGBS-M25<br>H16B-TGBHS-PG21<br>H16B-TGBHS-PG29<br>H16B-TGBHS-M25<br>H16B-TGBHS-M32                                                                                 | T1260163116-000<br>T1260163121-000<br>T1260163120-000<br>T1260163125-000<br>T1280163121-000<br>T1280163129-000<br>T1280163125-000<br>T1280163132-000                                                                             |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 60                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 76                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Bulkhead mounted with 4 bolts                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |    |          |                 |       |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| <br> | With protection cover<br> <table><tr><td>Construction</td><td>A</td><td>B</td><td>C</td><td>D</td><td>F</td><td>G</td><td>H</td></tr><tr><td>Low</td><td>105</td><td>117</td><td>45</td><td>57</td><td>20</td><td>65</td><td>56</td></tr><tr><td>Hight</td><td>105</td><td>117</td><td>45</td><td>57</td><td>20</td><td>65</td><td>81</td></tr></table> | Construction | A  | B        | C               | D     | F  | G                                                                  | H                                      | Low                                          | 105                                                                                                                                                                                                                          | 117                                                                                                                                                                                                                              | 45 | 57 | 20 | 65 | 56 | Hight | 105 | 117 | 45 | 57 | 20 | 65 | 81 | 1 Side entry 2 Side entry<br>Low construction<br>High construction | M25<br>M25<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H16B-AD-BO<br>H16B-SDR-BO-PG21<br>H16B-SDR-BO-M25<br>H16B-SDR-BO-2PG21<br>H16B-SDR-BO-2M25<br>H16B-SDRH-BO-PG21<br>H16B-SDRH-BO-PG29<br>H16B-SDRH-BO-M25<br>H16B-SDRH-BO-M32<br>H16B-SDRH-BO-2PG21<br>H16B-SDRH-BO-2PG29<br>H16B-SDRH-BO-2M25<br>H16B-SDRH-BO-2M32 | T1430160000-000<br>T1460160121-000<br>T1460160125-000<br>T1460160221-000<br>T1460160225-000<br>T1490160121-000<br>T1490160129-000<br>T1490160125-000<br>T1490160132-000<br>T1490160221-000<br>T1490160229-000<br>T1490160225-000<br>T1490160232-000 |
| Construction                                                                                                                                                               | A                                                                                                                                                                                                                                                                                                                                                                                                                                          | B            | C  | D        | F               | G     | H  |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 105                                                                                                                                                                                                                                                                                                                                                                                                                                        | 117          | 45 | 57       | 20              | 65    | 56 |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 105                                                                                                                                                                                                                                                                                                                                                                                                                                        | 117          | 45 | 57       | 20              | 65    | 81 |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |

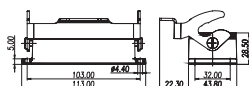
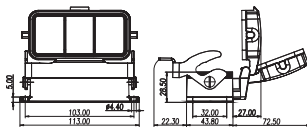
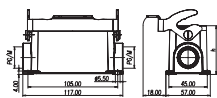
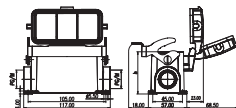
## H16B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                            | Metr.             | PG           | Type                                                                                          | Part Number                                                                                 |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|    | Low construction<br>                                                                                                                      | M25<br>M32        | PG21<br>PG29 | H16B-TS-RO-PG21<br>H16B-TS-RO-PG29<br>H16B-TS-RO-M25<br>H16B-TS-RO-M32                        | T1310160121-000<br>T1310160129-000<br>T1310160125-000<br>T1310160132-000                    |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|    | High construction<br>                                                                                                                     | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TSH-RO-PG21<br>H16B-TSH-RO-PG29<br>H16B-TSH-RO-M25<br>H16B-TSH-RO-M32<br>H16B-TSH-RO-M40 | T1330160121-000<br>T1330160129-000<br>T1330160125-000<br>T1330160132-000<br>T1330160140-000 |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|   | Low construction<br>                                                                                                                     | M25<br>M32        | PG21<br>PG29 | H16B-TG-RO-PG21<br>H16B-TG-RO-PG29<br>H16B-TG-RO-M25<br>H16B-TG-RO-M32                        | T1320160121-000<br>T1320160129-000<br>T1320160125-000<br>T1320160132-000                    |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|  | High construction<br>                                                                                                                   | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TGH-RO-PG21<br>H16B-TGH-RO-PG29<br>H16B-TGH-RO-M25<br>H16B-TGH-RO-M32<br>H16B-TGH-RO-M40 | T1340160121-000<br>T1340160129-000<br>T1340160125-000<br>T1340160132-000<br>T1340160140-000 |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                                           | 62.5                                                                                        | High | 74.5 | <div>Low construction</div> M25<br>M32<br><div>High construction</div> M25<br>M32<br>M40 | PG21<br>PG29<br><br>PG21<br>PG29 | H16B-TBF-LB-PG21<br>H16B-TBF-LB-PG29<br>H16B-TBF-LB-M25<br>H16B-TBF-LB-M32<br>H16B-TBFH-LB-PG21<br>H16B-TBFH-LB-PG29<br>H16B-TBFH-LB-M25<br>H16B-TBFH-LB-M32<br>H16B-TBFH-LB-M40 | T1730163121-000<br>T1730163129-000<br>T1730163125-000<br>T1730163132-000<br>T1770163121-000<br>T1770163129-000<br>T1770163125-000<br>T1770163132-000<br>T1770163140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                          |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
| Low                                                                                 | 62.5                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
| High                                                                                | 74.5                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|  |                                                                                                                                                                                                                            |                   |              | H16B-KDTP-LB                                                                                  | T1010161500-000                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |

## H16B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                                                                                                                                                                                                 | PG                                                                                                                                                                                                                                                    | Type         | Part Number                                                                        |                                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------|------|----------------------------------|----------------------------------|--------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                       |              |                                                                                    |                                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
|    |                                                                                                                                                                      |                                                                                                                                                                                                                                                       |              | H16B-AG-LB                                                                         | T1500163000-000                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
|    | With protection cover<br>                                                                                                                                            |                                                                                                                                                                                                                                                       |              | H16B-AD-LB                                                                         | T1510163000-000                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                       |              |                                                                                    |                                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
|  |  <table border="1" data-bbox="325 1149 542 1240"><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>High</td><td>81</td></tr></table> | Construction                                                                                                                                                                                                                                          | H            | Low                                                                                | 56                                                                       | High | 81   | 1 Side entry<br>Low construction | M20<br>M25                       | PG16<br>PG21 | H16B-SGR-LB-PG16<br>H16B-SGR-LB-PG21<br>H16B-SGR-LB-M20<br>H16B-SGR-LB-M25 | T1610163116-000<br>T1610163121-000<br>T1610163120-000<br>T1610163125-000   |
|                                                                                     |                                                                                                                                                                                                                                                       | Construction                                                                                                                                                                                                                                          | H            |                                                                                    |                                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
|                                                                                     |                                                                                                                                                                                                                                                       | Low                                                                                                                                                                                                                                                   | 56           |                                                                                    |                                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
|                                                                                     |                                                                                                                                                                                                                                                       | High                                                                                                                                                                                                                                                  | 81           |                                                                                    |                                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
|                                                                                     | 2 Side entry<br>Low construction                                                                                                                                                                                                                      | M20<br>M25                                                                                                                                                                                                                                            | PG16<br>PG21 | H16B-SGR-LB-2PG16<br>H16B-SGR-LB-2PG21<br>H16B-SGR-LB-2M20<br>H16B-SGR-LB-2M25     | T1610163216-000<br>T1610163221-000<br>T1610163220-000<br>T1610163225-000 |      |      |                                  |                                  |              |                                                                            |                                                                            |
|                                                                                     | 1 Side entry<br>High construction                                                                                                                                                                                                                     | M25<br>M32                                                                                                                                                                                                                                            | PG21<br>PG29 | H16B-SGRH-LB-PG21<br>H16B-SGRH-LB-PG29<br>H16B-SGRH-LB-M25<br>H16B-SGRH-LB-M32     | T1650163121-000<br>T1650163129-000<br>T1650163125-000<br>T1650163132-000 |      |      |                                  |                                  |              |                                                                            |                                                                            |
|                                                                                     | 2 Side entry<br>High construction                                                                                                                                                                                                                     | M25<br>M32                                                                                                                                                                                                                                            | PG21<br>PG29 | H16B-SGRH-LB-2PG21<br>H16B-SGRH-LB-2PG29<br>H16B-SGRH-LB-2M25<br>H16B-SGRH-LB-2M32 | T1650163221-000<br>T1650163229-000<br>T1650163225-000<br>T1650163232-000 |      |      |                                  |                                  |              |                                                                            |                                                                            |
|                                                                                     |                                                                                                                                                                    |  <table border="1" data-bbox="325 1563 542 1655"><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>High</td><td>81</td></tr></table> | Construction | H                                                                                  | Low                                                                      | 56   | High | 81                               | 1 Side entry<br>Low construction | M20<br>M25   | PG16<br>PG21                                                               | H16B-SDR-LB-PG16<br>H16B-SDR-LB-PG21<br>H16B-SDR-LB-M20<br>H16B-SDR-LB-M25 |
| Construction                                                                        |                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                       | H            |                                                                                    |                                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
| Low                                                                                 |                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                       | 56           |                                                                                    |                                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
| High                                                                                |                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                       | 81           |                                                                                    |                                                                          |      |      |                                  |                                  |              |                                                                            |                                                                            |
| 2 Side entry<br>Low construction                                                    |                                                                                                                                                                                                                                                       | M20<br>M25                                                                                                                                                                                                                                            | PG16<br>PG21 | H16B-SDR-LB-2PG16<br>H16B-SDR-LB-2PG21<br>H16B-SDR-LB-2M20<br>H16B-SDR-LB-2M25     | T1620163216-000<br>T1620163221-000<br>T1620163220-000<br>T1620163225-000 |      |      |                                  |                                  |              |                                                                            |                                                                            |
| 1 Side entry<br>High construction                                                   |                                                                                                                                                                                                                                                       | M25<br>M32                                                                                                                                                                                                                                            | PG21<br>PG29 | H16B-SDRH-LB-PG21<br>H16B-SDRH-LB-PG29<br>H16B-SDRH-LB-M25<br>H16B-SDRH-LB-M32     | T1660163121-000<br>T1660163129-000<br>T1660163125-000<br>T1660163132-000 |      |      |                                  |                                  |              |                                                                            |                                                                            |
| 2 Side entry<br>High construction                                                   |                                                                                                                                                                                                                                                       | M25<br>M32                                                                                                                                                                                                                                            | PG21<br>PG29 | H16B-SDRH-LB-2PG21<br>H16B-SDRH-LB-2PG29<br>H16B-SDRH-LB-2M25<br>H16B-SDRH-LB-2M32 | T1660163221-000<br>T1660163229-000<br>T1660163225-000<br>T1660163232-000 |      |      |                                  |                                  |              |                                                                            |                                                                            |

## HIP.16/40, HIP-K.16/40, EMV-K.16/40 housings

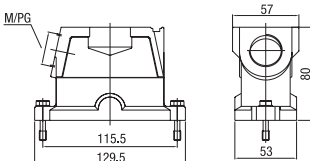
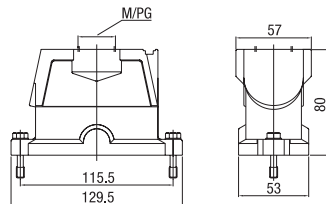
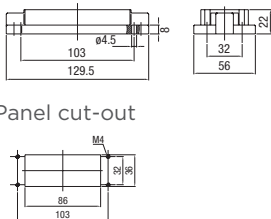
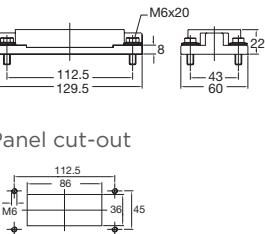
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         |                                                                                                      | Metr. | PG       | Type                                                                                        | Part Number                               |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------|----------|---------------------------------------------------------------------------------------------|-------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                      |       |          |                                                                                             |                                           |
|    |                     | M32   | 21<br>29 | <b>HIP</b><br>HIP.16/40.STS.1.21.G<br>HIP.16/40.STS.1.29.G<br>HIP.16/40.STS.1.M32.G         | 1-1102649-5<br>1-1102651-5<br>0-1106454-2 |
|                                                                                     |                                                                                                      | M32   | 29       | <b>HIP-K</b><br>HIP-K.16/40.STS.1.29.G<br>HIP-K.16/40.STS.1.M32.G                           | 2-1102651-5<br>0-1106444-2                |
|                                                                                     |                                                                                                      | M32   | 29<br>21 | <b>EMV-K</b><br>EMV-K.16/40.STS.1.29.G<br>EMV-K.16/40.STS.1.M32.G<br>EMV-K.16/40.STS.1.21.G | 4-1102723-5<br>0-1106446-4<br>4-1102722-5 |
| Hood: Top entry                                                                     |                                                                                                      |       |          |                                                                                             |                                           |
|  |                    | M32   | 21<br>29 | <b>HIP</b><br>HIP.16/40.STO.1.21.G<br>HIP.16/40.STO.1.29.G<br>HIP.16/40.STO.1.M32.G         | 1-1102653-5<br>1-1102655-5<br>0-1106454-1 |
|                                                                                     |                                                                                                      | M32   | 21<br>29 | <b>HIP-K</b><br>HIP-K.16/40.STO.2.21.G<br>HIP-K.16/40.STO.1.29.G<br>HIP-K.16/40.STO.1.M32.G | 0-1108534-1<br>2-1102655-5<br>0-1106444-1 |
|                                                                                     |                                                                                                      | M32   | 29       | <b>EMV-K</b><br>EMV-K.16/40.STO.1.29.G<br>EMV-K.16/40.STO.1.M32.G                           | 4-1102725-5<br>0-1106446-3                |
| Surface mounted housing: Bottom entry                                               |                                                                                                      |       |          |                                                                                             |                                           |
|  | <br>Panel cut-out |       |          | <b>HIP</b><br>HIP.16/40.AG                                                                  | 1-1102656-5                               |
|                                                                                     |                                                                                                      |       |          | <b>HIP-K</b><br>HIP-K.16/40.AG                                                              | 2-1102656-5                               |
|                                                                                     |                                                                                                      |       |          | <b>EMV-K</b><br>EMV-K.16/40.AG                                                              | 4-1102728-5                               |
|  | <br>Panel cut-out |       |          | <b>HIP</b><br>HIP.16/40.AG.M6                                                               | 1-1102618-5                               |
|                                                                                     |                                                                                                      |       |          | <b>HIP-K</b><br>HIP-K.16/40.AG.M6                                                           | 2-1102618-5                               |
|                                                                                     |                                                                                                      |       |          | <b>EMV-K</b><br>EMV-K.16/40.AG.M6                                                           | 4-1102730-5                               |

## HIP.16/40, HIP-K.16/40, EMV-K.16/40 housings

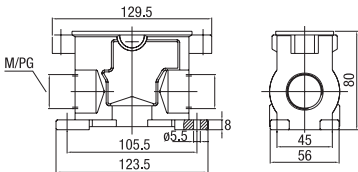
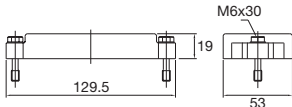
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                       | Metr.                                                                               | PG                                                                                  | Type                                                                                     | Part Number                                                                              |                                           |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------|
| Surface mounted housing: Side entry                                               |                                                                                     |                                                                                     |                                                                                          |                                                                                          |                                           |
|  |    | 2xM32                                                                               | 21<br>2x21                                                                               | <b>HIP</b><br>HIP.16/40.SG.1.21.G<br>HIP.16/40.SG.2.21.G<br>HIP.16/40.SG.2.M32.G         | 1-1102616-5<br>1-1102617-5<br>0-1106453-1 |
|                                                                                   |                                                                                     | 2xM32                                                                               | 21<br>2x21                                                                               | <b>HIP-K</b><br>HIP-K.16/40.SG.1.21.G<br>HIP-K.16/40.SG.2.21.G<br>HIP-K.16/40.SG.2.M32.G | 5-1102616-5<br>2-1102617-5<br>0-1106443-1 |
|                                                                                   | 2xM32                                                                               | 21<br>2x21                                                                          | <b>EMV-K</b><br>EMV-K.16/40.SG.1.21.Z<br>EMV-K.16/40.SG.2.21.Z<br>EMV-K.16/40.SG.2.M32.G | 4-1102726-5<br>4-1102727-5<br>0-1106445-2                                                |                                           |
|                                                                                   | Protective covers for housings                                                      |                                                                                     |                                                                                          |                                                                                          |                                           |
|                                                                                   |  |  |                                                                                          | <b>HIP</b><br>HIP/EMV.16/40.SKB                                                          | 3-1106203-5                               |
|                                                                                   |                                                                                     |                                                                                     |                                                                                          | <b>HIP-K</b><br>HIP-K.16/40.SKB                                                          | 4-1106203-5                               |

# HSB-012 inserts

INSERTS FOR H32B HOOD/HOUSING

690V 35A

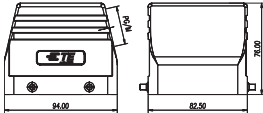
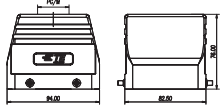
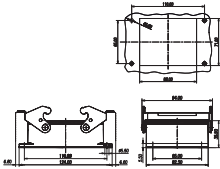
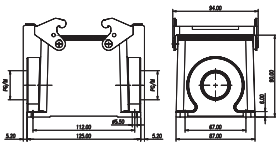
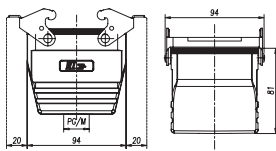
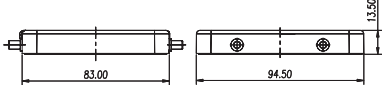
12 (2x6)+ ⚡

| Dimensions (mm)                                                                   |  | Type | Part Number |               |
|-----------------------------------------------------------------------------------|--|------|-------------|---------------|
|                                                                                   |  |      | Male insert | Female insert |
| Screw terminal                                                                    |  |      |             |               |
|  |  |      |             |               |



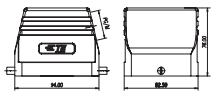
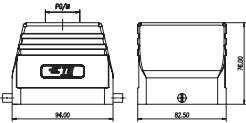
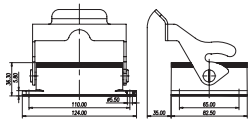
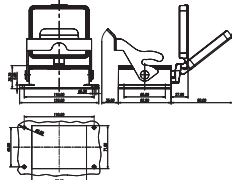
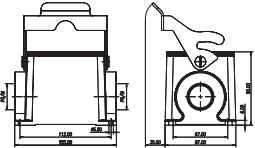
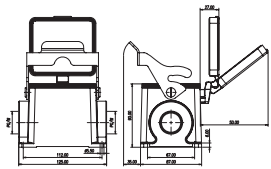
## H32B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                               | PG                                                                                   | Type                                                                                                                                                                                                                                                                                      | Part Number                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|    |    | M32<br>M40                                                                           | PG29<br>PG36<br>H32B-TS-PG29<br>H32B-TS-PG36<br>H32B-TS-M32<br>H32B-TS-M40                                                                                                                                                                                                                | T1210320129-000<br>T1210320136-000<br>T1210320132-000<br>T1210320140-000                                                                                                                                                                                               |
| Hood: Top entry                                                                     |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|    |    | M25<br>M32<br>M40<br>M50                                                             | PG21<br>PG29<br>PG36<br>PG42<br>H32B-TG-PG21<br>H32B-TG-PG29<br>H32B-TG-PG36<br>H32B-TG-PG42<br>H32B-TG-M25<br>H32B-TG-M32<br>H32B-TG-M40<br>H32B-TG-M50                                                                                                                                  | T1220320121-000<br>T1220320129-000<br>T1220320136-000<br>T1220320142-000<br>T1220320125-000<br>T1220320132-000<br>T1220320140-000<br>T1220320150-000                                                                                                                   |
| Bulkhead mounted                                                                    |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|   |   |                                                                                      | H32B-AG                                                                                                                                                                                                                                                                                   | T1410322000-000                                                                                                                                                                                                                                                        |
| Surface mounted: Side entry                                                         |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|  |  | 1 Side entry<br>M32<br>M40<br>M50<br>M63<br>2 Side entry<br>M32<br>M40<br>M50<br>M63 | PG29<br>PG36<br>PG42<br>H32B-SGR-PG29<br>H32B-SGR-PG36<br>H32B-SGR-PG42<br>H32B-SGR-M32<br>H32B-SGR-M40<br>H32B-SGR-M50<br>H32B-SGR-M63<br>PG29<br>PG36<br>PG42<br>H32B-SGR-2PG29<br>H32B-SGR-2PG36<br>H32B-SGR-2PG42<br>H32B-SGR-2M32<br>H32B-SGR-2M40<br>H32B-SGR-2M50<br>H32B-SGR-2M63 | T1440322129-000<br>T1440322136-000<br>T1440322142-000<br>T1440322132-000<br>T1440322140-000<br>T1440322150-000<br>T1440322163-000<br>T1440322229-000<br>T1440322236-000<br>T1440322242-000<br>T1440322232-000<br>T1440322240-000<br>T1440322250-000<br>T1440322263-000 |
| Cable-to-cable hood                                                                 |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|  |  | M32<br>M40<br>M50<br>M63                                                             | PG29<br>PG36<br>PG42<br>H32B-TBF-PG29<br>H32B-TBF-PG36<br>H32B-TBF-PG42<br>H32B-TBF-M32<br>H32B-TBF-M40<br>H32B-TBF-M50<br>H32B-TBF-M63                                                                                                                                                   | T1710322129-000<br>T1710322136-000<br>T1710322142-000<br>T1710322132-000<br>T1710322140-000<br>T1710322150-000<br>T1710322163-000                                                                                                                                      |
| Protection covers for hoods                                                         |                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |
|  |  |                                                                                      | H32B-KDB                                                                                                                                                                                                                                                                                  | T1000321220-000                                                                                                                                                                                                                                                        |

## H32B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                              | Metr.                                                    | PG                           | Type                                                                                                                                             | Part Number                                                                                                                                          |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|    |                             | M32<br>M40                                               | PG29<br>PG36                 | H32B-TS-RO-PG29<br>H32B-TS-RO-PG36<br>H32B-TS-RO-M32<br>H32B-TS-RO-M40                                                                           | T1310320129-000<br>T1310320136-000<br>T1310320132-000<br>T1310320140-000                                                                             |
| Hood: Top entry                                                                     |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|    |                             | M25<br>M32<br>M40<br>M50                                 | PG21<br>PG29<br>PG36<br>PG42 | H32B-TG-RO-PG21<br>H32B-TG-RO-PG29<br>H32B-TG-RO-PG36<br>H32B-TG-RO-PG42<br>H32B-TG-RO-M25<br>H32B-TG-RO-M32<br>H32B-TG-RO-M40<br>H32B-TG-RO-M50 | T1320320121-000<br>T1320320129-000<br>T1320320136-000<br>T1320320142-000<br>T1320320125-000<br>T1320320132-000<br>T1320320140-000<br>T1320320150-000 |
| Bulkhead mounted                                                                    |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|   |                            |                                                          |                              | H32B-AG-LB                                                                                                                                       | T1500322000-000                                                                                                                                      |
|  | With protection cover<br> |                                                          |                              | H32B-AD-LB                                                                                                                                       | T1510322000-000                                                                                                                                      |
| Surface mounted: Side entry                                                         |                                                                                                              |                                                          |                              |                                                                                                                                                  |                                                                                                                                                      |
|  |                           | 1 Side entry<br>M32<br>M40<br>2 Side entry<br>M32<br>M40 | PG29<br><br>PG29             | H32B-SGR-LB-PG29<br>H32B-SGR-LB-M32<br>H32B-SGR-LB-M40<br>H32B-SGR-LB-2PG29<br>H32B-SGR-LB-2M32<br>H32B-SGR-LB-2M40                              | T1610322129-000<br>T1610322132-000<br>T1610322140-000<br>T1610322229-000<br>T1610322232-000<br>T1610322240-000                                       |
|  | With protection cover<br> | 1 Side entry<br>M32<br>M40<br>2 Side entry<br>M32<br>M40 | PG29<br><br>PG29             | H32B-SDR-LB-PG29<br>H32B-SDR-LB-M32<br>H32B-SDR-LB-M40<br>H32B-SDR-LB-2PG29<br>H32B-SDR-LB-2M32<br>H32B-SDR-LB-2M40                              | T1620320129-000<br>T1620320132-000<br>T1620320140-000<br>T1620320229-000<br>T1620320232-000<br>T1620320240-000                                       |

## HQ Series



### 1. Specifications

DIN VDE 0110 Concerning clearance and creepage distances

DIN VDE 0627 Connectors and plug devices

### 2. Standards

DIN EN 175 301-801

DIN EN 61 984

### 3. Approvals



## HQ technical characteristics

|                          |                      |
|--------------------------|----------------------|
| Specifications .....     | DIN EN 60 664-1      |
| .....                    | DIN EN 61 984        |
| Number of contacts ..... | 5,7,8,12,17,4/2 + PE |

## CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.

## INSERTS

|                                             |                                  |
|---------------------------------------------|----------------------------------|
| Working current                             |                                  |
| HQ-005,008.....                             | 16A max                          |
| HQ-007,012,017 .....                        | 10A max                          |
| HQ4/2.....                                  | Power area 40A max               |
| .....                                       | Signal area 10A max              |
| Working voltage                             |                                  |
| HQ-005,007,012.....                         | 400V                             |
| HQ-008.....                                 | 500V                             |
| HQ-017.....                                 | 250V                             |
| HQ4/2.....                                  | Power area 600V Signal area 250V |
| Test voltage urms                           |                                  |
| HQ-005,017 .....                            | 4KV                              |
| HQ-007,008,012,4/2 .....                    | 6KV                              |
| Pollution degree .....                      | 3                                |
| Insulation resistance .....                 | $\geq 10^{10}\Omega$             |
| Material .....                              | Polycarbonate                    |
| Temperature range .....                     | -40°C... +100°C/125°C            |
| Flammability acc. to UL94 .....             | VO                               |
| Working voltage acc. to UL/CSA .....        | 600V                             |
| Mechanical working life-mating cycles ..... | $\geq 500$                       |

## CONTACTS

|                                |                                        |
|--------------------------------|----------------------------------------|
| Material .....                 | Copper alloy                           |
| Surface .....                  | Hard silver-plated                     |
| .....                          | Hard gold-plated                       |
| Contact resistance .....       | $\leq 1m\Omega$                        |
| Terminal .....                 | Crimp terminal                         |
| - mm <sup>2</sup> .....        | 0.14-4.0/0.14-2.5/1.5-6mm <sup>2</sup> |
| - AWG .....                    | 26-12/26-14/16-10                      |
| - Tightening/test torque ..... | 0.25Nm                                 |

## HOODS, HOUSINGS

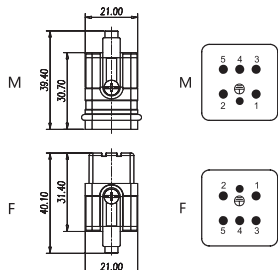
|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element.....                         | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

## HQ-005 inserts

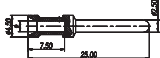
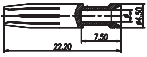
INSERTS FOR H3A HOOD/HOUSING

400V MAX. 16A

5+ (⊕)

| Dimensions (mm)                                                                   | Contact arrangement view from termination side                                    | Part Number     |                 | Type     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------|-----------------|----------|
|                                                                                   |                                                                                   | Male insert     | Female insert   |          |
| Crimp terminal (Order crimp contacts separately)                                  |                                                                                   |                 |                 |          |
|  |  | T2080052101-000 |                 | HQ-005-M |
|                                                                                   |                                                                                   |                 | T2080052201-000 | HQ-005-F |

## 16A Contact

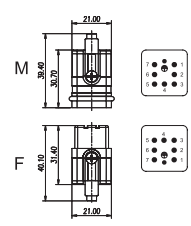
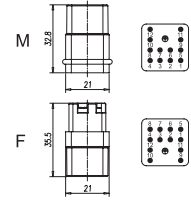
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
|                                                   |                                      | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                      |                                                                                                                         | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                      |                                                                                                                         | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                      |                                                                                                                         | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                      |                                                                                                                         | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                      |                                                                                                                         | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                      |                                                                                                                         | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                      |                                                                                                                         |                 |       |                   |                               |                 |                             |                 |
| <b>CEF/Female</b><br><br>                         | <b>16A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                      |                                                                                                                         | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                      |                                                                                                                         | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                      |                                                                                                                         | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                      |                                                                                                                         | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                      |                                                                                                                         | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                      |                                                                                                                         | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |
|                                                                                                                                      |                                                                                                                         |                 |       |                   |                               |                 |                             |                 |

## HQ-007/012 inserts

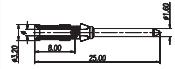
INSERTS FOR H3A HOOD/HOUSING

400V MAX. 10A

7+   
12+ 

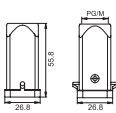
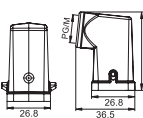
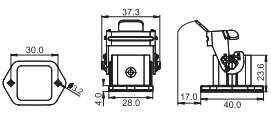
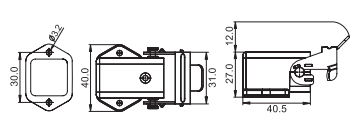
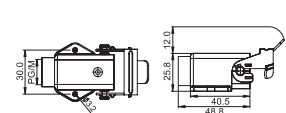
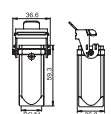
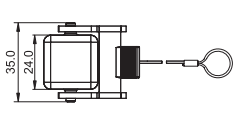
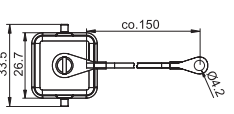
| Dimensions (mm)                                                                    | Contact arrangement view from termination side                                     | Part Number     |                 | Type     |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------|-----------------|----------|
|                                                                                    |                                                                                    | Male insert     | Female insert   |          |
| Crimp terminal (Order crimp contacts separately)                                   |                                                                                    |                 |                 |          |
|   |   | T2080072101-000 |                 | HQ-007-M |
|                                                                                    |                                                                                    |                 | T2080072201-000 | HQ-007-F |
|  |  | T2080122101-000 |                 | HQ-012-M |
|                                                                                    |                                                                                    |                 | T2080122201-000 | HQ-012-F |

### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male<br> | 10A Male crimp contacts<br>   | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                             |                                                                                                                  | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| CDF/Female<br>                                                                                                                           | 10A Female crimp contacts<br> | 0.14-0.37       | 26-22 | 8.0               | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 8.0               | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 8.0               | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 8.0               | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 8.0               | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 6.0               | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.14-0.37       | 26-22 | 8.0               | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 8.0               | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 8.0               | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 8.0               | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 8.0               | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 6.0               | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

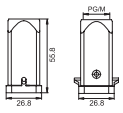
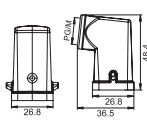
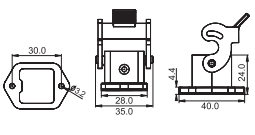
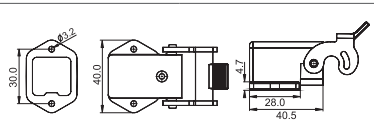
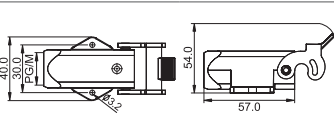
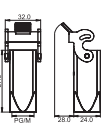
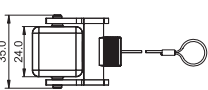
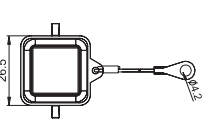
## H3A metal hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                     | Metr.                                                                               | PG   | Type                                             | Part Number                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|--------------------------------------------------|-------------------------------------------------------|
| Top entry                                                                           |                                                                                     |                                                                                     |      |                                                  |                                                       |
|    |    | M20                                                                                 | PG11 | H3A-MTG-PG11<br>H3A-MTG-M20                      | T1329030111-000<br>T1329030120-000                    |
| Side entry                                                                          |                                                                                     |                                                                                     |      |                                                  |                                                       |
|    |    | M20                                                                                 | PG11 | H3A-MTS-PG11<br>H3A-MTS-M20                      | T1319030111-000<br>T1319030120-000                    |
| Bulkhead mounting: Bottom entry                                                     |                                                                                     |                                                                                     |      |                                                  |                                                       |
|    |    |                                                                                     |      | H3A-MAG                                          | T1509030000-000                                       |
| Bulkhead mounting: Side entry                                                       |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  |  |                                                                                     |      | H3A-MAGS                                         | T1549030000-000                                       |
| Surface mounting: Side entry                                                        |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  |  | M16<br>M20                                                                          | PG11 | H3A-MAGSV-PG11<br>H3A-MAGSV-M16<br>H3A-MAGSV-M20 | T1619030111-000<br>T1619030116-000<br>T1619030120-000 |
| Cable-to-cable hood:                                                                |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  |  | M20                                                                                 | PG11 | H3A-MTGVB-PG11<br>H3A-MTGVB-M20                  | T1739030111-000<br>T1739030120-000                    |
| Protection covers for hoods (thermoplastic)                                         |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  | Note: For mounted male insert and hood                                              |  |      |                                                  | H3A-KDTP<br>T1010031100-000                           |
| Metal protection covers for hoods                                                   |                                                                                     |                                                                                     |      |                                                  |                                                       |
|  | Note: For mounted female insert and hood                                            |  |      |                                                  | H3A-KDB<br>T1010033100-000                            |

## H3A thermoplastic hoods/housings

### THERMOPLASTIC HOODS, HOUSINGS

| Dimensions (mm)                                                                     |                                                                                     | Metr.                                                                               | PG   | Type                                          | Part Number                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|-----------------------------------------------|-------------------------------------------------------|
| Top entry                                                                           |                                                                                     |                                                                                     |      |                                               |                                                       |
|    |    | M20                                                                                 | PG11 | H3A-TG-PG11<br>H3A-TG-M20                     | T1329031111-000<br>T1329031120-000                    |
| Side entry                                                                          |                                                                                     |                                                                                     |      |                                               |                                                       |
|    |    | M20                                                                                 | PG11 | H3A-TS-PG11<br>H3A-TS-M20                     | T1319031111-000<br>T1319031120-000                    |
| Bulkhead mounting: Bottom entry                                                     |                                                                                     |                                                                                     |      |                                               |                                                       |
|    |    |                                                                                     |      | H3A-AG                                        | T1509031100-000                                       |
| Bulkhead mounting: Side entry                                                       |                                                                                     |                                                                                     |      |                                               |                                                       |
|  |  |                                                                                     |      | H3A-AGS                                       | T1509031111-000                                       |
| Surface mounting: Side entry                                                        |                                                                                     |                                                                                     |      |                                               |                                                       |
|  |  | M16<br>M20                                                                          | PG11 | H3A-AGSV-PG11<br>H3A-AGSV-M16<br>H3A-AGSV-M20 | T1619031111-000<br>T1619031116-000<br>T1619031120-000 |
| Cable-to-cable hood:                                                                |                                                                                     |                                                                                     |      |                                               |                                                       |
|  |  | M20                                                                                 | PG11 | H3A-TGVB-PG11<br>H3A-TGVB-M20                 | T1739031111-000<br>T1739031120-000                    |
| Protection covers for hoods (thermoplastic)                                         |                                                                                     |                                                                                     |      |                                               |                                                       |
|  | Note: For mounted male insert and hood                                              |  |      | H3A-KDTP                                      | T1010031100-000                                       |
| Protection covers for hoods                                                         |                                                                                     |                                                                                     |      |                                               |                                                       |
|  | Note: For mounted female insert and hood                                            |  |      | H3A-KDBP (White)<br>H3A-KDBPG (Grey)          | T1010032100-000<br>T1010032300-000                    |
| White    Grey                                                                       |                                                                                     |                                                                                     |      |                                               |                                                       |
| Covers without sealing type                                                         |                                                                                     |                                                                                     |      |                                               |                                                       |
|                                                                                     |                                                                                     |                                                                                     |      | H3A-KDBP (White)<br>H3A-KDBP (Grey)           | T1010033200-000<br>T1010032200-000                    |



## HIP.3/4, HIP-K.3/4, EMV-K.3/4 housings

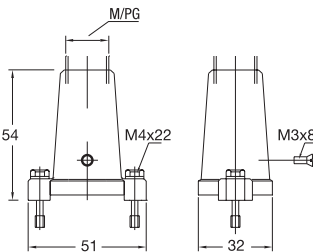
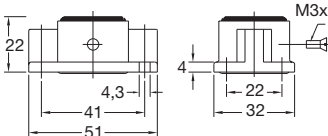
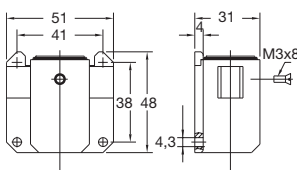
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                                                        | PG         | Type                                                                                                                                    | Part Number                                                                                                                             |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Top entry                                                                     |                                                                                                              |            |                                                                                                                                         |                                                                                                                                         |
|    |                             | M16        | 11                                                                                                                                      | <b>HIP</b><br>HIP.3/4.ST0.1.11.G<br>HIP.3/4.ST0.1.M16.G<br><br>1-1102600-5<br>0-1106408-1                                               |
|                                                                                     |                                                                                                              | M16<br>M20 | 11                                                                                                                                      | <b>HIP-K</b><br>HIP-K.3/4.ST0.1.11.G<br>HIP-K.3/4.ST0.1.M16.G<br>HIP-K.3/4.ST0.1.M20.G<br><br>2-1102600-5<br>0-1106408-2<br>0-1106408-3 |
|                                                                                     | M16<br>M20                                                                                                   | 11         | <b>EMV-K</b><br>EMV-K.3/4.ST0.1.11.G<br>EMV-K.3/4.ST0.1.M16.G<br>EMV-K.3/4.ST0.1.M20.G<br><br>4-1102700-5<br>0-1106402-2<br>0-1106402-3 |                                                                                                                                         |
| Surface mounted housing: Bottom entry                                               |                                                                                                              |            |                                                                                                                                         |                                                                                                                                         |
|  | <br>Panel cut-out 21 x 21 |            |                                                                                                                                         | <b>HIP</b><br>HIP.3/4.AG<br><br>1-1102603-5                                                                                             |
|                                                                                     |                                                                                                              |            |                                                                                                                                         | <b>HIP-K</b><br>HIP-K.3/4.AG<br><br>2-1102603-5                                                                                         |
|                                                                                     |                                                                                                              |            |                                                                                                                                         | <b>EMV-K</b><br>EMV-K.3/4.AG<br><br>4-1102703-5                                                                                         |
| Surface mounted housing: Bottom entry (by panel cut-out)                            |                                                                                                              |            |                                                                                                                                         |                                                                                                                                         |
|  | <br>Panel cut-out ø 20    |            |                                                                                                                                         | <b>HIP</b><br>HIP.3/4.SGF<br><br>1-1102602-5                                                                                            |
|                                                                                     |                                                                                                              |            |                                                                                                                                         | <b>HIP-K</b><br>HIP-K.3/4.SGF<br><br>2-1102602-5                                                                                        |
|                                                                                     |                                                                                                              |            |                                                                                                                                         | <b>EMV-K</b><br>EMV-K.3/4.SGF<br><br>4-1102702-5                                                                                        |

## HIP.3/4, HIP-K.3/4, EMV-K.3/4 housings

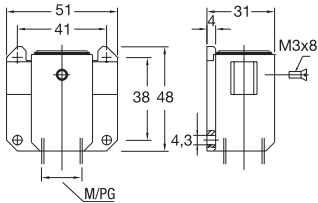
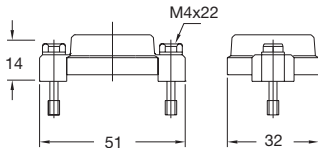
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                               | PG   | Type                                                                                | Part Number |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|-------------|
| <b>Surface mounted housing: Side entry</b>                                          |                                                                                     |      |                                                                                     |             |
|    |    | M16  | <b>HIP</b><br>HIP.3/4.SG.1.11.G<br>HIP.3/4.SG.1.M16.G<br>HIP.3/4.SG.1.M20.G         | 1-1102601-5 |
|                                                                                     |                                                                                     | M20  |                                                                                     | 0-1106407-1 |
|                                                                                     |                                                                                     |      |                                                                                     | 0-1106401-4 |
|                                                                                     | M16                                                                                 | PG11 | <b>HIP-K</b><br>HIP-K.3/4.SG.1.11.G<br>HIP-K.3/4.SG.1.M16.G                         | 2-1102601-5 |
|                                                                                     |                                                                                     |      |                                                                                     | 0-1106407-2 |
|                                                                                     | M16                                                                                 | PG11 | <b>EMV-K</b><br>EMV-K.3/4.SG.1.11.G<br>EMV-K.3/4.SG.1.M16.G<br>EMV-K.3/4.SG.1.M20.G | 4-1102701-5 |
|                                                                                     | M20                                                                                 |      |                                                                                     | 0-1106401-2 |
|                                                                                     |                                                                                     |      |                                                                                     | 0-1106401-3 |
| <b>Protective covers for housings</b>                                               |                                                                                     |      |                                                                                     |             |
|  |  |      | <b>HIP/EMV</b><br>HIP/EMV.3/4.SKB                                                   | 3-1106200-5 |
|                                                                                     |                                                                                     |      | <b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.3/4.SKB                                           | 4-1106200-5 |

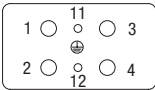
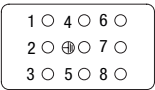
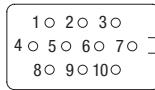
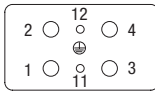
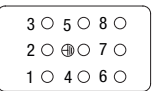
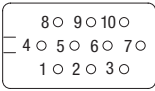
## HQ-017, 4/2, 8, 10 Inserts

### INSERTS FOR H8A HOOD/HOUSING

17+ 4/2+ 8+ 10

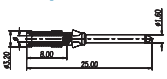
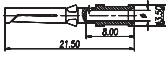
| Dimension (mm)                                                                                              | Type          | Part Number     |                 |
|-------------------------------------------------------------------------------------------------------------|---------------|-----------------|-----------------|
|                                                                                                             |               | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                                            |               |                 |                 |
|                            | HQ-017-M      | T2080172101-000 |                 |
|                                                                                                             | HQ-017-F      |                 | T2080172201-000 |
| 400V/250V max. 40A/10A<br> | HQ-4/2-M      | T2080062101-100 |                 |
|                                                                                                             | HQ-4/2-F      |                 | T2080062201-100 |
|                           | HQ-008-M      | T2019092101-000 |                 |
|                                                                                                             | HQ-008-F      |                 | T2019092201-000 |
|                          | HG-Q.10.Sti.C | O-1108808-1     |                 |
|                                                                                                             | HG-Q.10.Bu.C  |                 | O-1103091-1     |

Suitable crimp contacts and crimping tools: see page 190

| HE-Q.4/2                                                                            | HE-Q.8                                                                              | HE-Q.10                                                                               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Contact arrangement Male insert                                                     |                                                                                     |                                                                                       |
|  |  |  |
| Contact arrangement Female insert                                                   |                                                                                     |                                                                                       |
|  |  |  |

## Crimp contacts HN.D series

### 10A Contact

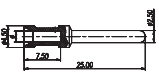
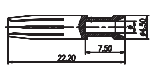
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male<br>crimp contacts<br> | Wire gauge      |       | Strip-<br>ping<br>length<br>mm | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                 | mm <sup>2</sup> | AWG   |                                | Type                          | Part Number     | Type                        | Part Number     |
|                                                     |                                | 0.14-0.37       | 26-22 | 8.0                            | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                      |                                                                                                                 | 0.5             | 20    | 8.0                            | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                      |                                                                                                                 | 0.75            | 18    | 8.0                            | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                      |                                                                                                                 | 1.0             | 18    | 8.0                            | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                      |                                                                                                                 | 1.5             | 16    | 8.0                            | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                      |                                                                                                                 | 2.5             | 14    | 6.0                            | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                      |                                                                                                                 |                 |       |                                |                               |                 |                             |                 |
| CDF/Female<br>                                      |                                                                                                                 | 0.14-0.37       | 26-22 | 8.0                            | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                      |                                                                                                                 | 0.5             | 20    | 8.0                            | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                      |                                                                                                                 | 0.75            | 18    | 8.0                            | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                      |                                                                                                                 | 1.0             | 18    | 8.0                            | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                      |                                                                                                                 | 1.5             | 16    | 8.0                            | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                      |                                                                                                                 | 2.5             | 14    | 6.0                            | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |
|                                                                                                                                      |                                                                                                                 |                 |       |                                |                               |                 |                             |                 |

## Crimping tools HN.D series

| Description                                                                                                                          |                                                                                     | Type            | Part Number     |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-----------------|
| <b>Crimp tool</b><br><br>Wire range: 0.5-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts                          |  | CRIMPBOX-0.5/4  | T3100000001-000 |
| <b>Crimp tool</b><br><br>Wire range: 0.14-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts<br>with locator and die |  | RSZ.HE-HN.D-HVT | 1-1105851-8     |
| <b>Removal tools</b><br><br>Used for CDM/CDF<br>contact series                                                                       |  | REMOV-HD        | T3100000003-000 |
| <b>M3 screw driver</b><br><br>Used for HA/HE inserts                                                                                 |  | SCREWD-M3       | T3100000009-000 |

## Crimp contacts HE/HA series

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male<br>crimp contacts<br>   | Wire gauge      |       | Strip-<br>ping<br>length<br>mm | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                   | mm <sup>2</sup> | AWG   |                                | Type                          | Part Number     | Type                        | Part Number     |
|                                                     |                                                                                                                   | 0.14-0.37       | 26-22 | 7.5                            | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                      |                                                                                                                   | 0.5             | 20    | 7.5                            | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                      |                                                                                                                   | 0.75            | 18    | 7.5                            | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                      |                                                                                                                   | 1.0             | 18    | 7.5                            | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                      |                                                                                                                   | 1.5             | 16    | 7.5                            | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                      |                                                                                                                   | 2.5             | 14    | 7.5                            | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                      |                                                                                                                   | 4.0             | 12    | 7.5                            | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                      |                                                                                                                   |                 |       |                                |                               |                 |                             |                 |
| CEF/Female<br>                                      | 16A Female<br>crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5                            | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                      |                                                                                                                   | 0.5             | 20    | 7.5                            | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                      |                                                                                                                   | 0.75            | 18    | 7.5                            | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                      |                                                                                                                   | 1.0             | 18    | 7.5                            | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                      |                                                                                                                   | 1.5             | 16    | 7.5                            | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                      |                                                                                                                   | 2.5             | 14    | 7.5                            | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                      |                                                                                                                   | 4.0             | 12    | 7.5                            | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |
|                                                                                                                                      |                                                                                                                   |                 |       |                                |                               |                 |                             |                 |

## Crimping tools HE/HA series

| Description                                                                                                                          |                                                                                     | Type            | Part Number     |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-----------------|
| <b>Crimp tool</b><br><br>Wire range: 0.5-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts                          |  | CRIMPBOX-0.5/4  | T3100000001-000 |
| <b>Crimp tool</b><br><br>Wire range: 0.14-4.0mm <sup>2</sup><br>Suitable for CDM/CDF<br>and CEM/CEF contacts<br>with locator and die |  | RSZ.HE-HN.D-HVT | 1-1105851-8     |
| <b>Removal tools</b><br><br>Used for CEM/CEF<br>contact series                                                                       |  | REMOV-HEE       | T3100000002-000 |
| <b>M3 screw driver</b><br><br>Used for HA/HE inserts                                                                                 |  | SCREWD-M3       | T3100000009-000 |

## Crimp contacts HGQ10 series

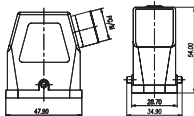
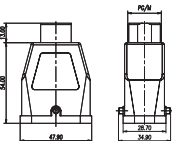
| <b>Tech data</b><br><b>Material:</b><br>copper alloy<br><b>Finish:</b><br>tin plated<br><b>Contact resistance:</b> ≤3mΩ<br><b>Crimp Terminal:</b><br>0.2-4.0 mm <sup>2</sup><br>AWG: 24-12<br><br>Other finishes<br>and Materials on request<br><br>Appl. Spec.:<br>114-18018 | Type                           | Part Number                                  | (mm <sup>2</sup> )                               | Tool                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------|--------------------------------------------------|----------------------------------------------|
|                                                                                                                                                                                                                                                                               | Pin contact tin plated         | 962966-1<br>962967-1<br>962968-1<br>962969-1 | 0.2 - 0.4<br>0.5 - 1.0<br>1.0 - 2.5<br>2.5 - 4.0 | 734285-1<br>734285-1<br>734285-2<br>734285-3 |
|                                                                                                                                                                                                                                                                               | Reel contact/pin tin plated    | 929962-1<br>929963-1<br>929964-1<br>929965-1 | 0.2 - 0.4<br>0.5 - 1.0<br>1.0 - 2.5<br>2.5 - 4.0 | 734285-1<br>734285-1<br>734285-2<br>734285-3 |
|                                                                                                                                                                                                                                                                               | Socket contact tin plated      | 962976-1<br>962977-1<br>962978-1<br>962979-1 | 0.2 - 0.4<br>0.5 - 1.0<br>1.0 - 2.5<br>2.5 - 4.0 | 734285-1<br>734285-1<br>734285-2<br>734285-3 |
|                                                                                                                                                                                                                                                                               | Reel contact/socket tin plated | 929969-1<br>929970-1<br>929971-1<br>929972-1 | 0.2 - 0.4<br>0.5 - 1.0<br>1.0 - 2.5<br>2.5 - 4.0 | 734285-1<br>734285-1<br>734285-2<br>734285-3 |

## Crimping tools HGQ10 series

| Description                            | Type                                                                                                  | Part Number |
|----------------------------------------|-------------------------------------------------------------------------------------------------------|-------------|
| Extraction tool                        | Extraction tool                                                                                       | 1-1579007-8 |
|                                        | Handtool<br>734285-11,5 mm <sup>2</sup><br>734285-22,5 mm <sup>2</sup><br>734285-34,0 mm <sup>2</sup> |             |
| Crimping tool with locator             | Safety Press SSC-2FP                                                                                  | 1481004-7   |
| Bench and Automatic tooling on request | Ergo Die Adapter                                                                                      | 1579000-7   |

## H8A with 1 lever on the hoods/housings

### THERMOPLASTIC HOODS, HOUSINGS

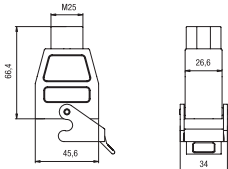
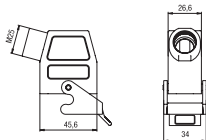
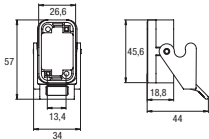
| Dimensions (mm)                                                                   | Metr.                                                                             | PG | Type                               | Part Number                        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----|------------------------------------|------------------------------------|
| Hood: Side entry                                                                  |                                                                                   |    |                                    |                                    |
|  |  |    | PG16                               | H8A-TS-PG16<br>T1359090116-000     |
|                                                                                   |                                                                                   |    | M20                                | H8A-TS-M20<br>T1319080120-000      |
|                                                                                   |                                                                                   |    | M25                                | H8A-TS-M25<br>T1319080125-000      |
|                                                                                   | M25                                                                               |    | <b>EMV</b><br>HG-Q-EMV.STO.1.M25.Z | O-1103073-3                        |
| Hood: Top entry                                                                   |                                                                                   |    |                                    |                                    |
|  |  |    | M20                                | H8A-TG-M20<br>T1329080120-000      |
|                                                                                   |                                                                                   |    | M25                                | H8A-TG-M25<br>T1329080125-000      |
|                                                                                   |                                                                                   |    | M25                                | <b>EMV</b><br>HG-Q-EMV.STO.1.M25.Z |

## HG-Q housings

Plastic glass-fibre reinforced

**EMV:** Protection against electro-magnetic interference

IP 65

| Description                                                                         |                                                                                     | Metr. | PG | Type                                  | Part Number |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|----|---------------------------------------|-------------|
| Cable-to-cable hood: Bottom entry                                                   |                                                                                     |       |    |                                       |             |
|    |    | M25   |    | HG-Q.KDO-LB.1.M25.Z                   | O-1108795-1 |
|                                                                                     |                                                                                     | M25   |    | <b>EMV</b><br>HG-Q-EMV.KDO-LB.1.M25.Z | O-1108795-3 |
| Cable-to-cable hood: Side entry                                                     |                                                                                     |       |    |                                       |             |
|    |    | M25   |    | HG-Q.KDS-LB.1.M25.Z                   | O-1108795-2 |
|                                                                                     |                                                                                     | M25   |    | <b>EMV</b><br>HG-Q-EMV.KDS-LB.1.M25.Z | O-1108795-4 |
| Surface mount housing: Bottom entry                                                 |                                                                                     |       |    |                                       |             |
|  |  | M25   |    | HG-Q.AG-LB                            | O-1103072-1 |
|                                                                                     |                                                                                     | M25   |    | <b>EMV</b><br>HG-Q-EMV.AG-LB          | O-1103072-2 |

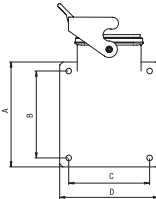


# HG-Q.10 motor housings

Plastic glass-fibre reinforced  
**EMV:** Protection against electro-magnetic interference

400V 20A

IP 65

| Description                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Metr.           | PG  | Type                                           | Part Number                    |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------------------------------------------------|--------------------------------|--|----|---|---|---|---|----------|----|----|----|----|----------|----|----|----|----|----------|----|----|----|----|----------|----|----|----|----|----------|-----|-----|-----|-----|--|--|------------------------------------------------|--------------------------------|
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |     | HG-Q.10.MC.1<br><b>EMV</b><br>HG-Q.10-EMV.MC.1 | O-1103092-1<br><br>O-1103092-8 |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |     | HG-Q.10.MC.2<br><b>EMV</b><br>HG-Q.10-EMV.MC.2 | O-1103092-2<br><br>O-1103092-9 |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |     | HG-Q.10.MC.3<br><b>EMV</b><br>HG-Q.10-EMV.MC.3 | O-1103092-3<br><br>1-1103092-0 |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
|   |  <table><tr><th colspan="5">Dimensions (mm)</th></tr><tr><th>PN</th><th>A</th><th>B</th><th>C</th><th>D</th></tr><tr><td>O-1, O-8</td><td>70</td><td>58</td><td>54</td><td>66</td></tr><tr><td>O-2, O-9</td><td>70</td><td>60</td><td>60</td><td>70</td></tr><tr><td>O-3, 1-0</td><td>74</td><td>56</td><td>56</td><td>74</td></tr><tr><td>O-4, 1-1</td><td>75</td><td>64</td><td>64</td><td>75</td></tr><tr><td>O-5, 1-2</td><td>120</td><td>105</td><td>105</td><td>120</td></tr></table> | Dimensions (mm) |     |                                                |                                |  | PN | A | B | C | D | O-1, O-8 | 70 | 58 | 54 | 66 | O-2, O-9 | 70 | 60 | 60 | 70 | O-3, 1-0 | 74 | 56 | 56 | 74 | O-4, 1-1 | 75 | 64 | 64 | 75 | O-5, 1-2 | 120 | 105 | 105 | 120 |  |  | HG-Q.10.MC.4<br><b>EMV</b><br>HG-Q.10-EMV.MC.4 | O-1103092-4<br><br>1-1103092-1 |
| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |     |                                                |                                |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
| PN                                                                                  | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | B               | C   | D                                              |                                |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
| O-1, O-8                                                                            | 70                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 58              | 54  | 66                                             |                                |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
| O-2, O-9                                                                            | 70                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 60              | 60  | 70                                             |                                |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
| O-3, 1-0                                                                            | 74                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 56              | 56  | 74                                             |                                |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
| O-4, 1-1                                                                            | 75                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 64              | 64  | 75                                             |                                |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
| O-5, 1-2                                                                            | 120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 105             | 105 | 120                                            |                                |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |     | HG-Q.10.MC.5<br><b>EMV</b><br>HG-Q.10-EMV.MC.5 | O-1103092-5<br><br>1-1103092-2 |  |    |   |   |   |   |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |    |    |    |    |          |     |     |     |     |  |  |                                                |                                |

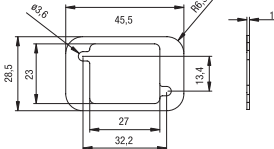
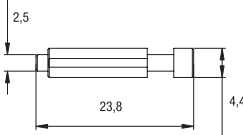
## HG-Q accessories

Plastic glass-fibre reinforced

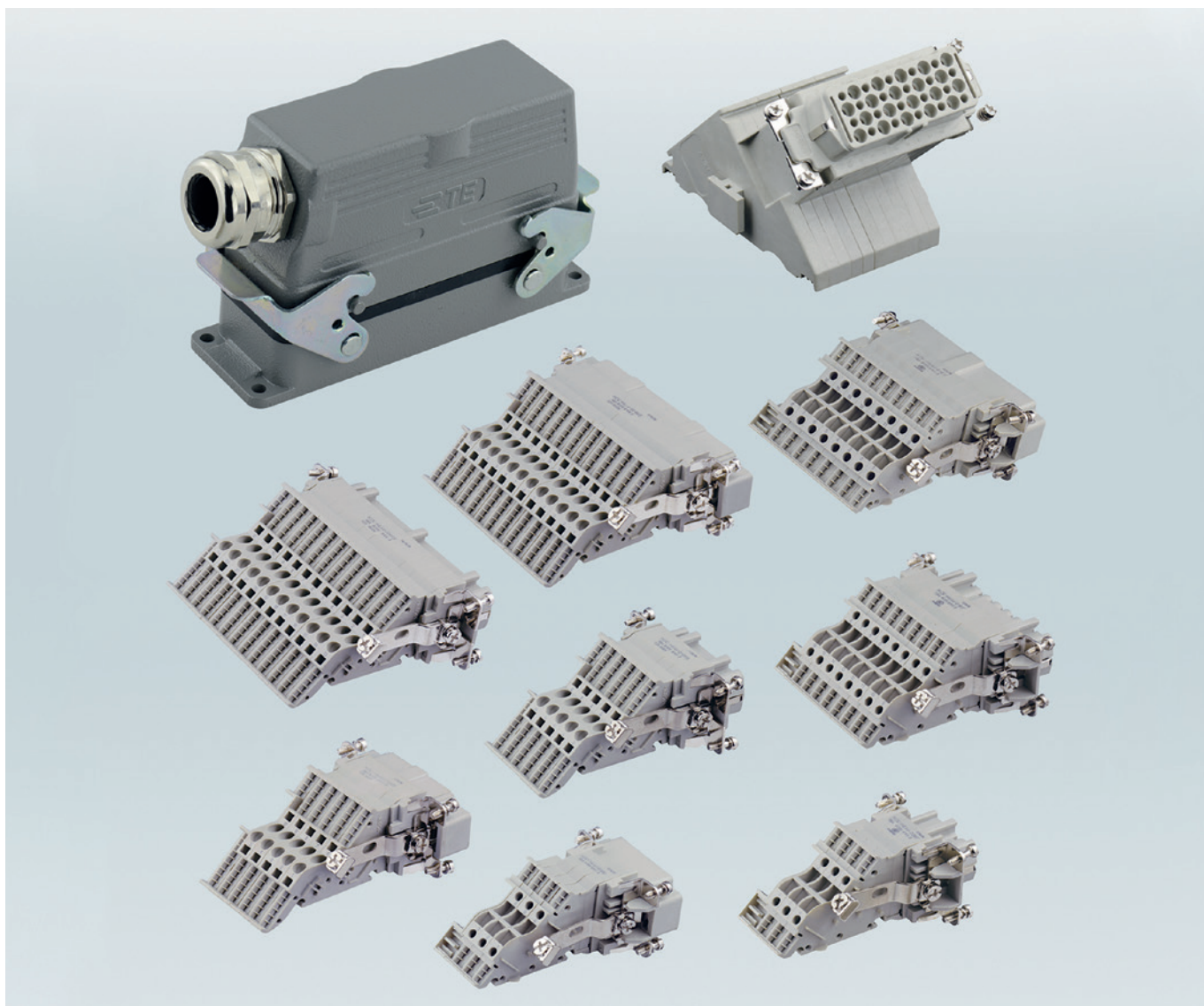
**EMV:** Protection against electro-magnetic interference

SIZE Q

IP 65

| Description                                                                                                                                                             | Metr.                                                                                | PG | Type                                                                                                                     | Part Number                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Flange sealing for HG-Q.8 Surface mount housing                                                                                                                         |                                                                                      |    |                                                                                                                          |                                                                                        |
|       |                                                                                      |    | Conductive<br>HG-Q.FI-dicht-L                                                                                            | O-1108794-2                                                                            |
| Gland fitting, IP68 plastic                                                                                                                                             |                                                                                      |    |                                                                                                                          |                                                                                        |
|  <p>All glands are supplied with a black M25 nut</p>                                   | M25 (Yellow)<br>M25 (Grey)<br>M25 (Black)<br>M25 (Green)<br>M25 (Red)<br>M25 (White) |    | HG-Q.M25.6,5/4,0<br>HG-Q.M25.8,0/5,0<br>HG-Q.M25.9,5/6,5<br>HG-Q.M25.10,5/7,0<br>HG-Q.M25.13,0/9,0<br>HG-Q.M25.15,5/11,5 | O-1103074-1<br>O-1103074-2<br>O-1103074-3<br>O-1103074-4<br>O-1103074-5<br>O-1103074-6 |
| Cover for all HG-Q housing                                                                                                                                              |                                                                                      |    |                                                                                                                          |                                                                                        |
|                                                                                      |                                                                                      |    | Set-HG-Q.8.SKP                                                                                                           | O-1108818-1                                                                            |
| Coding pin for Q.5 and Q.8, HE, HEE                                                                                                                                     |                                                                                      |    |                                                                                                                          |                                                                                        |
|   |                                                                                      |    | Sich-Stift.HVE.C                                                                                                         | O-1110984-4                                                                            |

## HEAV Contact Series



### 1. Specifications

DIN VDE 0110 Concerning clearance and creepage distances

DIN VDE 0627 Connectors and plug devices

### 2. Standards

DIN EN 60 664-1

DIN EN 61 984

### 3. Approvals



RoHS

## HEAV/HESAV technical characteristics

|                          |                 |
|--------------------------|-----------------|
| Specifications .....     | DIN EN 60 664-1 |
| .....                    | DIN EN 61 984   |
| Number of contacts ..... | 6,10,16,24 + PE |

### INSERTS

|                                             |                      |
|---------------------------------------------|----------------------|
| Working current .....                       | 16A max              |
| (See current carrying capacity)             |                      |
| Working voltage .....                       | 500V                 |
| Test voltage urms.....                      | 6KV                  |
| Test voltage urms acc. to TUV .....         | 4KV                  |
| Pollution degree .....                      | 2                    |
| Insulation resistance .....                 | $\geq 10^{10}\Omega$ |
| Material .....                              | Polycarbonate        |
| Temperature range .....                     | -40°C... +125°C      |
| Flammability acc. to UL94 .....             | V0                   |
| Working voltage acc. to UL/CSA .....        | 600V                 |
| Mechanical working life-mating cycles ..... | $\geq 500$           |

### CONTACTS

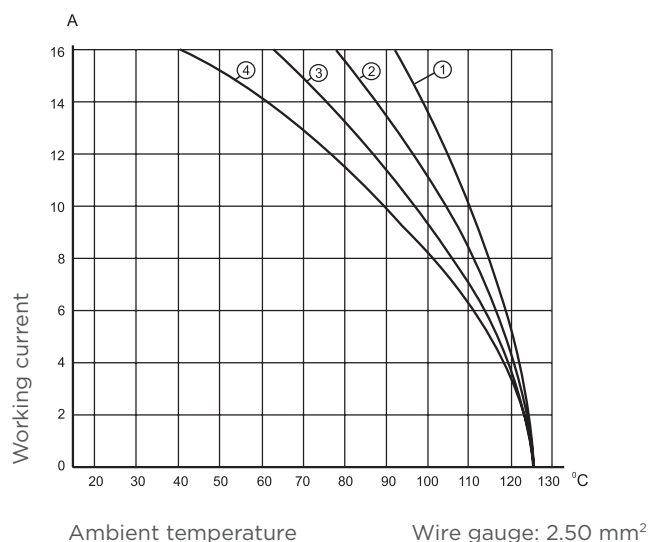
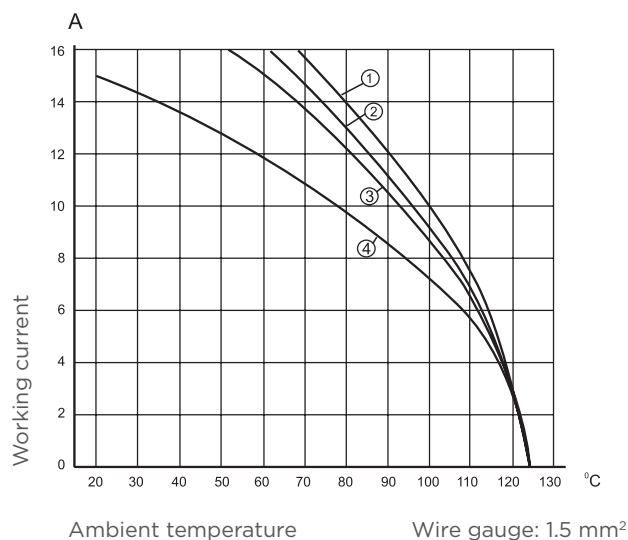
|                          |                        |
|--------------------------|------------------------|
| Material .....           | Copper alloy           |
| Surface .....            | Hard silver-plated     |
| Contact resistance ..... | $\leq 4m\Omega$        |
| HEAV Terminal .....      | Screw terminal         |
| - mm <sup>2</sup> .....  | 0.2-2.5mm <sup>2</sup> |
| - AWG .....              | 24-14                  |
| HESAV Terminal .....     | Spring terminal        |
| - mm <sup>2</sup> .....  | 0.5-2.5mm <sup>2</sup> |
| - AWG .....              | 20-14                  |

### HOODS, HOUSINGS

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element.....                         | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.



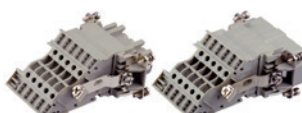
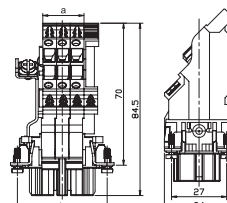
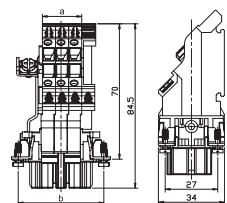
- 1 HEAV-006/HESAV-006
- 2 HEAV-010/HESAV-010
- 3 HEAV-016/HESAV-016
- 4 HEAV-024/HESAV-024

# HEAV inserts

LEFT HAND VERSION  
SCREW TERMINAL

500V MAX. 16A

6+  10+   
16+  24+ 

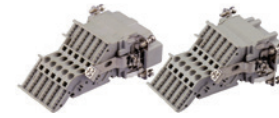
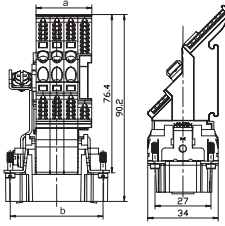
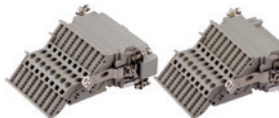
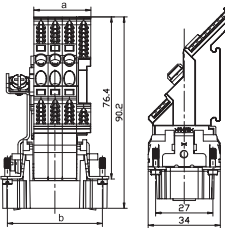
| Dimensions (mm)                                                                                                                                                                                                                                                                                                                                                            | Type                          | Type       | Part Number     |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------|-----------------|-----------------|----|----|----------|----|----|----------|----|------|----------|----|-----|--|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                            |                               |            | Male insert     | Female insert   |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Screw terminal 6+ ⚡                                                                                                                                                                                                                                                                                                                                                        |                               |            |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                           | 6-pole                        | HEAV-006-M | T2090062101-000 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                            |                               | HEAV-006-F |                 | T2090062201-000 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Screw terminal 10+ ⚡                                                                                                                                                                                                                                                                                                                                                       |                               |            |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                           | 10-pole                       | HEAV-010-M | T2090102101-000 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                            |                               | HEAV-010-F |                 | T2090102201-000 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Left hand version                                                                                                                                                                                                                                                                                                                                                          |                               |            |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|  <table><tr><td>Male insert/<br/>Female insert</td><td>A</td><td>B</td></tr><tr><td>HEAV-006</td><td>20</td><td>44</td></tr><tr><td>HEAV-010</td><td>34</td><td>57</td></tr><tr><td>HEAV-016</td><td>54</td><td>77.5</td></tr><tr><td>HEAV-024</td><td>81</td><td>104</td></tr></table> | Male insert/<br>Female insert | A          | B               | HEAV-006        | 20 | 44 | HEAV-010 | 34 | 57 | HEAV-016 | 54 | 77.5 | HEAV-024 | 81 | 104 |  |  |  |  |
| Male insert/<br>Female insert                                                                                                                                                                                                                                                                                                                                              | A                             | B          |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-006                                                                                                                                                                                                                                                                                                                                                                   | 20                            | 44         |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-010                                                                                                                                                                                                                                                                                                                                                                   | 34                            | 57         |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-016                                                                                                                                                                                                                                                                                                                                                                   | 54                            | 77.5       |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-024                                                                                                                                                                                                                                                                                                                                                                   | 81                            | 104        |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Screw terminal 16+ ⚡                                                                                                                                                                                                                                                                                                                                                       |                               |            |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                         | 16-pole                       | HEAV-016-M | T2090162101-000 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                            |                               | HEAV-016-F |                 | T2090162201-000 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Screw terminal 24+ ⚡                                                                                                                                                                                                                                                                                                                                                       |                               |            |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                         | 24-pole                       | HEAV-024-M | T2090242101-000 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                            |                               | HEAV-024-F |                 | T2090242201-000 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Left hand version                                                                                                                                                                                                                                                                                                                                                          |                               |            |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|  <table><tr><td>Male insert/<br/>Female insert</td><td>A</td><td>B</td></tr><tr><td>HEAV-006</td><td>20</td><td>44</td></tr><tr><td>HEAV-010</td><td>34</td><td>57</td></tr><tr><td>HEAV-016</td><td>54</td><td>77.5</td></tr><tr><td>HEAV-024</td><td>81</td><td>104</td></tr></table> | Male insert/<br>Female insert | A          | B               | HEAV-006        | 20 | 44 | HEAV-010 | 34 | 57 | HEAV-016 | 54 | 77.5 | HEAV-024 | 81 | 104 |  |  |  |  |
| Male insert/<br>Female insert                                                                                                                                                                                                                                                                                                                                              | A                             | B          |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-006                                                                                                                                                                                                                                                                                                                                                                   | 20                            | 44         |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-010                                                                                                                                                                                                                                                                                                                                                                   | 34                            | 57         |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-016                                                                                                                                                                                                                                                                                                                                                                   | 54                            | 77.5       |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-024                                                                                                                                                                                                                                                                                                                                                                   | 81                            | 104        |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |

## HESAV inserts

### LEFT HAND VERSION SPRING TERMINAL

500V MAX. 16A

6+  10+   
16+  24+ 

| Dimensions (mm)                                                                                                                                                                                                                                                                                                                                                            | Type                          | Type        | Part Number     |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------|-----------------|-----------------|----|----|----------|----|----|----------|----|------|----------|----|-----|--|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                            |                               | Male insert | Female insert   |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Spring terminal 6+                                                                                                                                                                                                                                                                        |                               |             |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                           | 6-pole                        | HEAV-006-MS | T2100063101-000 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                            |                               | HEAV-006-FS |                 | T2100063201-000 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Spring terminal 10+                                                                                                                                                                                                                                                                       |                               |             |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                           | 10-pole                       | HEAV-010-MS | T2100103101-000 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                            |                               | HEAV-010-FS |                 | T2100103201-000 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Left hand version                                                                                                                                                                                                                                                                                                                                                          |                               |             |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|  <table><tr><td>Male insert/<br/>Female insert</td><td>A</td><td>B</td></tr><tr><td>HEAV-006</td><td>20</td><td>44</td></tr><tr><td>HEAV-010</td><td>34</td><td>57</td></tr><tr><td>HEAV-016</td><td>54</td><td>77.5</td></tr><tr><td>HEAV-024</td><td>81</td><td>104</td></tr></table> | Male insert/<br>Female insert | A           | B               | HEAV-006        | 20 | 44 | HEAV-010 | 34 | 57 | HEAV-016 | 54 | 77.5 | HEAV-024 | 81 | 104 |  |  |  |  |
| Male insert/<br>Female insert                                                                                                                                                                                                                                                                                                                                              | A                             | B           |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-006                                                                                                                                                                                                                                                                                                                                                                   | 20                            | 44          |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-010                                                                                                                                                                                                                                                                                                                                                                   | 34                            | 57          |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-016                                                                                                                                                                                                                                                                                                                                                                   | 54                            | 77.5        |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-024                                                                                                                                                                                                                                                                                                                                                                   | 81                            | 104         |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Spring terminal 16+                                                                                                                                                                                                                                                                     |                               |             |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                         | 16-pole                       | HEAV-016-MS | T2100163101-000 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                            |                               | HEAV-016-FS |                 | T2100163201-000 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Spring terminal 24+                                                                                                                                                                                                                                                                     |                               |             |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                         | 24-pole                       | HEAV-024-MS | T2100243101-000 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                            |                               | HEAV-024-FS |                 | T2100243201-000 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| Left hand version                                                                                                                                                                                                                                                                                                                                                          |                               |             |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
|  <table><tr><td>Male insert/<br/>Female insert</td><td>A</td><td>B</td></tr><tr><td>HEAV-006</td><td>20</td><td>44</td></tr><tr><td>HEAV-010</td><td>34</td><td>57</td></tr><tr><td>HEAV-016</td><td>54</td><td>77.5</td></tr><tr><td>HEAV-024</td><td>81</td><td>104</td></tr></table> | Male insert/<br>Female insert | A           | B               | HEAV-006        | 20 | 44 | HEAV-010 | 34 | 57 | HEAV-016 | 54 | 77.5 | HEAV-024 | 81 | 104 |  |  |  |  |
| Male insert/<br>Female insert                                                                                                                                                                                                                                                                                                                                              | A                             | B           |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-006                                                                                                                                                                                                                                                                                                                                                                   | 20                            | 44          |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-010                                                                                                                                                                                                                                                                                                                                                                   | 34                            | 57          |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-016                                                                                                                                                                                                                                                                                                                                                                   | 54                            | 77.5        |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |
| HEAV-024                                                                                                                                                                                                                                                                                                                                                                   | 81                            | 104         |                 |                 |    |    |          |    |    |          |    |      |          |    |     |  |  |  |  |

## HMN Modular Series



- Mutually compatible with other brands
- More convenient to install
- Complete series
- Can be developed according to customer requirements

### 1. Specifications

DIN VDE 0110 Concerning clearance and creepage distances  
DIN VDE 0627 Connectors and plug devices

### 2. Standards

DIN EN 175 301-801  
DIN EN 61 984

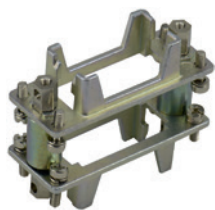
### 3. Approvals





## HMN modular connectors overview

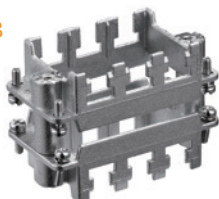
H10A



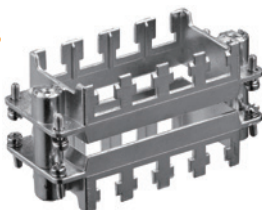
H6B



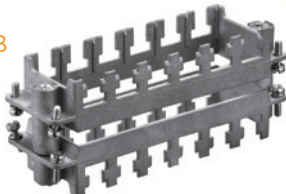
H10B



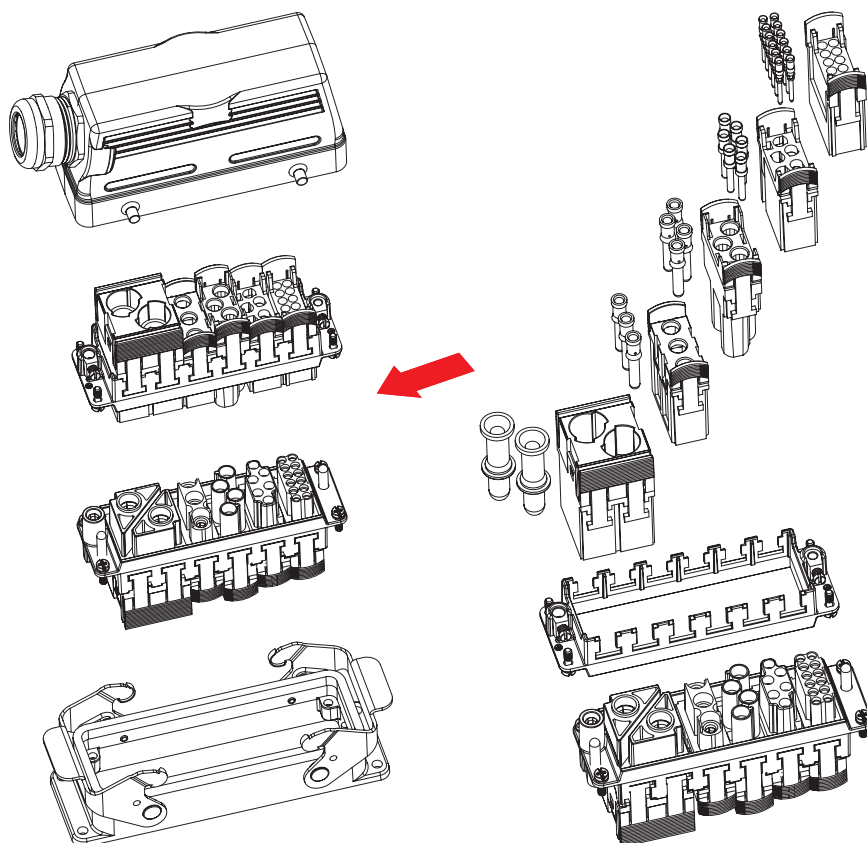
H16B



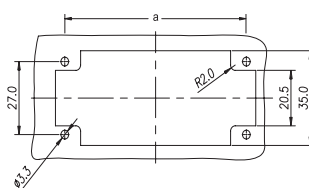
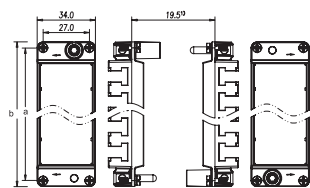
H24B



MODULAR UNITS, INSTALL AND REMOVE WITHOUT SPECIAL TOOLS!



### HMN MODULE FIXING FRAME



| Hood/Housing | NO. of modules | a    | b    |
|--------------|----------------|------|------|
| H10A         | 1              | 49.5 | 56.5 |
| H6B          | 2              | 44   | 51   |
| H10B         | 3              | 57   | 64.1 |
| H16B         | 4              | 77.5 | 84.5 |
| H24B         | 6              | 104  | 111  |

Distance for electrical contacts max. 21mm.  
For pneumatic contacts max. 20.5mm. Each frame is composed of an upper and a lower bracket.

| Description              | Size | Part Number     | Type       |
|--------------------------|------|-----------------|------------|
| H10A frame for 1 modules | H10A | T2079104201-M   | H10A-T1-M  |
|                          |      | T2079104101-F   | H10A-T1-F  |
| H6B frame for 2 modules  | H6B  | T2070064101-000 | H6BN-T2-M  |
|                          |      | T2070064201-000 | H6BN-T2-F  |
| H10B frame for 3 modules | H10B | T2070104101-000 | H10BN-T3-M |
|                          |      | T2070104201-000 | H10BN-T3-F |
| H16B frame for 4 modules | H16B | T2070164101-000 | H16BN-T4-M |
|                          |      | T2070164201-000 | H16BN-T4-F |
| H24B frame for 6 modules | H24B | T2070244101-000 | H24BN-T6-M |
|                          |      | T2070244201-000 | H24BN-T6-F |



[illegible]

## 200A/1 Pole module technical characteristics

Specifications .....DIN EN 60 664-1  
..... DIN EN 61 984  
Number of contacts .....1 pole

### INSERTS

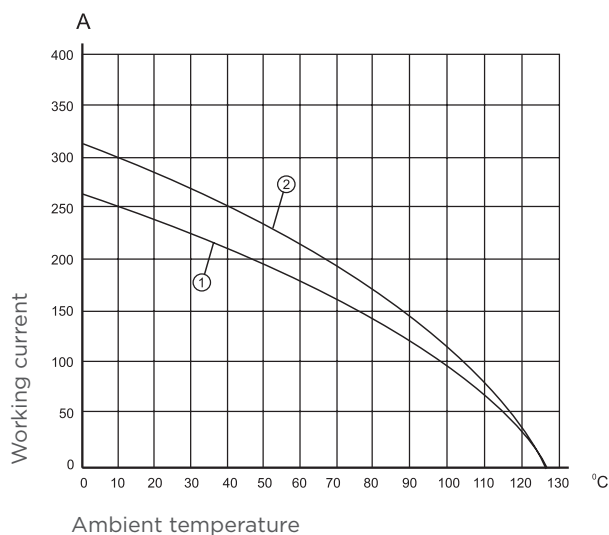
Working current ..... 200A max  
(See current carrying capacity)  
Working voltage ..... 1000V  
Test voltage urms ..... 8KV  
Pollution degree ..... 3  
Insulation resistance .....  $\geq 10^{10}\Omega$   
Material ..... Polycarbonate  
Temperature range ..... -40°C... +125°C  
Flammability acc. to UL94 ..... V0  
Working voltage acc. to UL/CSA..... 600V  
Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

Material .....Copper alloy  
Surface .....Hard silver-plated  
Contact resistance ..... $\leq 0.3m\Omega$   
Terminal ..... Crimp terminal  
- mm<sup>2</sup> .....25-70mm<sup>2</sup>  
- AWG .....2-0

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
Control and test procedures according to DIN IEC 60512-3.



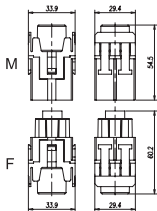
- 1 H24B hood/housing with 3 modules;  
wire gauge: 50mm<sup>2</sup>
- 2 H24B hood/housing with 3 modules;  
wire gauge: 70mm<sup>2</sup>

## HMN-001 module inserts

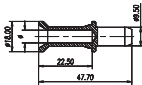
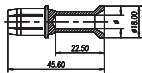
CRIMP TERMINAL

1000V MAX. 200A

1 Pole

| Dimensions (mm)                                                                   |                                                                                   | Type       | Part Number     |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|-----------------|-----------------|
|                                                                                   |                                                                                   |            | Male insert     | Female insert   |
| Crimp terminal                                                                    | Size chart                                                                        |            |                 |                 |
|  |  | HMN-001-MC | T2111013101-000 |                 |
|                                                                                   |                                                                                   | HMN-001-FC |                 | T2111013201-000 |

## 200A Contact

| Tech data<br>Material:<br>copper<br>Contact<br>resistance: $\leq 0.3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CHM/Male | 200A Male<br>crimp contacts<br>           | Wire gauge      | Ø    | Stripping<br>length | Crimp contacts, silver-plated |                 |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------|------|---------------------|-------------------------------|-----------------|
|                                                                                                                                  |                                                                                                                              | mm <sup>2</sup> |      | mm                  | Type                          | Part Number     |
|                                               |                                                                                                                              | 25              | 7.0  | 22.5                | CHM-25                        | T2060001025-000 |
|                                                                                                                                  |                                                                                                                              | 35              | 8.2  | 22.5                | CHM-35                        | T2060001035-000 |
|                                                                                                                                  |                                                                                                                              | 50              | 10.0 | 22.5                | CHM-50                        | T2060001050-000 |
|                                                                                                                                  |                                                                                                                              | 70              | 11.5 | 22.5                | CHM-70                        | T2060001070-000 |
|                                                                                                                                  |                                                                                                                              |                 |      |                     |                               |                 |
| <b>CHF/Female</b><br><br>                     | <b>200A Female<br/>crimp contacts</b><br> | 25              | 7.0  | 22.5                | CHF-25                        | T2060002025-000 |
|                                                                                                                                  |                                                                                                                              | 35              | 8.2  | 22.5                | CHF-35                        | T2060002035-000 |
|                                                                                                                                  |                                                                                                                              | 50              | 10.0 | 22.5                | CHF-50                        | T2060002050-000 |
|                                                                                                                                  |                                                                                                                              | 70              | 11.5 | 22.5                | CHF-70                        | T2060002070-000 |
|                                                                                                                                  |                                                                                                                              |                 |      |                     |                               |                 |

## 100A/2 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts .....2 poles

### INSERTS

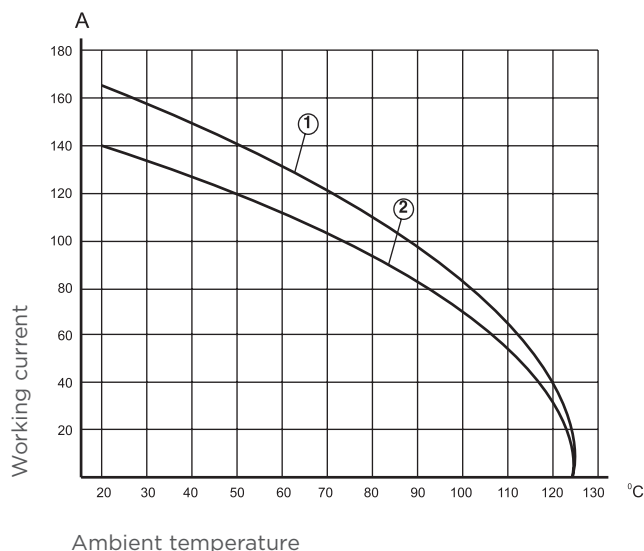
Working current ..... 100A max  
 (See current carrying capacity)  
 Working voltage ..... 1000V  
 Test voltage urms ..... 8KV  
 Pollution degree ..... 3  
 Insulation resistance .....  $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 ..... V0  
 Working voltage acc. to UL/CSA..... 600V  
 Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

Material .....Copper alloy  
 Surface .....Hard silver-plated  
 Contact resistance .....  $\leq 0.3m\Omega$   
 Terminal ..... Crimp terminal  
 - mm<sup>2</sup> ..... 10-35mm<sup>2</sup>  
 - AWG ..... 6-2

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



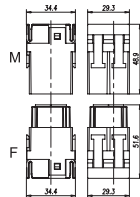
- 1 H24B hood/housing with 3 modules;  
wire gauge: 35mm<sup>2</sup>
- 2 H24B hood/housing with 3 modules;  
wire gauge: 25mm<sup>2</sup>

## HMN-D2 module inserts

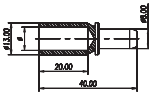
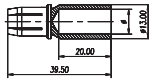
CRIMP TERMINAL

1000V MAX. 100A

2 Poles

| Dimensions (mm)                                                                    |                                                                                   | Type      | Part Number     |                 |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                    |                                                                                   |           | Male insert     | Female insert   |
| Crimp terminal                                                                     | Size chart                                                                        |           |                 |                 |
|   |  | HMN-D2-MC | T2111028101-000 |                 |
|                                                                                    |                                                                                   | HMN-D2-FC |                 | T2111028201-000 |
| Contact arrangement view from termination side                                     |                                                                                   |           |                 |                 |
|  |                                                                                   |           |                 |                 |

### 100A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 100A Male crimp contacts<br>          | Wire gauge      | $\varnothing$ | Stripping length | Crimp contacts, silver-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|------------------|-------------------------------|-----------------|
|                                                                                                                                      |                                                                                                                          | mm <sup>2</sup> |               | mm               | Type                          | Part Number     |
| <b>CDF/Female</b><br>                             | <b>100A Female crimp contacts</b><br> | 10              | 4.3           | 19               | CNM-10                        | T2050001010-000 |
|                                                                                                                                      |                                                                                                                          | 16              | 5.5           | 19               | CNM-16                        | T2050001016-000 |
|                                                                                                                                      |                                                                                                                          | 25              | 7             | 19               | CNM-25                        | T2050001025-000 |
|                                                                                                                                      |                                                                                                                          | 35              | 8.2           | 16               | CNM-35                        | T2050001035-000 |
|                                                                                                                                      |                                                                                                                          |                 |               |                  |                               |                 |
|                                                                                                                                      |                                                                                                                          | 10              | 4.3           | 19               | CNF-10                        | T2050002010-000 |
|                                                                                                                                      |                                                                                                                          | 16              | 5.5           | 19               | CNF-16                        | T2050002016-000 |
|                                                                                                                                      |                                                                                                                          | 25              | 7             | 19               | CNF-25                        | T2050002025-000 |
|                                                                                                                                      |                                                                                                                          | 35              | 8.2           | 16               | CNF-35                        | T2050002035-000 |
|                                                                                                                                      |                                                                                                                          |                 |               |                  |                               |                 |

## 70A/2 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts .....2 poles

### INSERTS

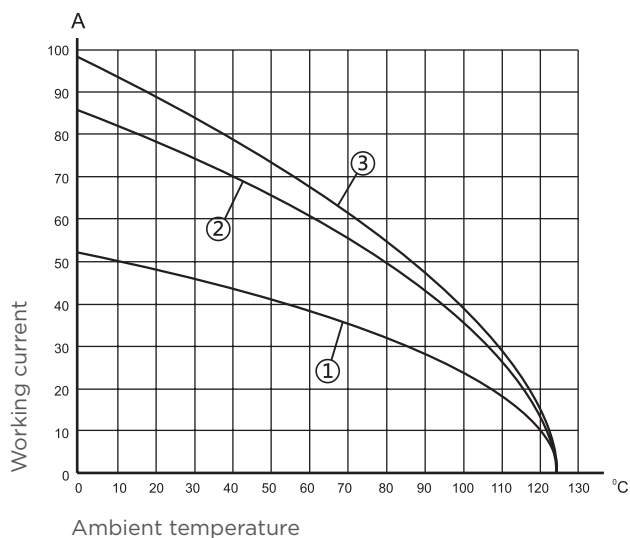
Working current ..... 70A max  
 (See current carrying capacity)  
 Working voltage ..... 1000V  
 Test voltage urms ..... 8KV  
 Pollution degree ..... 3  
 Insulation resistance .....  $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 ..... V0  
 Working voltage acc. to UL/CSA ..... 600V  
 Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

Material .....Copper alloy  
 Surface .....Hard silver-plated  
 Contact resistance ..... $\leq 0.5m\Omega$   
 Terminal ..... Crimp terminal  
 - mm<sup>2</sup> ..... 6-22mm<sup>2</sup>  
 - AWG .....8-4

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



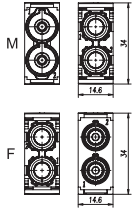
- 1 H24B hood/housing with 6 modules;  
wire gauge: 6mm<sup>2</sup>
- 2 H24B hood/housing with 6 modules;  
wire gauge: 16mm<sup>2</sup>
- 3 H24B hood/housing with 6 modules;  
wire gauge: 22mm<sup>2</sup>

## HMN-002 module inserts

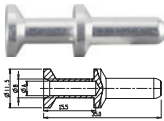
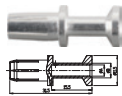
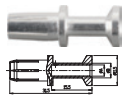
CRIMP TERMINAL

1000V MAX. 70A

2 Poles

| Dimensions (mm)                                                                   |                                                                                   | Type       | Part Number     |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|-----------------|-----------------|
|                                                                                   |                                                                                   |            | Male insert     | Female insert   |
| Crimp terminal (order crimp contacts separately)                                  | Contact arrangement view from termination side                                    |            |                 |                 |
|  |  | HMN-002-MC | T2111020101-000 |                 |
|                                                                                   |                                                                                   | HMN-002-FC |                 | T2111020201-000 |

### 70A Contact

| Male   |  | Wire gauge          |      | A   | B    | Crimp contacts, silver-plated |                  |
|--------|-------------------------------------------------------------------------------------|---------------------|------|-----|------|-------------------------------|------------------|
|        |                                                                                     | mm <sup>2</sup>     | AWG  |     |      | Type                          | Part Number      |
| Female |  | 10.0mm <sup>2</sup> | AWG7 | 4.3 | 5.6  | CSM-10                        | T24000001100-000 |
|        |                                                                                     | 16.0mm <sup>2</sup> | AWG5 | 5.5 | 8.5  | CSM-16                        | T24000001160-000 |
|        |                                                                                     | 25.0mm <sup>2</sup> | AWG3 | 7.0 | 10.0 | CSM-25                        | T24000001250-000 |
|        |                                                                                     | 10.0mm <sup>2</sup> | AWG7 | 4.3 | 5.6  | CSF-10                        | T24000002100-000 |
| Female |  | 16.0mm <sup>2</sup> | AWG5 | 5.5 | 8.5  | CSF-16                        | T24000002160-000 |
|        |                                                                                     | 25.0mm <sup>2</sup> | AWG3 | 7.0 | 10.0 | CSF-25                        | T24000002250-000 |
|        |                                                                                     |                     |      |     |      |                               |                  |

## 40A/3 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts .....3 poles

### INSERTS

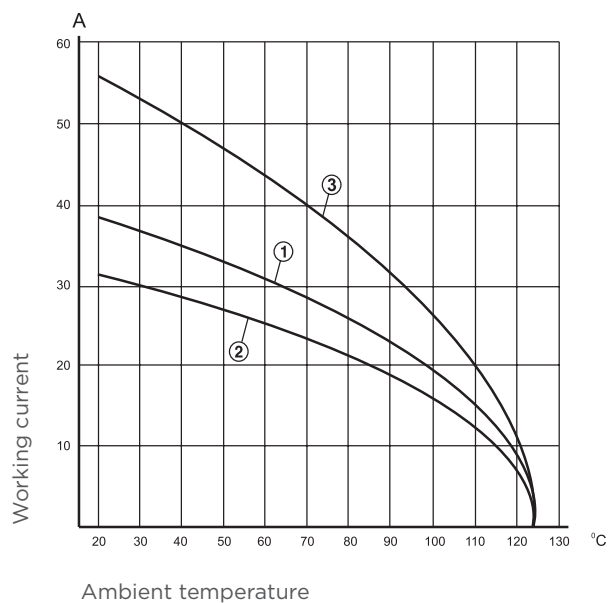
Working current .....40A max  
 (See current carrying capacity)  
 Working voltage  
 Cable ø up to 5mm..... 690V  
 Cable ø up to 7.5mm..... 500V  
 Test voltage urms .....6KV  
 Pollution degree .....3  
 Insulation resistance ..... $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 .....V0  
 Working voltage acc. to UL/CSA .....600V  
 Mechanical working life-mating cycles ..... $\geq 500$

### CONTACTS

Material .....Copper alloy  
 Surface .....Hard silver-plated  
 Contact resistance ..... $\leq 0.3m\Omega$   
 Terminal ..... Crimp terminal  
 - mm<sup>2</sup> .....1.0-6mm<sup>2</sup>  
 - AWG .....18-10

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



- 1 H24B hood/housing with 6 modules;  
wire gauge: 6.0mm<sup>2</sup>
- 2 H24B hood/housing with 6 modules;  
wire gauge: 4.0mm<sup>2</sup>
- 3 H24B hood/housing with 6 modules;  
wire gauge: 10.0mm<sup>2</sup>

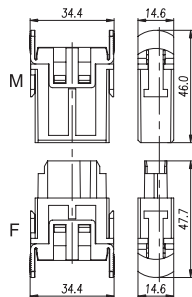
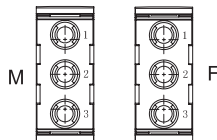


## HMN-003 module inserts

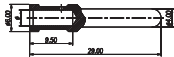
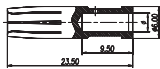
### CRIMP TERMINAL

690V MAX. 40A

3 Poles

| Dimensions (mm)                                                                     |                                                                                   | Type      | Part Number     |                 |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                     |                                                                                   |           | Male insert     | Female insert   |
| Crimp terminal                                                                      | Size chart                                                                        |           |                 |                 |
|    |  | HMN-003-M | T2111032101-000 |                 |
|                                                                                     |                                                                                   | HMN-003-F |                 | T2111032201-000 |
| Contact arrangement view from termination side                                      |                                                                                   |           |                 |                 |
|  |                                                                                   |           |                 |                 |

### 40A Contact

| Tech data                                                                                                                                                                                                               | 40A Male crimp contacts                                                                                                 | Wire gauge      |     | Stripping length | Crimp contacts, silver-plated |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------------------|-------------------------------|-----------------|
|                                                                                                                                                                                                                         |                                                                                                                         | mm <sup>2</sup> | AWG |                  | Type                          | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤0.3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CMM/Male</b><br> |                                      | 1.5             | 16  | 8.0              | CMM-1.5                       | T2040001015-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 2.5             | 14  | 8.0              | CMM-2.5                       | T2040001025-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 4.0             | 12  | 8.0              | CMM-4.0                       | T2040001040-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 6.0             | 10  | 8.0              | CMM-6.0                       | T2040001060-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 10              | 7   | 8.0              | CMM-10                        | T2040001100-000 |
| <b>CMF/Female</b><br>                                                                                                                | <b>40A Female crimp contacts</b><br> | 1.5             | 16  | 8.0              | CMF-1.5                       | T2040002015-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 2.5             | 14  | 8.0              | CMF-2.5                       | T2040002025-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 4.0             | 12  | 8.0              | CMF-4.0                       | T2040002040-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 6.0             | 10  | 8.0              | CMF-6.0                       | T2040002060-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 10              | 7   | 8.0              | CMF-10                        | T2040002100-000 |

## 40A/4 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts .....4 poles

### INSERTS

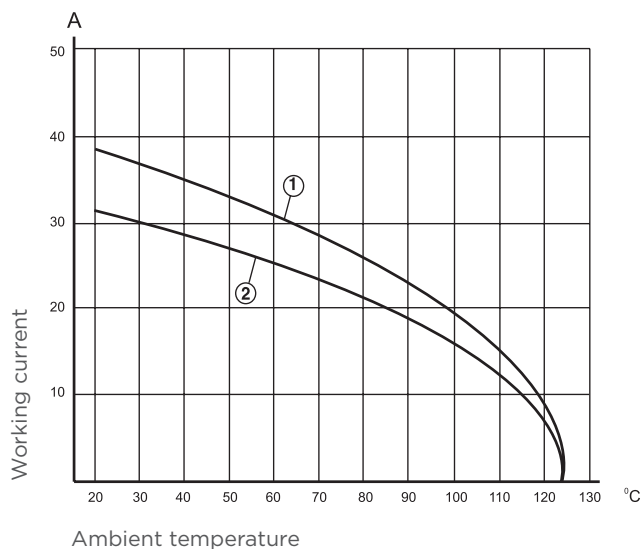
Working current .....40A max  
 (See current carrying capacity)  
 Working voltage  
 Cable  $\varnothing$  up to 5mm.....830V  
 Cable  $\varnothing$  up to 7.5mm.....500V  
 Test voltage urms .....8KV  
 Pollution degree .....3  
 Insulation resistance ..... $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 .....V0  
 Working voltage acc. to UL/CSA .....600V  
 Mechanical working life-mating cycles ..... $\geq 500$

### CONTACTS

Material .....Copper alloy  
 Surface .....Hard silver-plated  
 Contact resistance ..... $\leq 0.3m\Omega$   
 Terminal ..... Crimp terminal  
 -  $mm^2$  .....1.0-6 $mm^2$   
 - AWG .....18-10

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



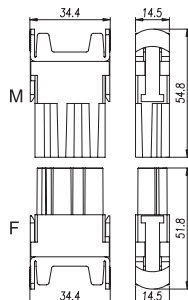
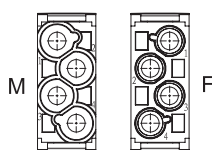
- 1 H24B hood/housing with 6 modules;  
wire gauge: 6.0 $mm^2$
- 2 H24B hood/housing with 6 modules;  
wire gauge: 4.0 $mm^2$

## HMN-004 module inserts

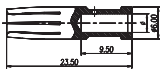
### CRIMP TERMINAL

830V MAX. 40A

4 Poles

| Dimensions (mm)                                                                     |                                                                                   | Type      | Part Number     |                 |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                     |                                                                                   |           | Male insert     | Female insert   |
| Crimp terminal                                                                      | Size chart                                                                        |           |                 |                 |
|    |  | HMN-004-M | T2111042101-000 |                 |
|                                                                                     |                                                                                   | HMN-004-F |                 | T2111042201-000 |
| Contact arrangement view from termination side                                      |                                                                                   |           |                 |                 |
|  |                                                                                   |           |                 |                 |

### 40A Contact

| Tech data                                                                                                                                                                                                               | 40A Male crimp contacts                                                                                                 | Wire gauge      |     | Stripping length | Crimp contacts, silver-plated |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------------------|-------------------------------|-----------------|
|                                                                                                                                                                                                                         |                                                                                                                         | mm <sup>2</sup> | AWG |                  | Type                          | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤0.3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CMM/Male</b><br> |                                      | 1.5             | 16  | 8.0              | CMM-1.5                       | T2040001015-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 2.5             | 14  | 8.0              | CMM-2.5                       | T2040001025-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 4.0             | 12  | 8.0              | CMM-4.0                       | T2040001040-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 6.0             | 10  | 8.0              | CMM-6.0                       | T2040001060-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 10              | 7   | 8.0              | CMM-10                        | T2040001100-000 |
| <b>CMF/Female</b><br>                                                                                                                | <b>40A Female crimp contacts</b><br> | 1.5             | 16  | 8.0              | CMF-1.5                       | T2040002015-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 2.5             | 14  | 8.0              | CMF-2.5                       | T2040002025-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 4.0             | 12  | 8.0              | CMF-4.0                       | T2040002040-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 6.0             | 10  | 8.0              | CMF-6.0                       | T2040002060-000 |
|                                                                                                                                                                                                                         |                                                                                                                         | 10              | 7   | 8.0              | CMF-10                        | T2040002100-000 |

## 16A/5 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts ..... 5 poles

### INSERTS

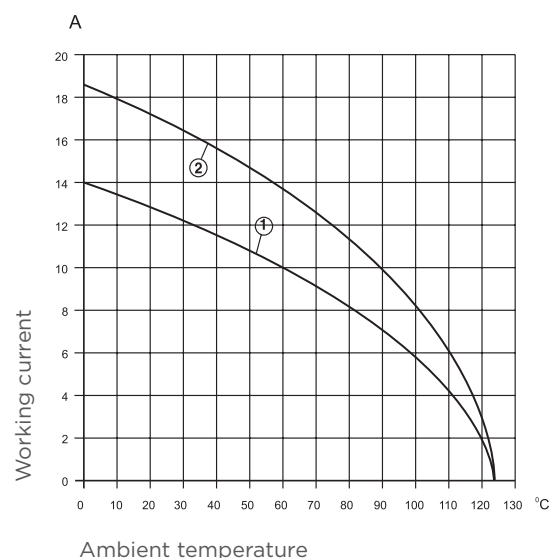
Working current ..... 16A max  
 (See current carrying capacity)  
 Working voltage ..... 400V  
 Test voltage urms ..... 6KV  
 Pollution degree ..... 3  
 Insulation resistance .....  $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 ..... V0  
 Working voltage acc. to UL/CSA ..... 600V  
 Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

Material ..... Copper alloy  
 Surface ..... Hard silver-plated  
 ..... Hard gold-plated  
 Contact resistance .....  $\leq 3m\Omega$   
 Terminal ..... Spring terminal  
 - mm<sup>2</sup> ..... 0.5-2.5mm<sup>2</sup>  
 - AWG ..... 20-14

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



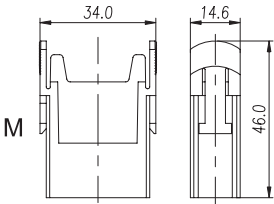
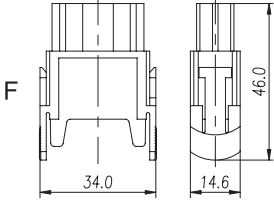
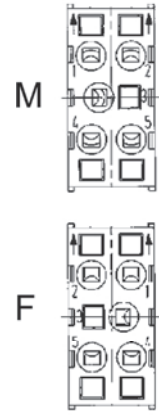
- 1 H24B hood/housing with 6 modules;  
wire gauge: 2.5mm<sup>2</sup>
- 2 H24B hood/housing with 6 modules;  
wire gauge: 1.5mm<sup>2</sup>

HMN-005 module inserts

SPRING TERMINAL

400V MAX. 16A

5 Poles

| Dimensions (mm)                                                                    |                                                                                     | Type       | Part Number     |                 |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|-----------------|-----------------|
|                                                                                    |                                                                                     |            | Male insert     | Female insert   |
| Spring terminal                                                                    | Size chart                                                                          |            |                 |                 |
|  |    | HMN-005-MS | T2110052101-000 |                 |
|                                                                                    |   | HMN-005-FS |                 | T2110052201-000 |
| Contact arrangement view from termination side                                     |  |            |                 |                 |

## 16A/6 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts .....6 poles

### INSERTS

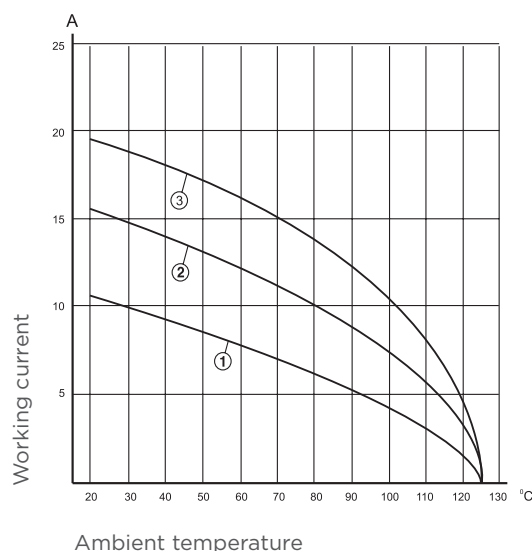
Working current ..... 16A max  
 (See current carrying capacity)  
 Working voltage ..... 500/830V  
 Test voltage urms .....  
 HMN-006-M/F ..... 6KV  
 HMN-006-PM/F ..... 8KV  
 Pollution degree ..... 3  
 Insulation resistance .....  $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 ..... V0  
 Working voltage acc. to UL/CSA ..... 600V  
 Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

Material .....Copper alloy  
 Surface .....Hard silver-plated  
 .....Hard gold-plated  
 Contact resistance ..... $\leq 1m\Omega$   
 Terminal ..... Crimp terminal  
 - mm<sup>2</sup> ..... 0.14-4.0mm<sup>2</sup>  
 - AWG ..... 26-12

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.

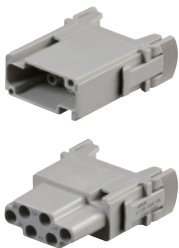
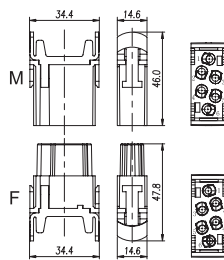
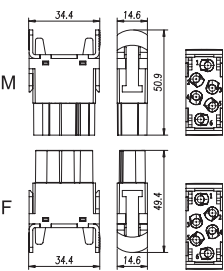


- 1 H24B hood/housing with 6 modules;  
wire gauge: 1.5mm<sup>2</sup>
- 2 H24B hood/housing with 6 modules;  
wire gauge: 2.5mm<sup>2</sup>
- 2 H24B hood/housing with 6 modules;  
wire gauge: 4mm<sup>2</sup>

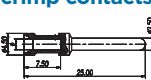
## HMN-006 module inserts

### CRIMP TERMINAL

6 Poles

| Dimensions (mm)                                                                                     |                                                                                    | Type       | Part Number     |                 |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------|-----------------|-----------------|
|                                                                                                     |                                                                                    |            | Male insert     | Female insert   |
| Crimp terminal                                                                                      | Contact arrangement view from termination side                                     |            |                 |                 |
| 500V max. 16A<br>  |   | HMN-006-M  | T2111062101-000 |                 |
|                                                                                                     |                                                                                    | HMN-006-F  |                 | T2111062201-000 |
| 830V Max. 16A<br> |  | HMN-006-PM | T2111063101-000 |                 |
|                                                                                                     |                                                                                    | HMN-006-PF |                 | T2111063201-000 |

### 16A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male<br> | 16A Male crimp contacts<br>   | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                             |                                                                                                                  | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
|                                                                                                                                                                                                                             |                                                                                                                  |                 |       |                   |                               |                 |                             |                 |
| CEF/Female<br>                                                                                                                           | 16A Female crimp contacts<br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |
|                                                                                                                                                                                                                             |                                                                                                                  |                 |       |                   |                               |                 |                             |                 |

## 16A/8 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts .....8 poles

### INSERTS

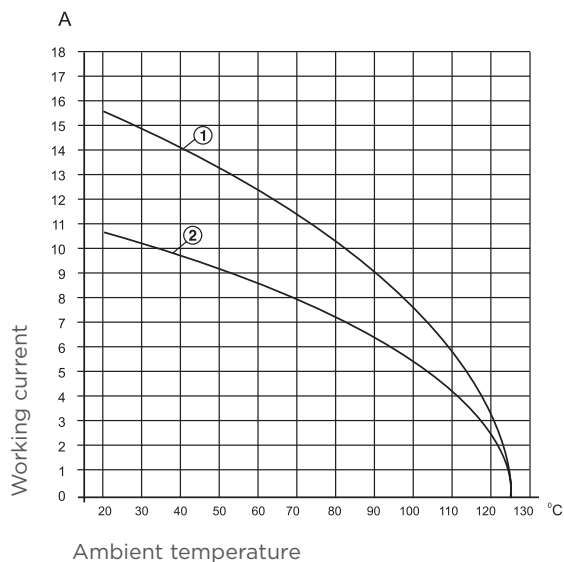
Working current ..... 16A max  
 (See current carrying capacity)  
 Working voltage .....400V  
 Test voltage urms .....6KV  
 Pollution degree ..... 3  
 Insulation resistance .....  $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 ..... V0  
 Working voltage acc. to UL/CSA ..... 600V  
 Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

Material .....Copper alloy  
 Surface .....Hard silver-plated  
 .....Hard gold-plated  
 Contact resistance .....  $\leq 1m\Omega$   
 Terminal ..... Crimp terminal  
 - mm<sup>2</sup> ..... 0.14-4.0mm<sup>2</sup>  
 - AWG ..... 26-12

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



- 1 H24B hood/housing with 6 modules;  
wire gauge: 2.5mm<sup>2</sup>
- 2 H24B hood/housing with 6 modules;  
wire gauge: 1.5mm<sup>2</sup>

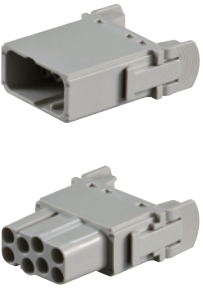
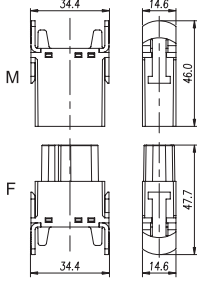
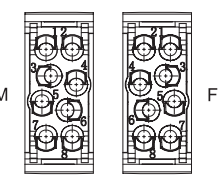


## HMN-008 module inserts

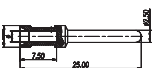
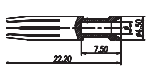
### CRIMP TERMINAL

400V MAX. 16A

8 Poles

| Dimensions (mm)                                                                   |                                                                                     | Type      | Part Number     |                 |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                   |                                                                                     |           | Male insert     | Female insert   |
| Crimp terminal (Order crimp contacts separately)                                  | Size chart                                                                          |           |                 |                 |
|  |    | HMN-008-M | T2111082101-000 |                 |
|                                                                                   |                                                                                     | HMN-008-F |                 | T2111082201-000 |
| Contact arrangement view from termination side                                    |  |           |                 |                 |

### 16A Contact

| Tech data                                                                                                                                                                                                          | 16A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                    |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b>  |                                      | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| <b>CEF/Female</b>                                                                                                               | <b>16A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

## 10A/12 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts .....12 poles

### INSERTS

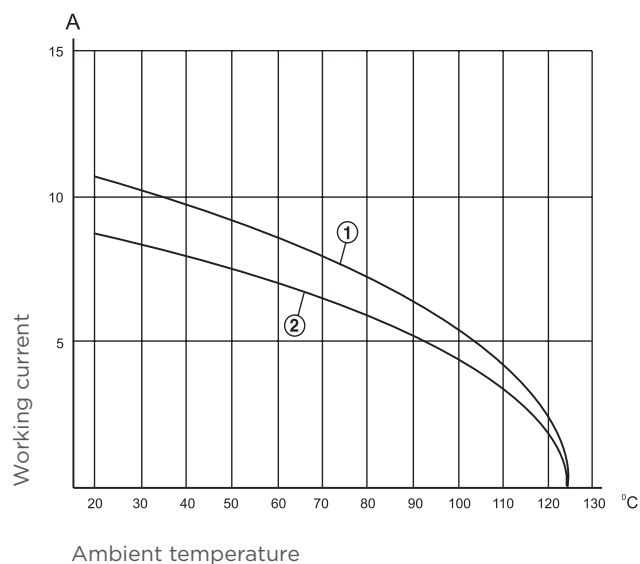
Working current .....10A max  
 (See current carrying capacity)  
 Working voltage .....250V  
 Test voltage urms .....4KV  
 Pollution degree .....3  
 Insulation resistance ..... $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 .....V0  
 Working voltage acc. to UL/CSA .....600V  
 Mechanical working life-mating cycles ..... $\geq 500$

### CONTACTS

Material .....Copper alloy  
 Surface .....Hard silver-plated  
 .....Hard gold-plated  
 Contact resistance ..... $\leq 3m\Omega$   
 Terminal ..... Crimp terminal  
 - mm<sup>2</sup> .....0.14-2.5mm<sup>2</sup>  
 - AWG .....26-14

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



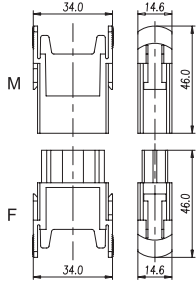
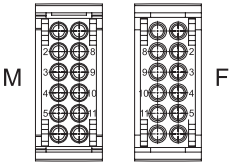
- 1 H24B hood/housing with 6 modules;  
wire gauge: 1.5mm<sup>2</sup>
- 2 H24B hood/housing with 6 modules;  
wire gauge: 1.0mm<sup>2</sup>

## HMN-012 module inserts

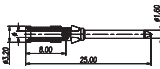
### CRIMP TERMINAL

250V MAX. 10A

12 Poles

| Dimensions (mm)                                                                                                                                                        |                                                                                     | Type      | Part Number     |                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                                                                                                        |                                                                                     |           | Male insert     | Female insert   |
| Crimp terminal (Order crimp contacts separately)                                                                                                                       | Size chart                                                                          |           |                 |                 |
| <br> |    | HMN-012-M | T2111122101-000 |                 |
|                                                                                                                                                                        |                                                                                     | HMN-012-F |                 | T2111122201-000 |
| Contact arrangement view from termination side                                                                                                                         |  |           |                 |                 |

### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male<br> | 10A Male crimp contacts<br>   | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                             |                                                                                                                  | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.14-0.37       | 26-22 | 8.0               | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 8.0               | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 8.0               | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 8.0               | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 8.0               | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 6.0               | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
| CDF/Female<br>                                                                                                                           | 10A Female crimp contacts<br> | 0.14-0.37       | 26-22 | 8.0               | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.5             | 20    | 8.0               | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 0.75            | 18    | 8.0               | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.0             | 18    | 8.0               | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 1.5             | 16    | 8.0               | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                                                                                                             |                                                                                                                  | 2.5             | 14    | 6.0               | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |

## 10A/17 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts .....17 poles

### INSERTS

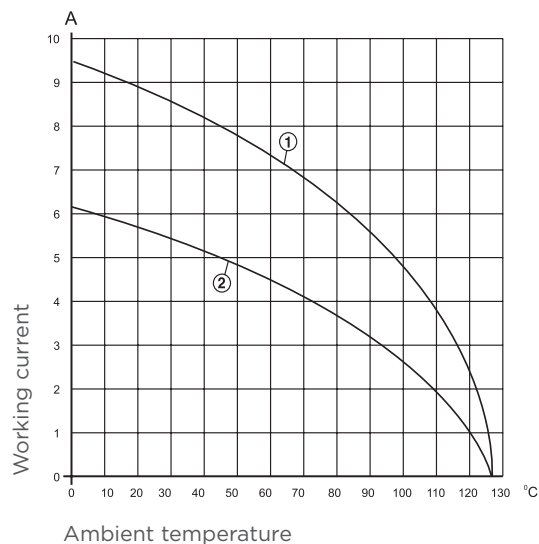
Working current .....10A max  
 (See current carrying capacity)  
 Working voltage.....160V  
 Test voltage urms .....2.5KV  
 Pollution degree .....3  
 Pollution degree acc. to TUV.....2  
 Insulation resistance ..... $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 .....V0  
 Working voltage acc. to UL/CSA .....600V  
 Mechanical working life-mating cycles ..... $\geq 500$

### CONTACTS

Material .....Copper alloy  
 Surface .....Hard silver-plated  
 .....Hard gold-plated  
 Contact resistance ..... $\leq 3m\Omega$   
 Terminal ..... Crimp terminal  
 - mm<sup>2</sup> .....0.14-2.5mm<sup>2</sup>  
 - AWG .....26-14

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



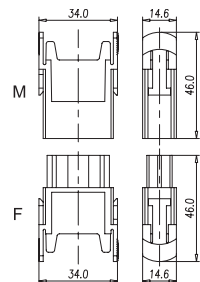
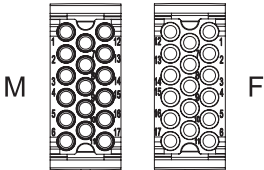
- 1 H24B hood/housing with 6 modules;  
wire gauge: 1.5mm<sup>2</sup>
- 2 H24B hood/housing with 6 modules;  
wire gauge: 1.0mm<sup>2</sup>

## HMN-017 module inserts

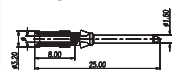
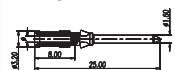
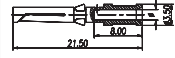
### CRIMP TERMINAL

160V MAX. 10A

17 Poles

| Dimensions (mm)                                                                   |                                                                                     | Type      | Part Number     |                 |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                   |                                                                                     |           | Male insert     | Female insert   |
| Crimp terminal (Order crimp contacts separately)                                  | Size chart                                                                          |           |                 |                 |
|  |    | HMN-017-M | T2111172101-000 |                 |
|                                                                                   |                                                                                     | HMN-017-F |                 | T2111172201-000 |
| Contact arrangement view from termination side                                    |  |           |                 |                 |

### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male crimp contacts<br> | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
|                                                   |                             | 0.14-0.37       | 26-22 | 8.0               | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                      |                                                                                                                | 0.5             | 20    | 8.0               | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                      |                                                                                                                | 0.75            | 18    | 8.0               | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                      |                                                                                                                | 1.0             | 18    | 8.0               | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                      |                                                                                                                | 1.5             | 16    | 8.0               | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                      |                                                                                                                | 2.5             | 14    | 6.0               | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                      |                                                                                                                |                 |       |                   |                               |                 |                             |                 |
|                                                   |                             | 0.14-0.37       | 26-22 | 8.0               | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                      |                                                                                                                | 0.5             | 20    | 8.0               | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                      |                                                                                                                | 0.75            | 18    | 8.0               | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                      |                                                                                                                | 1.0             | 18    | 8.0               | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                      |                                                                                                                | 1.5             | 16    | 8.0               | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                      |                                                                                                                | 2.5             | 14    | 6.0               | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |
|                                                                                                                                      |                                                                                                                |                 |       |                   |                               |                 |                             |                 |

## 16A/20 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts ..... 20 poles

### INSERTS

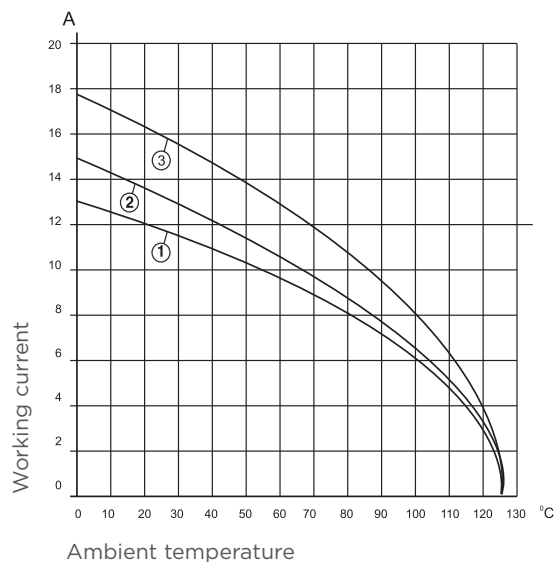
Working current ..... 16A max  
 (See current carrying capacity)  
 Working voltage ..... 500V  
 Test voltage urms ..... 6KV  
 Pollution degree ..... 3  
 Insulation resistance .....  $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 ..... V0  
 Working voltage acc. to UL/CSA ..... 600V  
 Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

Material ..... Copper alloy  
 Surface ..... Hard silver-plated  
 ..... Hard gold-plated  
 Contact resistance .....  $\leq 1m\Omega$   
 Terminal ..... Crimp terminal  
 - mm<sup>2</sup> ..... 0.14-4.0mm<sup>2</sup>  
 - AWG ..... 26-12

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



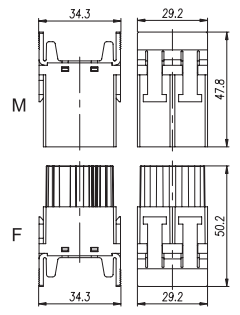
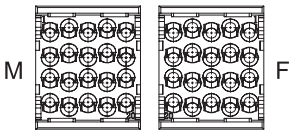
- 1 H24B hood/housing with 3 modules;  
wire gauge: 1.5mm<sup>2</sup>
- 2 H24B hood/housing with 3 modules;  
wire gauge: 2.5mm<sup>2</sup>
- 3 H24B hood/housing with 3 modules;  
wire gauge: 4mm<sup>2</sup>

## HMN-020 module inserts

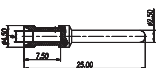
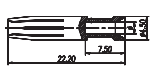
### CRIMP TERMINAL

500V MAX. 16A

20 Poles

| Dimensions (mm)                                                                   |                                                                                     | Type      | Part Number     |                 |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                   |                                                                                     |           | Male insert     | Female insert   |
| Crimp terminal (Order crimp contacts separately)                                  | Size chart                                                                          |           |                 |                 |
|  |    | HMN-020-M | T2111202101-000 |                 |
|                                                                                   |                                                                                     | HMN-020-F |                 | T2111202201-000 |
| Contact arrangement view from termination side                                    |  |           |                 |                 |

### 16A Contact

| Tech data                                                                                                                                                                                                          | 16A Male crimp contacts                                                                                                 | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                    |                                                                                                                         | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤1mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CEM/Male</b>  |                                      | 0.14-0.37       | 26-22 | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.5             | 20    | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.75            | 18    | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.0             | 18    | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.5             | 16    | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 2.5             | 14    | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 4.0             | 12    | 7.5               | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| <b>CEF/Female</b>                                                                                                               | <b>16A Female crimp contacts</b><br> | 0.14-0.37       | 26-22 | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.5             | 20    | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 0.75            | 18    | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.0             | 18    | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 1.5             | 16    | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 2.5             | 14    | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                    |                                                                                                                         | 4.0             | 12    | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

## 5A/25 Poles module technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts .....25 poles

### INSERTS

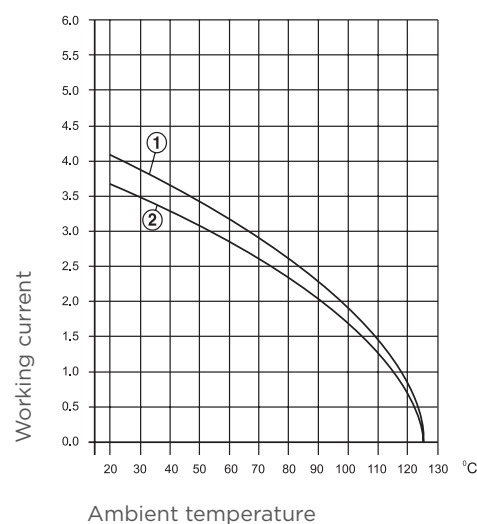
Working current .....5A max  
 (See current carrying capacity)  
 Working voltage..... 50V  
 Test voltage urms ..... 0.8KV  
 Pollution degree ..... 3  
 Insulation resistance .....  $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 ..... V0  
 Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

Material .....Copper alloy  
 Surface .....Hard silver-plated  
 .....Hard gold-plated  
 Contact resistance ..... $\leq 1m\Omega$   
 Terminal ..... Crimp terminal  
 - mm<sup>2</sup> .....0.08-0.52mm<sup>2</sup>  
 - AWG .....28-20

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



#### Turned contacts

1 H24B hood/housing with 6 modules;  
 wire gauge: 0.5mm<sup>2</sup>

#### Stamped contacts

2 H24B hood/housing with 6 modules;  
 wire gauge: 0.5mm<sup>2</sup>

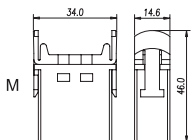
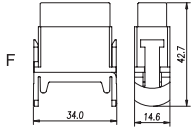
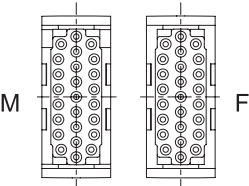


## HMN-025 module inserts

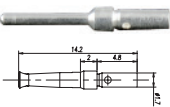
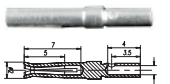
### CRIMP TERMINAL

50V MAX. 5A

25 poles

| Dimensions (mm)                                                                                                                                                        |                                                                                     | Type      | Part Number     |                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|-----------------|-----------------|
|                                                                                                                                                                        |                                                                                     |           | Male insert     | Female insert   |
| Crimp terminal (Order crimp contacts separately)                                                                                                                       | Size chart                                                                          |           |                 |                 |
| <br> |    | HMN-025-M | T2111252101-000 |                 |
|                                                                                                                                                                        |    | HMN-025-F |                 | T2111252201-000 |
| Contact arrangement view from termination side                                                                                                                         |  |           |                 |                 |

### 5A Contact

| Male   |  | Wire gauge      |       | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------|-------------------------------------------------------------------------------------|-----------------|-------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|        |                                                                                     | mm <sup>2</sup> | AWG   |                   | Type                          | Part Number     | Type                        | Part Number     |
|        |                                                                                     | 0.08-0.21       | 28-24 | 5.0               | CAM-08                        | T2070001008-000 | DAM-08                      | T2070011008-000 |
|        |                                                                                     | 0.13-0.33       | 26-22 | 5.0               | CAM-13                        | T2070001013-000 | DAM-13                      | T2070011013-000 |
|        |                                                                                     | 0.33-0.52       | 22-20 | 5.0               | CAM-33                        | T2070001033-000 | DAM-33                      | T2070011033-000 |
| Female |  | mm <sup>2</sup> | AWG   | mm                | Type                          | Part Number     | Type                        | Part Number     |
|        |                                                                                     | 0.08-0.21       | 28-24 | 5.0               | CAF-08                        | T2070002008-000 | DAF-08                      | T2070012008-000 |
|        |                                                                                     | 0.13-0.33       | 26-22 | 5.0               | CAF-13                        | T2070002013-000 | DAF-13                      | T2070012013-000 |
|        |                                                                                     | 0.33-0.52       | 22-20 | 5.0               | CAF-33                        | T2070002033-000 | DAF-33                      | T2070012033-000 |

## D-Sub & RJ45 module technical characteristics

### D-SUB MODULE TECHNICAL CHARACTERISTICS

Specifications .....DIN EN 60 664-1  
..... DIN EN 61 984  
Number of contacts .....9 poles

#### INSERTS

Working current .....5A max  
(See current carrying capacity)  
Working voltage..... 50V  
Test voltage urms ..... 0.8KV  
Pollution degree .....3  
Insulation resistance .....  $\geq 10^{10}\Omega$   
Material ..... Polycarbonate  
Temperature range ..... -40°C... +125°C  
Flammability acc. to UL94 .....V0  
Mechanical working life-mating cycles .....  $\geq 500$

#### CONTACTS

Material .....Copper alloy  
Surface .....Hard silver-plated  
.....Hard gold-plated  
Contact resistance .....  $\leq 1m\Omega$   
Terminal ..... Crimp terminal

### RJ45 MODULE TECHNICAL CHARACTERISTICS

Specifications .....DIN EN 60 664-1  
..... DIN EN 61 984  
Number of contacts .....8 poles

#### INSERTS

Working current .....1A max  
(See current carrying capacity)  
Working voltage..... 50V  
Test voltage urms ..... 0.8KV  
Pollution degree .....3  
Insulation resistance .....  $\geq 10^{10}\Omega$   
Material ..... Polycarbonate  
Temperature range ..... -40°C... +85°C  
Flammability acc. to UL94 .....V0  
Mechanical working life-mating cycles .....  $\geq 500$

#### MODULE WITH RJ45 TERMINAL

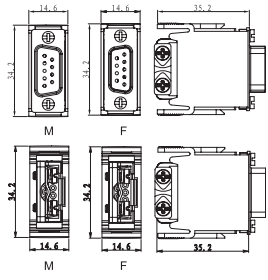
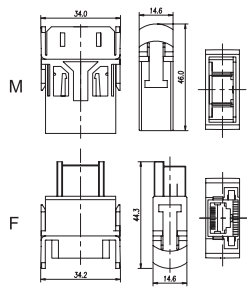
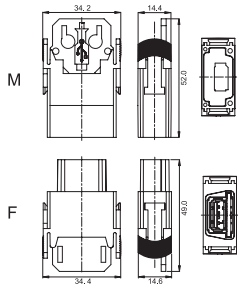
Material ..... Polycarbonate  
Temperature range..... -40°C... +70°C  
Flammability acc. to UL94 .....V0  
Stranded wire diameter..... 0.89-0.99mm  
Wire gauge ..... AWG24-26

Material ..... Polycarbonate  
Temperature range..... -40°C... +70°C  
Flammability acc. to UL94 .....V0  
Stranded wire diameter..... 0.94-1.07mm  
Wire gauge .....AWG22-24

## D-Sub/RJ45/USB module inserts

### CRIMP TERMINAL

9 Poles & 8 Poles & USB

| Dimensions (mm)                                                                                                                                                         |                                                                                     | Type        | Part Number     |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------|-----------------|-----------------|
|                                                                                                                                                                         |                                                                                     |             | Male insert     | Female insert   |
| Crimp terminal (Order crimp contacts separately)                                                                                                                        | Size chart                                                                          |             |                 |                 |
|       |    | HMN-009-M   | T2111092101-000 |                 |
|                                                                                                                                                                         |                                                                                     | HMN-009-F   |                 | T2111092201-000 |
|    |   | HMN-RJ45-MC | T2113000101-100 |                 |
|                                                                                                                                                                         |                                                                                     | HMN-RJ45-F  |                 | T2113000201-000 |
|   |  | HMN-USB-M   | T2114000101-000 |                 |
|                                                                                                                                                                         |                                                                                     | HMN-USB-F   |                 | T2114000201-000 |

## Quint module technical characteristics

Specifications .....DIN EN 60 664-1  
..... DIN EN 61 984

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.

### INSERTS

Number of contacts ..... 2  
Insulation resistance .....  $\geq 10^{10} \Omega$   
Material ..... Polycarbonate  
Temperature range ..... -40°C ... +125°C  
Flammability acc. to UL 94 ..... V0  
Mechanical working life-mating cycles.....  $\geq 500$

### QUINT CONTACTS

Number of contacts  
- Quint 1 + shielding  
- Quint 4 + shielding  
- High Density Quint 8 + shielding

Working current  
- Quint 1..... 16A max  
- Quint 4 ..... 10A max  
- Quint 8 ..... 5A max  
Working voltage..... 50V  
Test voltage urms..... 0.8KV  
Pollution degree ..... 3  
Quint 8 Pollution degree acc. to TUV ..... 2  
Insulation resistance .....  $\geq 10^{10} \Omega$   
Material ..... Polycarbonate  
Temperature range ..... -40°C ... +125°C  
Flammability acc. to UL 94 ..... V0  
Mechanical working life-mating cycles.....  $\geq 500$

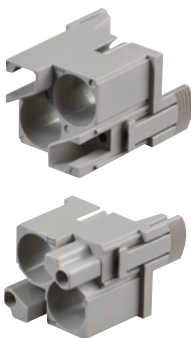
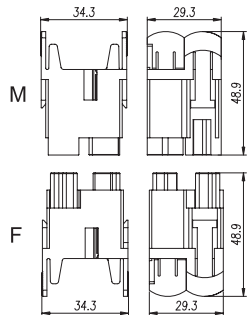
### CONTACTS

Material ..... Copper alloy  
Surface ..... Hard silver-plated  
..... Hard gold-plated  
Contact resistance.....  $\leq 3m\Omega$   
Terminal ..... Crimp terminal  
- mm<sup>2</sup>  
- Quint 1..... 0.14-4mm<sup>2</sup>  
- Quint 4 ..... 0.14-2.5mm<sup>2</sup>  
- Quint 8 ..... 0.08-0.52mm<sup>2</sup>  
- AWG  
- Quint 1..... 26-12  
- Quint 4 ..... 26-14  
- Quint 8 ..... 28-20

## Quint module inserts

### CRIMP TERMINAL

2 Poles

| Dimensions (mm)                                                                   |                                                                                   | Type     | Part Number     |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|-----------------|-----------------|
|                                                                                   |                                                                                   |          | Male insert     | Female insert   |
| Crimp terminal (Order crimp contacts separately)                                  | Size chart                                                                        |          |                 |                 |
|  |  | HMN-Q1-M | T2111027101-000 |                 |
|                                                                                   |                                                                                   | HMN-Q1-F |                 | T2111027201-000 |
|                                                                                   |                                                                                   | HMN-Q2-M | T2111027101-001 |                 |
|                                                                                   |                                                                                   | HMN-Q2-F |                 | T2111027201-001 |
|                                                                                   |                                                                                   | HMN-Q3-M | T2111027101-002 |                 |
|                                                                                   |                                                                                   | HMN-Q3-F |                 | T2111027201-002 |

#### Quint 1-pos

For 16A crimp contacts

|                                                                                     |          |                 |                 |
|-------------------------------------------------------------------------------------|----------|-----------------|-----------------|
|  | PIN-Q1-M | T2580011154-000 |                 |
|                                                                                     | PIN-Q1-F |                 | T2580012154-000 |

#### Quint 4-pos

For 10A crimp contacts

|                                                                                     |          |                 |                 |
|-------------------------------------------------------------------------------------|----------|-----------------|-----------------|
|  | PIN-Q2-M | T2580031154-000 |                 |
|                                                                                     | PIN-Q2-F |                 | T2580032154-000 |

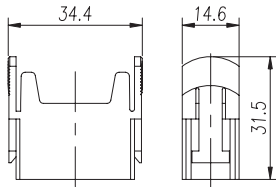
#### Quint 8-pos

For D-Sub crimp contacts

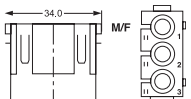
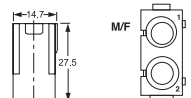
|                                                                                     |          |                 |                 |
|-------------------------------------------------------------------------------------|----------|-----------------|-----------------|
|  | PIN-Q3-M | T2580081154-000 |                 |
|                                                                                     | PIN-Q3-F |                 | T2580082154-000 |

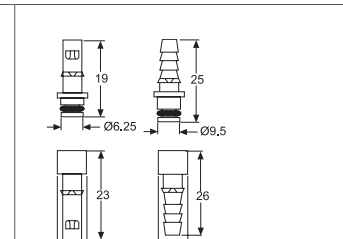
Dummy module inserts

1

| Dimensions (mm)                                                                   |                                                                                   | Type   | Part Number     |               |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|-----------------|---------------|
|                                                                                   |                                                                                   |        | Male insert     | Female insert |
|                                                                                   | Size chart                                                                        |        |                 |               |
|  |  | HMN-DM | T3110009902-000 |               |

## PNEUMATIC CONTACTS, MODULAR UNITS, WITH 2 OR 3 SEATS

| Dimensions (mm)                                                                   |                                                                                   | Type    | Part Number     |               |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|-----------------|---------------|
|                                                                                   |                                                                                   |         | Male insert     | Female insert |
|                                                                                   | Contact arrangement view from termination side                                    |         |                 |               |
|  |  | HMN-PA3 | T2111032301-000 |               |
|                                                                                   |  | HMN-PA2 | T2111022301-000 |               |

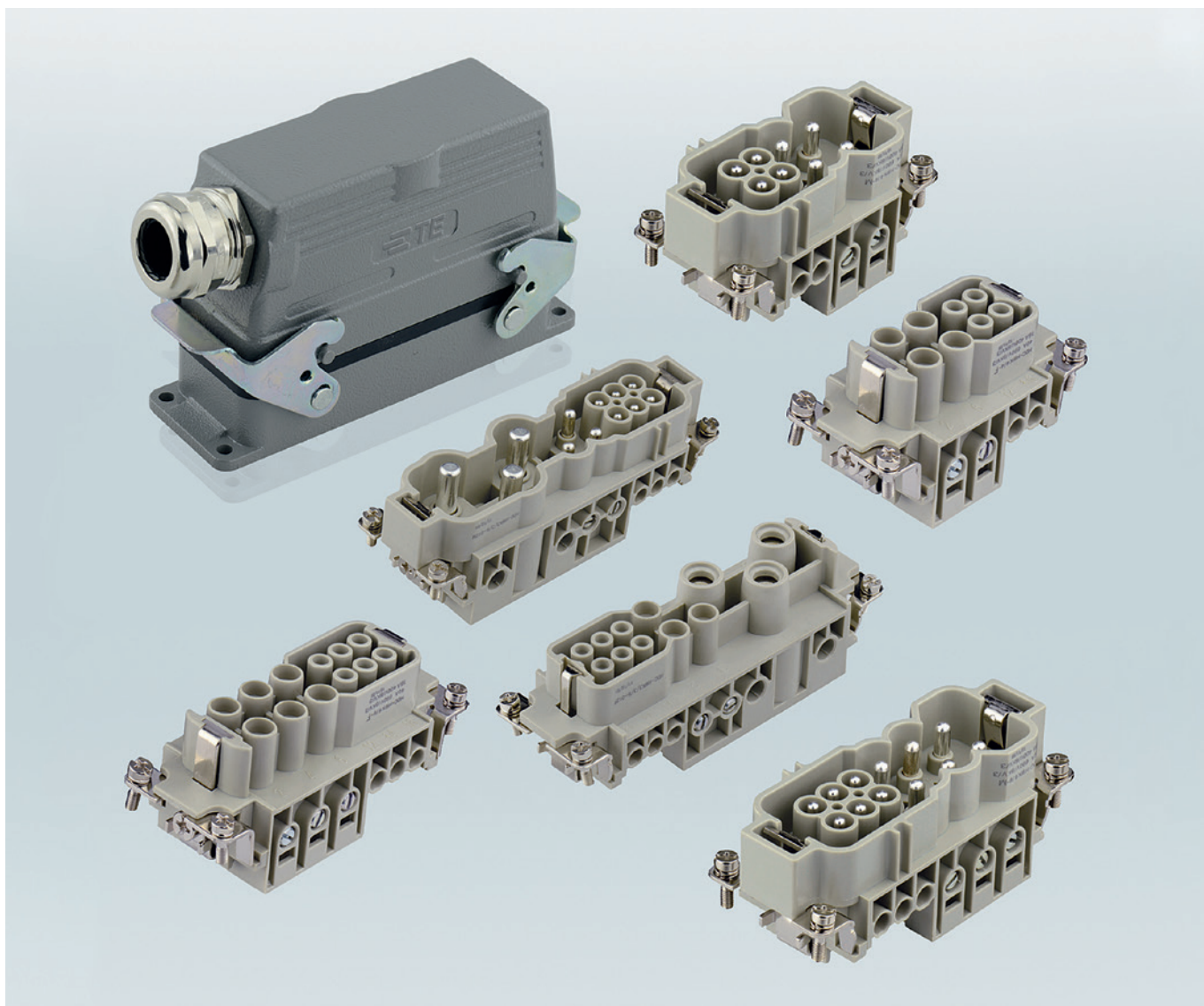
|                                                                                                                                                                                                                                                                                                 |                                                                                    |                                                                                 |                                                                                             |                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                               |  |                                                                                 |                                                                                             |                                                                                             |
| <p><b>Male contacts without closing valve</b></p> <p>For tubes with internal ø 1.6mm (For HMN P3 module)</p> <p>For tubes with internal ø 3.0mm (For HMN P3 module)</p> <p>For tubes with internal ø 4.0mm (For HMN P3 module)</p> <p>For tubes with internal ø 6.0mm (For HMN P2 module)</p>   |                                                                                    | <p>Pneu-c-M1.6</p> <p>Pneu-c-M3.0</p> <p>Pneu-c-M4.0</p> <p>Pneu-c-M6.0</p>     | <p>T2090002101-001</p> <p>T2090002101-002</p> <p>T2090002101-003</p> <p>T2090002101-004</p> |                                                                                             |
| <p><b>Female contacts without closing valve</b></p> <p>For tubes with internal ø 1.6mm (For HMN P3 module)</p> <p>For tubes with internal ø 3.0mm (For HMN P3 module)</p> <p>For tubes with internal ø 4.0mm (For HMN P3 module)</p> <p>For tubes with internal ø 6.0mm (For HMN P2 module)</p> |                                                                                    | <p>Pneu-c-F1.6</p> <p>Pneu-c-F3.0</p> <p>Pneu-c-F4.0</p> <p>Pneu-c-F6.0</p>     |                                                                                             | <p>T2090002201-001</p> <p>T2090002201-002</p> <p>T2090002201-003</p> <p>T2090002201-004</p> |
| <p><b>Female contacts with closing valve</b></p> <p>For tubes with internal ø 1.6mm (For HMN P3 module)</p> <p>For tubes with internal ø 3.0mm (For HMN P3 module)</p> <p>For tubes with internal ø 4.0mm (For HMN P3 module)</p> <p>For tubes with internal ø 6.0mm (For HMN P3 module)</p>    |                                                                                    | <p>Pneu-c-Fw1.6</p> <p>Pneu-c-Fw3.0</p> <p>Pneu-c-Fw4.0</p> <p>Pneu-c-Fw6.0</p> |                                                                                             | <p>T2090012201-001</p> <p>T2090012201-002</p> <p>T2090012201-003</p> <p>T2090012201-004</p> |
| <p><b>Male contacts (use contacts without closing valve)</b></p>                                                                                                                                                                                                                                |                                                                                    |                                                                                 |                                                                                             |                                                                                             |

## Notes

[illegible]



## HK, HWK Series



### 1. Specifications

DIN VDE 0110 Concerning clearance and creepage distances

DIN VDE 0627 Connectors and plug devices

### 2. Standards

DIN EN 60 664-1

DIN EN 61 984

### 3. Approvals



## HK8/24 technical characteristics

|                          |                 |
|--------------------------|-----------------|
| Specifications .....     | DIN EN 60 664-1 |
| .....                    | DIN EN 61 984   |
| Number of contacts ..... | 8/24 + PE       |

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.

### INSERTS

|                                             |                      |
|---------------------------------------------|----------------------|
| Rated current .....                         |                      |
| Power contact .....                         | 16A max              |
| Signal contact.....                         | 10A max              |
| Working voltage .....                       |                      |
| Power contact .....                         |                      |
| Conductor - ground .....                    | 230V                 |
| Conductor - conductor.....                  | 400V                 |
| Signal contact.....                         | 160V                 |
| Test voltage urms .....                     |                      |
| Power contact .....                         | 4KV                  |
| Signal contact.....                         | 2.5KV                |
| Pollution degree .....                      | 2                    |
| Insulation resistance .....                 | $\geq 10^{10}\Omega$ |
| Material .....                              | Polycarbonate        |
| Temperature range .....                     | -40°C... +125°C      |
| Flammability acc. to UL94 .....             | V0                   |
| Working voltage acc. to UL/CSA.....         | 600V/300V            |
| Mechanical working life-mating cycles ..... | $\geq 500$           |

### CONTACTS

|                          |                         |
|--------------------------|-------------------------|
| Material .....           | Copper alloy            |
| Surface .....            | Hard silver-plated      |
| .....                    | Hard gold-plated        |
| Contact resistance ..... | $\leq 3m\Omega$         |
| Terminal .....           | Crimp terminal          |
| - mm <sup>2</sup> .....  |                         |
| Power contact .....      | 0.15-4.0mm <sup>2</sup> |
| Signal contact.....      | 0.15-2.5mm <sup>2</sup> |
| - AWG .....              |                         |
| Powder contact .....     | 26-12                   |
| Signal contact.....      | 26-14                   |

### HOODS, HOUSINGS

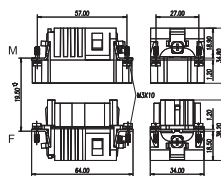
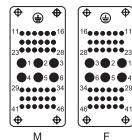
|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element.....                         | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

## HK8/24 inserts

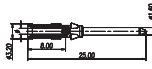
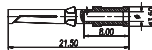
INSERTS FOR H10B HOOD/HOUSING

400V/160V MAX. 16A/10A

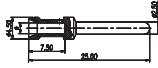
8/24+ Ⓢ

| Dimensions (mm)                                                                   |                                                                                   | Type         | Part Number     |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------|-----------------|-----------------|
|                                                                                   |                                                                                   |              | Male insert     | Female insert   |
| Crimp terminal (Order crimp contacts separately)                                  |                                                                                   |              |                 |                 |
|  |  | HK8/24-032-M | T2100322101-000 |                 |
|                                                                                   |                                                                                   | HK8/24-032-F |                 | T2100322201-000 |
| Contact arrangement view from termination side                                    |                                                                                   |              |                 |                 |
|  |                                                                                   |              |                 |                 |

### 10A Contact

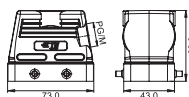
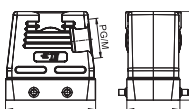
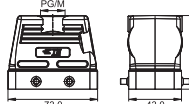
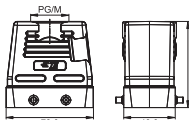
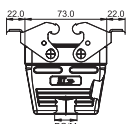
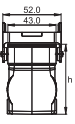
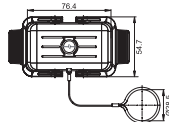
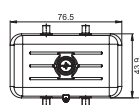
|                                                                                                                                                                                                                                           |                                                                                                                         |                   |            |                          |                                      |                    |                                    |                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------|------------|--------------------------|--------------------------------------|--------------------|------------------------------------|--------------------|
| <b>Tech data</b><br><b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CDM/Male</b><br> | <b>10A Male crimp contacts</b><br>   | <b>Wire gauge</b> |            | <b>Strip-ping length</b> | <b>Crimp contacts, silver-plated</b> |                    | <b>Crimp contacts, gold-plated</b> |                    |
|                                                                                                                                                                                                                                           |                                                                                                                         | <b>mm²</b>        | <b>AWG</b> | <b>mm</b>                | <b>Type</b>                          | <b>Part Number</b> | <b>Type</b>                        | <b>Part Number</b> |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.14-0.37         | 26-22      | 8.0                      | CDM-0.14                             | T2020001002-000    | DDM-0.14                           | T2020011002-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20         | 8.0                      | CDM-0.5                              | T2020001005-000    | DDM-0.5                            | T2020011005-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18         | 8.0                      | CDM-0.75                             | T2020001008-000    | DDM-0.75                           | T2020011008-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18         | 8.0                      | CDM-1.0                              | T2020001010-000    | DDM-1.0                            | T2020011010-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16         | 8.0                      | CDM-1.5                              | T2020001015-000    | DDM-1.5                            | T2020011015-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14         | 6.0                      | CDM-2.5                              | T2020001025-000    | DDM-2.5                            | T2020011025-000    |
| <b>CDF/Female</b><br>                                                                                                                                  | <b>10A Female crimp contacts</b><br> | 0.14-0.37         | 26-22      | 8.0                      | CDF-0.14                             | T2020002002-000    | DDF-0.14                           | T2020012002-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.5               | 20         | 8.0                      | CDF-0.5                              | T2020002005-000    | DDF-0.5                            | T2020012005-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 0.75              | 18         | 8.0                      | CDF-0.75                             | T2020002008-000    | DDF-0.75                           | T2020012008-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.0               | 18         | 8.0                      | CDF-1.0                              | T2020002010-000    | DDF-1.0                            | T2020012010-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 1.5               | 16         | 8.0                      | CDF-1.5                              | T2020002015-000    | DDF-1.5                            | T2020012015-000    |
|                                                                                                                                                                                                                                           |                                                                                                                         | 2.5               | 14         | 6.0                      | CDF-2.5                              | T2020002025-000    | DDF-2.5                            | T2020012025-000    |

### 16A Contact

| <div>Tech data</div> <div>Material:</div> <div>copper alloy</div> <div>Contact resistance: <math>\leq 1\text{m}\Omega</math></div> <div>Terminal:</div> <div>crimp connection</div> <div>CEM/Male</div> <div></div> | <div>16A Male crimp contacts</div> <div></div>   | Wire gauge      |         | Strip-ping length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|-------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | mm <sup>2</sup> | AWG     | mm                | Type                          | Part Number     | Type                        | Part Number     |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 0.14-0.37       | 26-22   | 7.5               | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 0.5             | 20      | 7.5               | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 0.75            | 18      | 7.5               | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 1.0             | 18      | 7.5               | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 1.5             | 16      | 7.5               | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 2.5             | 14      | 7.5               | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
| 4.0                                                                                                                                                                                                                                                                                                    | 12                                                                                                                                  | 7.5             | CEM-4.0 | T2030001040-000   | DEM-4.0                       | T2030011040-000 |                             |                 |
| <div>CEF/Female</div> <div></div>                                                                                                                                                                                   | <div>16A Female crimp contacts</div> <div></div> | 0.14-0.37       | 26-22   | 7.5               | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 0.5             | 20      | 7.5               | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 0.75            | 18      | 7.5               | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 1.0             | 18      | 7.5               | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 1.5             | 16      | 7.5               | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 2.5             | 14      | 7.5               | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 4.0             | 12      | 7.5               | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

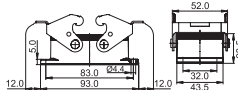
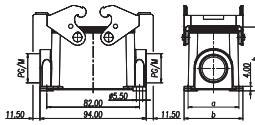
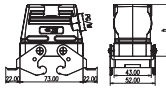
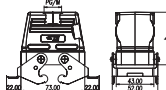
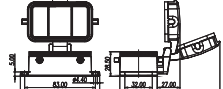
## H10B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                               | Metr.             | PG           | Type                                                                           | Part Number                                                                                 |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------|------|------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |              |                                                                                |                                                                                             |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|    | <div>Low construction</div> <div></div>                                                                                                                                                                                                                                                                                                      | M20<br>M25        | PG16<br>PG21 | H10B-TS-PG16<br>H10B-TS-PG21<br>H10B-TS-M20<br>H10B-TS-M25                     | T1210100116-000<br>T1210100121-000<br>T1210100120-000<br>T1210100125-000                    |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|    | <div>High construction</div> <div></div>                                                                                                                                                                                                                                                                                                     | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TSH-PG21<br>H10B-TSH-PG29<br>H10B-TSH-M20<br>H10B-TSH-M25<br>H10B-TSH-M32 | T1230100121-000<br>T1230100129-000<br>T1230100120-000<br>T1230100125-000<br>T1230100132-000 |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |              |                                                                                |                                                                                             |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|    | <div>Low construction</div> <div></div>                                                                                                                                                                                                                                                                                                      | M20<br>M25        | PG16<br>PG21 | H10B-TG-PG16<br>H10B-TG-PG21<br>H10B-TG-M20<br>H10B-TG-M25                     | T1220100116-000<br>T1220100121-000<br>T1220100120-000<br>T1220100125-000                    |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  | <div>High construction</div> <div></div>                                                                                                                                                                                                                                                                                                   | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TGH-PG21<br>H10B-TGH-PG29<br>H10B-TGH-M20<br>H10B-TGH-M25<br>H10B-TGH-M32 | T1240100121-000<br>T1240100129-000<br>T1240100120-000<br>T1240100125-000<br>T1240100132-000 |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |              |                                                                                |                                                                                             |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  | <div><div><div>Low construction</div><div></div></div><div><div>High construction</div><div></div></div></div> <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>Hight</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                            | 62.5                                                                                        | Hight | 74.5 | M20<br>M25<br><br>M25<br>M32 | PG16<br><br>PG21<br>PG29 | H10B-TBFS-PG16<br>H10B-TBFS-M20<br>H10B-TBFS-M25<br><br>H10B-TBFHS-PG21<br>H10B-TBFHS-PG29<br>H10B-TBFHS-M25<br>H10B-TBFHS-M32 | T1710101116-000<br>T1710101120-000<br>T1710101125-000<br><br>T1750101121-000<br>T1750101129-000<br>T1750101125-000<br>T1750101132-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |              |                                                                                |                                                                                             |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Low                                                                                 | 62.5                                                                                                                                                                                                                                                                                                                                                                                                                          |                   |              |                                                                                |                                                                                             |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Hight                                                                               | 74.5                                                                                                                                                                                                                                                                                                                                                                                                                          |                   |              |                                                                                |                                                                                             |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |              |                                                                                |                                                                                             |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  |                                                                                                                                                                                                                                                                                                                                            |                   |              | H10B-KDTP                                                                      | T1010101400-000                                                                             |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
| Housing protection cover                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |              |                                                                                |                                                                                             |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |
|  |                                                                                                                                                                                                                                                                                                                                            |                   |              | H10B-KDBP                                                                      | T1010102100-000                                                                             |       |      |                              |                          |                                                                                                                                |                                                                                                                                       |

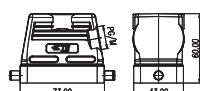
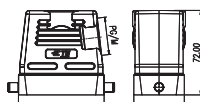
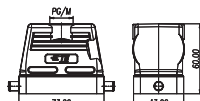
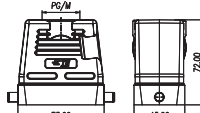
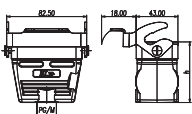
## H10B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                                   | Metr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PG           | Type     | Part Number     |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|-----------------|----|-------|----|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|----|----|----|----|----|----|----|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              | H10B-AGS | T1410101000-000 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Surface mounted: Side entry                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                  | <div><div><table><tr><td>Construction</td><td>A</td><td>B</td><td>H</td></tr><tr><td>Low</td><td>40</td><td>52</td><td>56</td></tr><tr><td>Hight</td><td>45</td><td>57</td><td>74</td></tr></table></div><div>1 Side entry<br/>Low construction<br/>M20<br/>M25<br/>2 Side entry<br/>M20<br/>M25<br/>High construction<br/>M25<br/>M32<br/>1 Side entry<br/>M25<br/>M32<br/>2 Side entry<br/>M25<br/>M32</div></div>                                                                                                                                                                    | Construction | A        | B               | H  | Low   | 40 | 52                               | 56                                                                                                                                           | Hight                                                                                                                                                | 45 | 57 | 74 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H10B-SGRS-PG16<br>H10B-SGRS-PG21<br>H10B-SGRS-M20<br>H10B-SGRS-M25<br>H10B-SGRS-2PG16<br>H10B-SGRS-2PG21<br>H10B-SGRS-2M20<br>H10B-SGRS-2M25<br>H10B-SGRHS-PG21<br>H10B-SGRHS-PG29<br>H10B-SGRHS-M25<br>H10B-SGRHS-M32<br>H10B-SGRHS-2PG21<br>H10B-SGRHS-2PG29<br>H10B-SGRHS-2M25<br>H10B-SGRHS-2M32 | T1440101116-000<br>T1440101121-000<br>T1440101120-000<br>T1440101125-000<br>T1440101216-000<br>T1440101221-000<br>T1440101220-000<br>T1440101225-000<br>T1470101121-000<br>T1470101129-000<br>T1470101125-000<br>T1470101132-000<br>T1470101221-000<br>T1470101229-000<br>T1470101225-000<br>T1470101232-000 |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Construction                                                                                                                                                                      | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | B            | H        |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                               | 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 52           | 56       |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                             | 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 57           | 74       |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Side entry housing with two levers                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                | <div><div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>72</td></tr></table></div><div>Low construction<br/>M20<br/>M25<br/>High construction<br/>M25<br/>M32</div></div>                                                                                                                                                                                                                                                                                                                                                      | Construction | H        | Low             | 60 | Hight | 72 | PG16<br>PG21<br><br>PG21<br>PG29 | H10B-TSBS-PG16<br>H10B-TSBS-PG21<br>H10B-TSBS-M20<br>H10B-TSBS-M25<br>H10B-TSBHS-PG21<br>H10B-TSBHS-PG29<br>H10B-TSBHS-M25<br>H10B-TSBHS-M32 | T1250103116-000<br>T1250103121-000<br>T1250103120-000<br>T1250103125-000<br>T1270103121-000<br>T1270103129-000<br>T1270103125-000<br>T1270103132-000 |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Construction                                                                                                                                                                      | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                               | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                             | 72                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Top entry housing with two levers                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                | <div><div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>72</td></tr></table></div><div>Low construction<br/>M20<br/>M25<br/>High construction<br/>M25<br/>M32</div></div>                                                                                                                                                                                                                                                                                                                                                      | Construction | H        | Low             | 60 | Hight | 72 | PG16<br>PG21<br><br>PG21<br>PG29 | H10B-TGBS-PG16<br>H10B-TGBS-PG21<br>H10B-TGBS-M20<br>H10B-TGBS-M25<br>H10B-TGBHS-PG21<br>H10B-TGBHS-PG29<br>H10B-TGBHS-M25<br>H10B-TGBHS-M32 | T1260103116-000<br>T1260103121-000<br>T1260103120-000<br>T1260103125-000<br>T1280103121-000<br>T1280103129-000<br>T1280103125-000<br>T1280103132-000 |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Construction                                                                                                                                                                      | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                               | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                             | 72                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Bulkhead mounted with 4 bolts                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |          |                 |    |       |    |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| <div></div> | <div>With protection cover</div> <div><div><table><tr><td>Construction</td><td>A</td><td>B</td><td>C</td><td>D</td><td>F</td><td>G</td><td>H</td></tr><tr><td>Low</td><td>82</td><td>94</td><td>40</td><td>52</td><td>22</td><td>67</td><td>54</td></tr><tr><td>Hight</td><td>82</td><td>94</td><td>45</td><td>57</td><td>20</td><td>65</td><td>74</td></tr></table></div><div>1 Side entry<br/>Low construction<br/>M20<br/>M25<br/>2 Side entry<br/>M20<br/>M25<br/>High construction<br/>M25<br/>M32<br/>1 Side entry<br/>M25<br/>M32<br/>2 Side entry<br/>M25<br/>M32</div></div> | Construction | A        | B               | C  | D     | F  | G                                | H                                                                                                                                            | Low                                                                                                                                                  | 82 | 94 | 40 | 52                                                                       | 22                                                                                                                                                                                                                                                                                                   | 67                                                                                                                                                                                                                                                                                                           | 54 | Hight | 82 | 94 | 45 | 57 | 20 | 65 | 74 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H10B-AD-BO<br>H10B-SDR-BO-PG16<br>H10B-SDR-BO-PG21<br>H10B-SDR-BO-M20<br>H10B-SDR-BO-M25<br>H10B-SDR-BO-2PG16<br>H10B-SDR-BO-2PG21<br>H10B-SDR-BO-2M20<br>H10B-SDR-BO-2M25<br>H10B-SDRH-BO-PG21<br>H10B-SDRH-BO-PG29<br>H10B-SDRH-BO-M25<br>H10B-SDRH-BO-M32<br>H10B-SDRH-BO-2PG21<br>H10B-SDRH-BO-2PG29<br>H10B-SDRH-BO-2M25<br>H10B-SDRH-BO-2M32 | T1430100000-000<br>T1460100116-000<br>T1460100121-000<br>T1460100120-000<br>T1460100125-000<br>T1460100216-000<br>T1460100221-000<br>T1460100220-000<br>T1460100225-000<br>T1490100121-000<br>T1490100129-000<br>T1490100125-000<br>T1490100132-000<br>T1490100221-000<br>T1490100229-000<br>T1490100225-000<br>T1490100232-000 |
| Construction                                                                                                                                                                      | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | B            | C        | D               | F  | G     | H  |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Low                                                                                                                                                                               | 82                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 94           | 40       | 52              | 22 | 67    | 54 |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |
| Hight                                                                                                                                                                             | 82                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 94           | 45       | 57              | 20 | 65    | 74 |                                  |                                                                                                                                              |                                                                                                                                                      |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |    |       |    |    |    |    |    |    |    |                                                                          |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                 |

## H10B with 1 lever on the hoods/housings

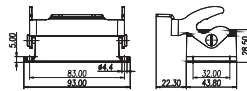
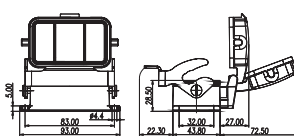
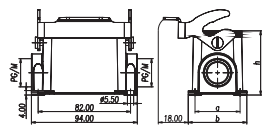
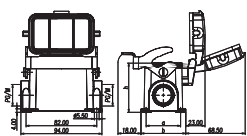
POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                        | Metr.             | PG           | Type                                                                                          | Part Number                                                                                 |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                                        |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|    | <div>Low construction</div> <div></div>                                                                                                               | M20<br>M25        | PG16<br>PG21 | H10B-TS-RO-PG16<br>H10B-TS-RO-PG21<br>H10B-TS-RO-M20<br>H10B-TS-RO-M25                        | T1310100116-000<br>T1310100121-000<br>T1310100120-000<br>T1310100125-000                    |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|    | <div>High construction</div> <div></div>                                                                                                              | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TSH-RO-PG21<br>H10B-TSH-RO-PG29<br>H10B-TSH-RO-M20<br>H10B-TSH-RO-M25<br>H10B-TSH-RO-M32 | T1330100121-000<br>T1330100129-000<br>T1330100120-000<br>T1330100125-000<br>T1330100132-000 |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                                        |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|   | <div>Low construction</div> <div></div>                                                                                                              | M20<br>M25        | PG16<br>PG21 | H10B-TG-RO-PG16<br>H10B-TG-RO-PG21<br>H10B-TG-RO-M20<br>H10B-TG-RO-M25                        | T1320100116-000<br>T1320100121-000<br>T1320100120-000<br>T1320100125-000                    |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|  | <div>High construction</div> <div></div>                                                                                                            | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TGH-RO-PG21<br>H10B-TGH-RO-PG29<br>H10B-TGH-RO-M20<br>H10B-TGH-RO-M25<br>H10B-TGH-RO-M32 | T1340100121-000<br>T1340100129-000<br>T1340100120-000<br>T1340100125-000<br>T1340100132-000 |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                                        |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|  | <div></div> <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                                           | 62.5                                                                                        | High | 74.5 | M20<br>M25<br><br>M25<br>M32 | PG16<br><br>PG21<br>PG29 | H10B-TBF-LB-PG16<br>H10B-TBF-LB-M20<br>H10B-TBF-LB-M25<br>H10B-TBFH-LB-PG21<br>H10B-TBFH-LB-PG29<br>H10B-TBFH-LB-M25<br>H10B-TBFH-LB-M32 | T1730103116-000<br>T1730103120-000<br>T1730103125-000<br>T1770103121-000<br>T1770103129-000<br>T1770103125-000<br>T1770103132-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                      |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Low                                                                                 | 62.5                                                                                                                                                                                                                                   |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| High                                                                                | 74.5                                                                                                                                                                                                                                   |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                                        |                   |              |                                                                                               |                                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |
|  |                                                                                                                                                                                                                                        |                   |              | H10B-KDTP-LB                                                                                  | T1010101500-000                                                                             |      |      |                              |                          |                                                                                                                                          |                                                                                                                                   |



## H10B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PG           | Type                      | Part Number                        |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------------|------------------------------------|---|-----|----|----|----|------|----|----|----|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |                           |                                    |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              | H10B-AG-LB                | T1500103000-000                    |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |
|    | <p>With protection cover</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              | H10B-AD-LB<br>H10B-ADM-LB | T1510103000-000<br>T1510103001-000 |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |                           |                                    |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |
|  | <div><div>1 Side entry</div><div>Low construction</div><div>M20</div><div>M25</div></div>  <div><div>1 Side entry</div><div>High construction</div><div>M25</div><div>M32</div></div> <table><tr><th>Construction</th><th>A</th><th>B</th><th>H</th></tr><tr><td>Low</td><td>40</td><td>52</td><td>54</td></tr><tr><td>High</td><td>45</td><td>57</td><td>74</td></tr></table> <div><div>2 Side entry</div><div>High construction</div><div>M25</div><div>M32</div></div>                              | Construction | A                         | B                                  | H | Low | 40 | 52 | 54 | High | 45 | 57 | 74 | <div>PG16<br/>PG21</div> <div>PG16<br/>PG21</div> <div>PG21<br/>PG29</div> <div>PG21<br/>PG29</div> | <div>H10B-SGR-LB-PG16<br/>H10B-SGR-LB-PG21<br/>H10B-SGR-LB-M20<br/>H10B-SGR-LB-M25<br/>H10B-SGR-LB-2PG16<br/>H10B-SGR-LB-2PG21<br/>H10B-SGR-LB-2M20<br/>H10B-SGR-LB-2M25</div> <div>H10B-SGRH-LB-PG21<br/>H10B-SGRH-LB-PG29<br/>H10B-SGRH-LB-M25<br/>H10B-SGRH-LB-M32<br/>H10B-SGRH-LB-2PG21<br/>H10B-SGRH-LB-2PG29<br/>H10B-SGRH-LB-2M25<br/>H10B-SGRH-LB-2M32</div> | <div>T1610103116-000<br/>T1610103121-000<br/>T1610103120-000<br/>T1610103125-000<br/>T1610103216-000<br/>T1610103221-000<br/>T1610103220-000<br/>T1610103225-000</div> <div>T1650103121-000<br/>T1650103129-000<br/>T1650103125-000<br/>T1650103132-000<br/>T1650103221-000<br/>T1650103229-000<br/>T1650103225-000<br/>T1650103232-000</div> |
| Construction                                                                        | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | B            | H                         |                                    |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |
| Low                                                                                 | 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 52           | 54                        |                                    |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |
| High                                                                                | 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 57           | 74                        |                                    |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |
|  | <p>With protection cover</p> <div><div>1 Side entry</div><div>Low construction</div><div>M20</div><div>M25</div></div>  <div><div>1 Side entry</div><div>High construction</div><div>M25</div><div>M32</div></div> <table><tr><th>Construction</th><th>A</th><th>B</th><th>H</th></tr><tr><td>Low</td><td>40</td><td>52</td><td>54</td></tr><tr><td>High</td><td>45</td><td>57</td><td>74</td></tr></table> <div><div>2 Side entry</div><div>High construction</div><div>M25</div><div>M32</div></div> | Construction | A                         | B                                  | H | Low | 40 | 52 | 54 | High | 45 | 57 | 74 | <div>PG16<br/>PG21</div> <div>PG16<br/>PG21</div> <div>PG21<br/>PG29</div> <div>PG21<br/>PG29</div> | <div>H10B-SDR-LB-PG16<br/>H10B-SDR-LB-PG21<br/>H10B-SDR-LB-M20<br/>H10B-SDR-LB-M25<br/>H10B-SDR-LB-2PG16<br/>H10B-SDR-LB-2PG21<br/>H10B-SDR-LB-2M20<br/>H10B-SDR-LB-2M25</div> <div>H10B-SDRH-LB-PG21<br/>H10B-SDRH-LB-PG29<br/>H10B-SDRH-LB-M25<br/>H10B-SDRH-LB-M32<br/>H10B-SDRH-LB-2PG21<br/>H10B-SDRH-LB-2PG29<br/>H10B-SDRH-LB-2M25<br/>H10B-SDRH-LB-2M32</div> | <div>T1620103116-000<br/>T1620103121-000<br/>T1620103120-000<br/>T1620103125-000<br/>T1620103216-000<br/>T1620103221-000<br/>T1620103220-000<br/>T1620103225-000</div> <div>T1660103121-000<br/>T1660103129-000<br/>T1660103125-000<br/>T1660103132-000<br/>T1660103221-000<br/>T1660103229-000<br/>T1660103225-000<br/>T1660103232-000</div> |
| Construction                                                                        | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | B            | H                         |                                    |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |
| Low                                                                                 | 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 52           | 54                        |                                    |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |
| High                                                                                | 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 57           | 74                        |                                    |   |     |    |    |    |      |    |    |    |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                               |

## HIP.10/24, HIP-K.10/24, EMV-K.10/24 housings

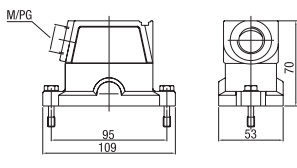
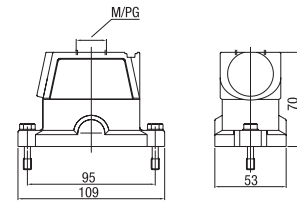
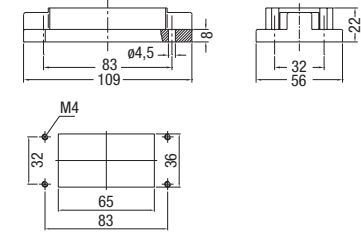
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         |                                                                                     | Metr.      | PG       | Type                                                                                                   | Part Number                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|----------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Hood: Side entry, Standard construction                                             |                                                                                     |            |          |                                                                                                        |                                                   |
|    |    | M25        | 16<br>21 | <b>HIP</b><br>HIP.10/24.STS.1.16.G<br>HIP.10/24.STS.1.21.G<br>HIP.10/24.STS.1.M25.G                    | 1-1102640-5<br>1-1102642-5<br>0-1106436-2         |
|                                                                                     |                                                                                     | M25<br>M32 | 21       | <b>HIP-K</b><br>HIP-K.10/24.STS.1.21.G<br>HIP-K.10/24.STS.1.M25.G<br>HIP-K.10/24.STS.1.M32.G           | 2-1102642-5<br>0-1106436-4<br>0-1106436-6         |
|                                                                                     |                                                                                     | M25<br>M32 | 21       | <b>EMV-K</b><br>EMV-K.10/24.STS.1.21.G<br>EMV-K.10/24.STS.1.M25.G<br>EMV-K.10/24.STS.1.M32.G           | 4-1102714-5<br>0-1106427-3<br>1-1106427-0         |
| Hood: Top entry                                                                     |                                                                                     |            |          |                                                                                                        |                                                   |
|  |  | M25        | 16<br>21 | <b>HIP</b><br>HIP.10/24.STO.1.16.G<br>HIP.10/24.STO.1.21.G<br>HIP.10/24.STO.1.M25.G                    | 1-1102644-5<br>1-1102646-5<br>0-1106436-1         |
|                                                                                     |                                                                                     | M25<br>M32 | 16       | <b>HIP-K</b><br>HIP-K.10/24.STO.1.16.G<br>HIP-K.10/24.STO.1.M25.G<br>HIP-K.10/24.STO.1.M32.G           | 2-1102644-5<br>0-1106436-3<br>0-1106436-5         |
|                                                                                     |                                                                                     | M25        | 21       | <b>EMV-K</b><br>EMV-K.10/24.STO.1.21.G<br>EMV-K.10/24.STO.1.M25.G                                      | 4-1102715-5<br>0-1106427-4                        |
| Surface mounted housing: Bottom entry                                               |                                                                                     |            |          |                                                                                                        |                                                   |
|  |  |            |          | <b>HIP</b><br>HIP.10/24.AG<br><br><b>HIP-K</b><br>HIP-K.10/24.AG<br><br><b>EMV-K</b><br>EMV-K.10/24.AG | 1-1102647-5<br><br>2-1102647-5<br><br>4-1102718-5 |



## HIP.10/24, HIP-K.10/24, EMV-K.10/24 housings

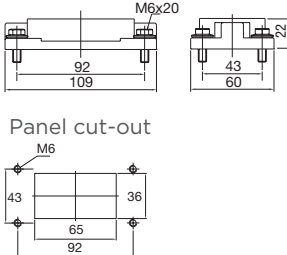
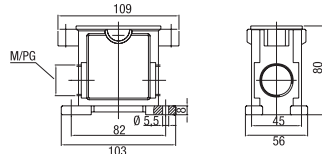
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                        | Metr.                                                                              | PG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------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| Surface mounted housing: Bottom entry                                              |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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|   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>HIP</b><br>HIP.10/24.AG.M6<br><br><b>HIP-K</b><br>HIP-K.10/24.AG.M6<br><br><b>EMV-K</b><br>EMV-K.10/24.AG.M6 | 1-1102612-5<br><br>2-1102612-5<br><br>4-1102720-5 |
| Surface mounted housing: Side entry                                                |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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|  |  | 2xM32<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br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|                                                                                                                 |                                                   |

## HWK 6/6 technical characteristics

|                          |                 |
|--------------------------|-----------------|
| Specifications .....     | DIN EN 60 664-1 |
| .....                    | DIN EN 61 984   |
| Number of contacts ..... | 6/6+PE          |

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.

### INSERTS

|                                             |                      |
|---------------------------------------------|----------------------|
| Rated current .....                         |                      |
| Power contact .....                         | 40A max              |
| Signal contact .....                        | 16A max              |
| Working voltage .....                       |                      |
| Power contact .....                         | 690V                 |
| Signal contact.....                         | 400V                 |
| Test voltage urms .....                     |                      |
| Power contact .....                         | 6KV                  |
| Signal contact.....                         | 4KV                  |
| Pollution degree .....                      | 3                    |
| Insulation resistance .....                 | $\geq 10^{10}\Omega$ |
| Material .....                              | Polycarbonate        |
| Temperature range .....                     | -40°C... +125°C      |
| Flammability acc. to UL94 .....             | V0                   |
| Working voltage acc. to UL/CSA .....        | 600V                 |
| Mechanical working life-mating cycles ..... | $\geq 500$           |

### CONTACTS

|                                |                        |
|--------------------------------|------------------------|
| Material .....                 | Copper alloy           |
| Surface .....                  | Hard silver-plated     |
| .....                          | Hard gold-plated       |
| Contact resistance .....       |                        |
| Power contact .....            | $\leq 0.3m\Omega$      |
| Signal contact.....            | $\leq 1m\Omega$        |
| Terminal .....                 | Screw terminal         |
| - mm <sup>2</sup> .....        |                        |
| Power contact .....            | 2.5-10mm <sup>2</sup>  |
| Signal contact.....            | 0.5-2.5mm <sup>2</sup> |
| - AWG .....                    |                        |
| Power contact .....            | 14-8                   |
| Signal contact.....            | 20-14                  |
| - Tightening/test torque ..... |                        |
| Power contact .....            | 1.2 Nm                 |
| Signal contact.....            | 0.5 Nm                 |

### HOODS, HOUSINGS

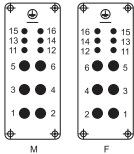
|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Material .....                               | Die cast aluminium                 |
| Surface .....                                | Powder-coated (RAL 7037)           |
| Locking element.....                         | Stainless steel, steel-zinc plated |
| Temperature range .....                      | -40°C... +125°C                    |
| Degree of protection acc. to DIN40 050 ..... | IP65                               |

HWK 6/6 inserts

POWER 690V/35A SIGNAL 400V/16A

INSERTS FOR H16B HOOD/HOUSING

6/6 ⚡

| Dimensions (mm)                                                                   |                                                                                   | Type         | Part Number     |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------|-----------------|-----------------|
|                                                                                   |                                                                                   |              | Male insert     | Female insert   |
| Screw terminal                                                                    | Contact arrangement view from termination side                                    |              |                 |                 |
|  |  | HWK6/6-012-M | T2106062101-000 |                 |
|                                                                                   |                                                                                   | HWK6/6-012-F |                 | T2106062201-000 |

## HK4/0, HK4/2 technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts ..... 4/0, 4/2 + PE

### INSERTS

Rated current  
 Power contact .....80A max  
 Signal contact ..... 16A max  
 (See current carrying capacity)  
 Working voltage  
 Power contact ..... 690V  
 Signal contact ..... 400V  
 Test voltage urms  
 Power contact .....8KV  
 Signal contact .....6KV  
 Pollution degree ..... 3  
 Insulation resistance .....  $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 ..... V0  
 Working voltage acc. to UL/CSA..... 600V/300V  
 Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

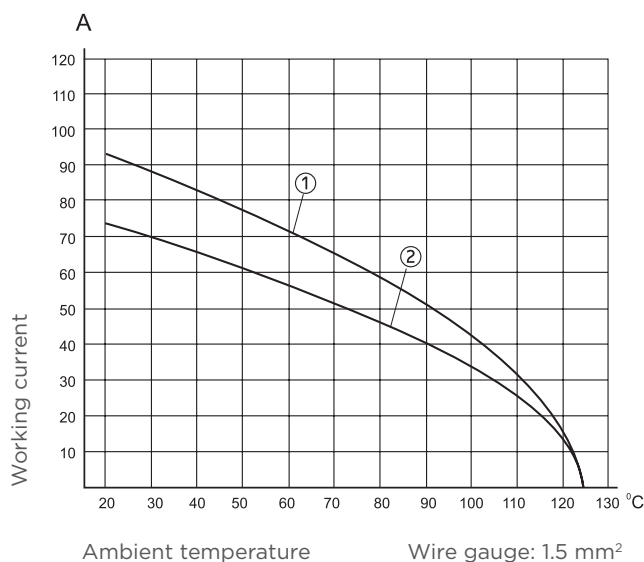
Material .....Copper alloy  
 Surface .....Hard silver-plated  
 .....Hard gold-plated  
 Contact resistance  
 Power contact .....  $\leq 0.3m\Omega$   
 Signal contact .....  $\leq 1m\Omega$   
 Terminal ..... Screw terminal  
 - mm<sup>2</sup>  
 Power contact .....1.5-16mm<sup>2</sup>  
 Signal contact ..... 0.5-2.5mm<sup>2</sup>  
 - AWG  
 Power contact ..... 16-6  
 Signal contact ..... 20-14  
 - Tightening/test torque  
 Power contact ..... 1.2 Nm  
 Signal contact ..... 0.5 Nm

### HOODS, HOUSINGS

Material ..... Die cast aluminium  
 Surface .....Powder-coated (RAL 7037)  
 Locking element.....Stainless steel, steel-zinc plated  
 Temperature range ..... -40°C... +125°C  
 Degree of protection acc. to DIN40 050 .....IP65

### CURRENT CARRYING CAPACITY

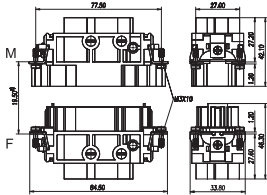
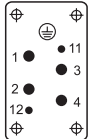
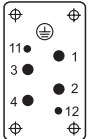
The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



- 1 Wire gauge: 16mm<sup>2</sup>
- 2 Wire gauge: 10mm<sup>2</sup>

690V/400V MAX. 80A/16A

$$4/0 + \text{ground symbol} \quad 4/2 + \text{ground symbol}$$

| Dimensions (mm)                                                                          |                                                                                          | Type        | Part Number     |                 |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------|-----------------|-----------------|
|                                                                                          |                                                                                          |             | Male insert     | Female insert   |
| Screw terminal                                                                           | Size chart                                                                               |             |                 |                 |
|       |       | HK4/2-006-M | T2100062101-000 |                 |
|                                                                                          |                                                                                          | HK4/2-006-F |                 | T2100062201-000 |
| Contact arrangement view from termination side                                           |                                                                                          |             |                 |                 |
| <br>M | <br>F |             |                 |                 |

## HK12/2 technical characteristics

Specifications .....DIN EN 60 664-1  
..... DIN EN 61 984  
Number of contacts .....12/2 + PE

### INSERTS

Rated current  
Power contact .....40A max  
Signal contact .....10A max  
(See current carrying capacity)  
Working voltage  
Power contact .....690V  
Signal contact .....250V  
Test voltage urms  
Power contact .....8KV  
Signal contact .....4KV  
Pollution degree .....3  
Insulation resistance ..... $\geq 10^{10}\Omega$   
Material .....Polycarbonate  
Temperature range .....-40°C... +125°C  
Flammability acc. to UL94 .....V0  
Working voltage acc. to UL/CSA.....600V/300V  
Mechanical working life-mating cycles ..... $\geq 500$

### CONTACTS

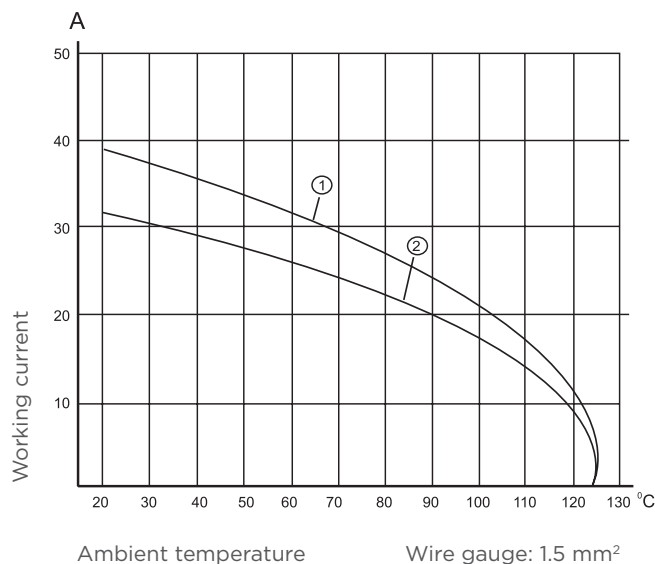
Material .....Copper alloy  
Surface .....Hard silver-plated  
.....Hard gold-plated  
Contact resistance  
Power contact ..... $\leq 0.3m\Omega$   
Signal contact..... $\leq 3m\Omega$   
Terminal .....Crimp terminal  
- mm<sup>2</sup>  
Power contact .....1-6mm<sup>2</sup>  
Signal contact.....0.14-2.5mm<sup>2</sup>  
- AWG  
Power contact .....18-10  
Signal contact.....26-14

### HOODS, HOUSINGS

Material .....Die cast aluminium  
Surface .....Powder-coated (RAL 7037)  
Locking element.....Stainless steel, steel-zinc plated  
Temperature range .....-40°C... +125°C  
Degree of protection acc. to DIN40 050 .....IP65

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.



1 Wire gauge: 6.0mm<sup>2</sup>

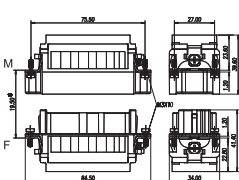
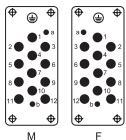
2 Wire gauge: 4.0mm<sup>2</sup>

## HK12/2 inserts

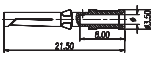
INSERT FOR H16B HOOD/HOUSING

690V/250V MAX. 40A/10A

12/2+⊕

| Dimensions (mm)                                                                   |                                                                                   | Type         | Part Number     |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------|-----------------|-----------------|
|                                                                                   |                                                                                   |              | Male insert     | Female insert   |
| Crimp terminal (Order crimp contacts separately)                                  | Size chart                                                                        |              |                 |                 |
|  |  | HK12/2-014-M | T2120142101-000 |                 |
|                                                                                   |                                                                                   | HK12/2-014-F |                 | T2120142201-000 |
| Contact arrangement view from termination side                                    |                                                                                   |              |                 |                 |
|  |                                                                                   |              |                 |                 |

### 10A Contact

| Tech data                                                                                                                                                                                                          | 10A Male crimp contacts                                                                                                 | Wire gauge                                    |                                     | Strip-ping length                      | Crimp contacts, silver-plated                                    |                                                                                                                | Crimp contacts, gold-plated                                      |                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------|----------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                    |                                                                                                                         | mm <sup>2</sup>                               | AWG                                 |                                        | Type                                                             | Part Number                                                                                                    | Type                                                             | Part Number                                                                                                    |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CDM/Male</b>  |                                      | 0.14-0.37<br>0.5<br>0.75<br>1.0<br>1.5<br>2.5 | 26-22<br>20<br>18<br>18<br>16<br>14 | 8.0<br>8.0<br>8.0<br>8.0<br>8.0<br>6.0 | CDM-0.14<br>CDM-0.5<br>CDM-0.75<br>CDM-1.0<br>CDM-1.5<br>CDM-2.5 | T2020001002-000<br>T2020001005-000<br>T2020001008-000<br>T2020001010-000<br>T2020001015-000<br>T2020001025-000 | DDM-0.14<br>DDM-0.5<br>DDM-0.75<br>DDM-1.0<br>DDM-1.5<br>DDM-2.5 | T2020011002-000<br>T2020011005-000<br>T2020011008-000<br>T2020011010-000<br>T2020011015-000<br>T2020011025-000 |
| <b>CDF/Female</b>                                                                                                               | <b>10A Female crimp contacts</b><br> | 0.14-0.37<br>0.5<br>0.75<br>1.0<br>1.5<br>2.5 | 26-22<br>20<br>18<br>18<br>16<br>14 | 8.0<br>8.0<br>8.0<br>8.0<br>8.0<br>6.0 | CDF-0.14<br>CDF-0.5<br>CDF-0.75<br>CDF-1.0<br>CDF-1.5<br>CDF-2.5 | T2020002002-000<br>T2020002005-000<br>T2020002008-000<br>T2020002010-000<br>T2020002015-000<br>T2020002025-000 | DDF-0.14<br>DDF-0.5<br>DDF-0.75<br>DDF-1.0<br>DDF-1.5<br>DDF-2.5 | T2020012002-000<br>T2020012005-000<br>T2020012008-000<br>T2020012010-000<br>T2020012015-000<br>T2020012025-000 |

### 40A Contact

| Tech data                                                                                                                                                                                                            | 40A Male crimp contacts                                                                                                 | Wire gauge                     |                           | Stripping length                | Crimp contacts, silver-plated                      |                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------|---------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                      |                                                                                                                         | mm <sup>2</sup>                | AWG                       |                                 | Type                                               | Part Number                                                                                 |
| <b>Material:</b><br>copper alloy<br><b>Contact resistance:</b> ≤0.3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CMM/Male</b>  |                                      | 1.5<br>2.5<br>4.0<br>6.0       | 16<br>14<br>12<br>10      | 8.0<br>8.0<br>8.0<br>8.0        | CMM-1.5<br>CMM-2.5<br>CMM-4.0<br>CMM-6.0           | T2040001015-000<br>T2040001025-000<br>T2040001040-000<br>T2040001060-000                    |
| <b>CMF/Female</b>                                                                                                                 | <b>40A Female crimp contacts</b><br> | 1.5<br>2.5<br>4.0<br>6.0<br>10 | 16<br>14<br>12<br>10<br>7 | 8.0<br>8.0<br>8.0<br>8.0<br>8.0 | CMF-1.5<br>CMF-2.5<br>CMF-4.0<br>CMF-6.0<br>CMF-10 | T2040002015-000<br>T2040002025-000<br>T2040002040-000<br>T2040002060-000<br>T2040002100-000 |

## HK6/36 technical characteristics

Specifications .....DIN EN 60 664-1  
..... DIN EN 61 984  
Number of contacts ..... 6/36 + PE

### INSERTS

Rated current  
Power contact .....40A max  
Signal contact .....10A max  
(See current carrying capacity)  
Working voltage  
Power contact ..... 690V  
Signal contact .....160V  
Test voltage urms  
Power contact ..... 6KV  
Signal contact .....2.5KV  
Pollution degree ..... 2  
Insulation resistance .....  $\geq 10^{10}\Omega$   
Material ..... Polycarbonate  
Temperature range ..... -40°C... +125°C  
Flammability acc. to UL94 ..... V0  
Working voltage acc. to UL/CSA..... 600V/300V  
Mechanical working life-mating cycles .....  $\geq 500$

### CONTACTS

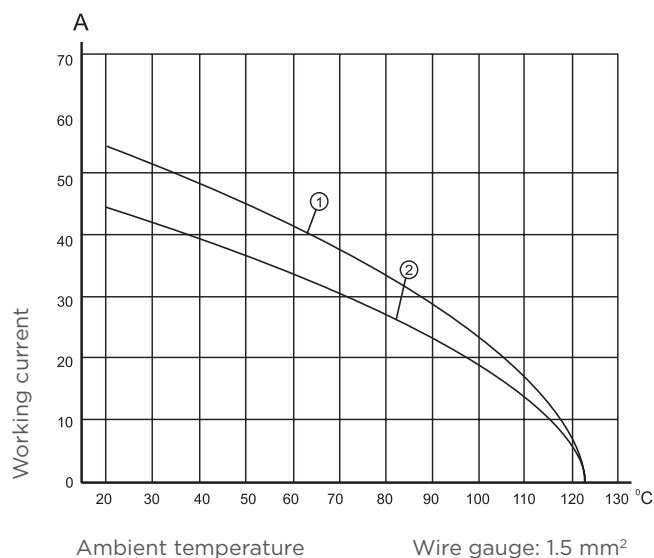
Material .....Copper alloy  
Surface .....Hard silver-plated  
.....Hard gold-plated  
Contact resistance  
Power contact .....  $\leq 0.3m\Omega$   
Signal contact.....  $\leq 3m\Omega$   
Terminal ..... Crimp terminal  
- mm<sup>2</sup>  
Power contact .....1-6mm<sup>2</sup>  
Signal contact.....0.14-2.5mm<sup>2</sup>  
- AWG  
Power contact .....18-10  
Signal contact.....26-14

### HOODS, HOUSINGS

Material ..... Die cast aluminium  
Surface .....Powder-coated (RAL 7037)  
Locking element.....Stainless steel, steel-zinc plated  
Temperature range ..... -40°C... +125°C  
Degree of protection acc. to DIN40 050 .....IP65

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals. Control and test procedures according to DIN IEC 60512-3.



1 Wire gauge: 6.0mm<sup>2</sup>

2 Wire gauge: 4.0mm<sup>2</sup>



690V/250V MAX. 40A/10A

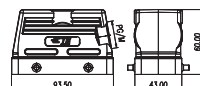
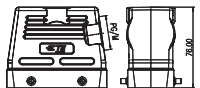
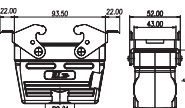
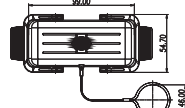
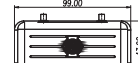
## 10A Contact

### 40A Contact

All specifications subject to change. Consult TE Connectivity for latest design specifications.  
Contact TE for assistance with any part number configuration.

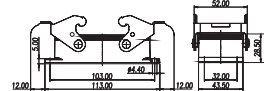
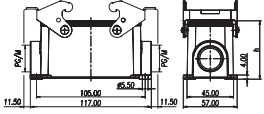
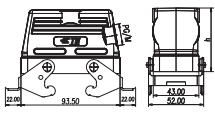
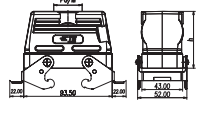
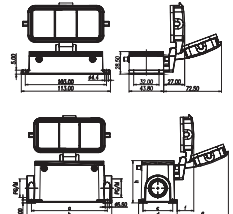
## H16B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                              | Metr.             | PG           | Type                                                                           | Part Number                                                                                 |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------|------|---------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                              |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | <div>Low construction</div> <div></div>                                                                                                     | M20<br>M25<br>M32 | PG16<br>PG21 | H16B-TS-PG16<br>H16B-TS-PG21<br>H16B-TS-M20<br>H16B-TS-M25<br>H16B-TS-M32      | T1210160116-000<br>T1210160121-000<br>T1210160120-000<br>T1210160125-000<br>T1210160132-000 |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | <div>High construction</div> <div></div>                                                                                                    | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TSH-PG21<br>H16B-TSH-PG29<br>H16B-TSH-M25<br>H16B-TSH-M32<br>H16B-TSH-M40 | T1230160121-000<br>T1230160129-000<br>T1230160125-000<br>T1230160132-000<br>T1230160140-000 |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                              |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|   | <div>Low construction</div> <div></div>                                                                                                    | M25<br>M32        | PG16<br>PG21 | H16B-TG-PG16<br>H16B-TG-PG21<br>H16B-TG-M25<br>H16B-TG-M32                     | T1220160116-000<br>T1220160121-000<br>T1220160125-000<br>T1220160132-000                    |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | <div>High construction</div> <div></div>                                                                                                  | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TGH-PG21<br>H16B-TGH-PG29<br>H16B-TGH-M25<br>H16B-TGH-M32<br>H16B-TGH-M40 | T1240160121-000<br>T1240160129-000<br>T1240160125-000<br>T1240160132-000<br>T1240160140-000 |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                              |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | <div></div> <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>Hight</td><td>74.5</td></tr></table> | Construction      | H            | Low                                                                            | 62.5                                                                                        | Hight | 74.5 | <div>Low construction</div> M25<br>M32 <div>High construction</div> M25<br>M32<br>M40 | PG21<br><br>PG21<br>PG29 | H16B-TBFS-PG21<br>H16B-TBFS-M25<br>H16B-TBFS-M32<br><br>H16B-TBFHS-PG21<br>H16B-TBFHS-PG29<br>H16B-TBFHS-M25<br>H16B-TBFHS-M32<br>H16B-TBFHS-M40 | T1710161121-000<br>T1710161125-000<br>T1710161132-000<br><br>T1750161121-000<br>T1750161129-000<br>T1750161125-000<br>T1750161132-000<br>T1750161140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Low                                                                                 | 62.5                                                                                                                                                                                                                         |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hight                                                                               | 74.5                                                                                                                                                                                                                         |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                              |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                           |                   |              | H16B-KDTP                                                                      | T1010161400-000                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
| Housing protection cover                                                            |                                                                                                                                                                                                                              |                   |              |                                                                                |                                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                           |                   |              | H16B-KDBP                                                                      | T1010162100-000                                                                             |       |      |                                                                                       |                          |                                                                                                                                                  |                                                                                                                                                          |

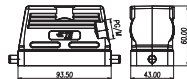
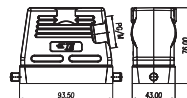
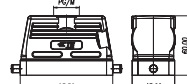
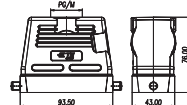
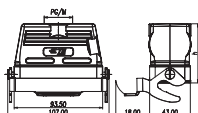
## H16B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                           | Metr.                                 | PG                       | Type                         | Part Number                                                                                                                                  |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------------------------------------------------------|----------------------------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|------|-----|-----|----|----|----|----|----|--------------------------------------------------------------------|----------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                           |                                                                                                                                                                                                                                                                                                                                                          |                                       |                          | H16B-AGS                     | T1410161000-000                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Surface mounted: Side entry                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                           |  <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>High</td><td>81</td></tr></table>                                                                                                                                                                                                                                | Construction                          | H                        | Low                          | 56                                                                                                                                           | High                                                                                                                                                 | 81 | 1 Side entry 2 Side entry<br>Low construction<br>High construction | M25<br>M25<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H16B-SGRS-PG21<br>H16B-SGRS-M25<br>H16B-SGRS-2PG21<br>H16B-SGRS-2M25<br>H16B-SGRHS-PG21<br>H16B-SGRHS-PG29<br>H16B-SGRHS-M25<br>H16B-SGRHS-M32<br>H16B-SGRHS-2PG21<br>H16B-SGRHS-2PG29<br>H16B-SGRHS-2M25<br>H16B-SGRHS-2M32 | T1440161121-000<br>T1440161125-000<br>T1440161221-000<br>T1440161225-000<br>T1470161121-000<br>T1470161129-000<br>T1470161125-000<br>T1470161132-000<br>T1470161221-000<br>T1470161229-000<br>T1470161225-000<br>T1470161232-000 |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 56                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| High                                                                                                                                                                       | 81                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Side entry housing with two levers                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                         |                                                                                                                                                                                                                                                                                                                                                        | Low construction<br>High construction | M20<br>M25<br>M25<br>M32 | PG16<br>PG21<br>PG21<br>PG29 | H16B-TSBS-PG16<br>H16B-TSBS-PG21<br>H16B-TSBS-M20<br>H16B-TSBS-M25<br>H16B-TSBHS-PG21<br>H16B-TSBHS-PG29<br>H16B-TSBHS-M25<br>H16B-TSBHS-M32 | T1250163116-000<br>T1250163121-000<br>T1250163120-000<br>T1250163125-000<br>T1270163121-000<br>T1270163129-000<br>T1270163125-000<br>T1270163132-000 |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Top entry housing with two levers                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                         |  <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>High</td><td>76</td></tr></table>                                                                                                                                                                                                                              | Construction                          | H                        | Low                          | 60                                                                                                                                           | High                                                                                                                                                 | 76 | Low construction<br>High construction                              | M20<br>M25<br>M25<br>M32               | PG16<br>PG21<br>PG21<br>PG29                 | H16B-TGBS-PG16<br>H16B-TGBS-PG21<br>H16B-TGBS-M20<br>H16B-TGBS-M25<br>H16B-TGBHS-PG21<br>H16B-TGBHS-PG29<br>H16B-TGBHS-M25<br>H16B-TGBHS-M32                                                                                 | T1260163116-000<br>T1260163121-000<br>T1260163120-000<br>T1260163125-000<br>T1280163121-000<br>T1280163129-000<br>T1280163125-000<br>T1280163132-000                                                                             |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 60                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| High                                                                                                                                                                       | 76                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Bulkhead mounted with 4 bolts                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                          |                              |                                                                                                                                              |                                                                                                                                                      |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| <br> | With protection cover<br> <table><tr><td>Construction</td><td>A</td><td>B</td><td>C</td><td>D</td><td>F</td><td>G</td><td>H</td></tr><tr><td>Low</td><td>105</td><td>117</td><td>45</td><td>57</td><td>20</td><td>65</td><td>56</td></tr><tr><td>High</td><td>105</td><td>117</td><td>45</td><td>57</td><td>20</td><td>65</td><td>81</td></tr></table> | Construction                          | A                        | B                            | C                                                                                                                                            | D                                                                                                                                                    | F  | G                                                                  | H                                      | Low                                          | 105                                                                                                                                                                                                                          | 117                                                                                                                                                                                                                              | 45 | 57 | 20 | 65 | 56 | High | 105 | 117 | 45 | 57 | 20 | 65 | 81 | 1 Side entry 2 Side entry<br>Low construction<br>High construction | M25<br>M25<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H16B-AD-BO<br>H16B-SDR-BO-PG21<br>H16B-SDR-BO-M25<br>H16B-SDR-BO-2PG21<br>H16B-SDR-BO-2M25<br>H16B-SDRH-BO-PG21<br>H16B-SDRH-BO-PG29<br>H16B-SDRH-BO-M25<br>H16B-SDRH-BO-M32<br>H16B-SDRH-BO-2PG21<br>H16B-SDRH-BO-2PG29<br>H16B-SDRH-BO-2M25<br>H16B-SDRH-BO-2M32 | T1430160000-000<br>T1460160121-000<br>T1460160125-000<br>T1460160221-000<br>T1460160225-000<br>T1490160121-000<br>T1490160129-000<br>T1490160125-000<br>T1490160132-000<br>T1490160221-000<br>T1490160229-000<br>T1490160225-000<br>T1490160232-000 |
| Construction                                                                                                                                                               | A                                                                                                                                                                                                                                                                                                                                                                                                                                         | B                                     | C                        | D                            | F                                                                                                                                            | G                                                                                                                                                    | H  |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 105                                                                                                                                                                                                                                                                                                                                                                                                                                       | 117                                   | 45                       | 57                           | 20                                                                                                                                           | 65                                                                                                                                                   | 56 |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| High                                                                                                                                                                       | 105                                                                                                                                                                                                                                                                                                                                                                                                                                       | 117                                   | 45                       | 57                           | 20                                                                                                                                           | 65                                                                                                                                                   | 81 |                                                                    |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |      |     |     |    |    |    |    |    |                                                                    |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |

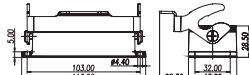
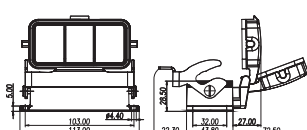
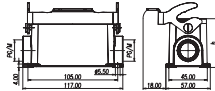
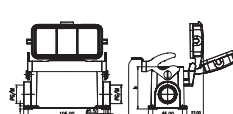
## H16B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                            | Metr.             | PG           | Type                                                                                          | Part Number                                                                                 |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|    | Low construction<br>                                                                                                                      | M25<br>M32        | PG21<br>PG29 | H16B-TS-RO-PG21<br>H16B-TS-RO-PG29<br>H16B-TS-RO-M25<br>H16B-TS-RO-M32                        | T1310160121-000<br>T1310160129-000<br>T1310160125-000<br>T1310160132-000                    |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|    | High construction<br>                                                                                                                     | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TSH-RO-PG21<br>H16B-TSH-RO-PG29<br>H16B-TSH-RO-M25<br>H16B-TSH-RO-M32<br>H16B-TSH-RO-M40 | T1330160121-000<br>T1330160129-000<br>T1330160125-000<br>T1330160132-000<br>T1330160140-000 |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|   | Low construction<br>                                                                                                                     | M25<br>M32        | PG21<br>PG29 | H16B-TG-RO-PG21<br>H16B-TG-RO-PG29<br>H16B-TG-RO-M25<br>H16B-TG-RO-M32                        | T1320160121-000<br>T1320160129-000<br>T1320160125-000<br>T1320160132-000                    |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|  | High construction<br>                                                                                                                   | M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TGH-RO-PG21<br>H16B-TGH-RO-PG29<br>H16B-TGH-RO-M25<br>H16B-TGH-RO-M32<br>H16B-TGH-RO-M40 | T1340160121-000<br>T1340160129-000<br>T1340160125-000<br>T1340160132-000<br>T1340160140-000 |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>74.5</td></tr></table></div> | Construction      | H            | Low                                                                                           | 62.5                                                                                        | High | 74.5 | <div>Low construction</div> M25<br>M32<br><div>High construction</div> M25<br>M32<br>M40 | PG21<br>PG29<br><br>PG21<br>PG29 | H16B-TBF-LB-PG21<br>H16B-TBF-LB-PG29<br>H16B-TBF-LB-M25<br>H16B-TBF-LB-M32<br>H16B-TBFH-LB-PG21<br>H16B-TBFH-LB-PG29<br>H16B-TBFH-LB-M25<br>H16B-TBFH-LB-M32<br>H16B-TBFH-LB-M40 | T1730163121-000<br>T1730163129-000<br>T1730163125-000<br>T1730163132-000<br>T1770163121-000<br>T1770163129-000<br>T1770163125-000<br>T1770163132-000<br>T1770163140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                          |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
| Low                                                                                 | 62.5                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
| High                                                                                | 74.5                                                                                                                                                                                                                       |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                            |                   |              |                                                                                               |                                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |
|  |                                                                                                                                                                                                                            |                   |              | H16B-KDTP-LB                                                                                  | T1010161500-000                                                                             |      |      |                                                                                          |                                  |                                                                                                                                                                                  |                                                                                                                                                                         |

## H16B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                                                                                                                                                                                                 | PG                                                                                  | Type                                                                                                                                                                                                                                                  | Part Number  |                                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----|----------------------------------|------------|----------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                       |                                                                                     |                                                                                                                                                                                                                                                       |              |                                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
|    |                                                                                                                                                                      |                                                                                     |                                                                                                                                                                                                                                                       | H16B-AG-LB   | T1500163000-000                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
|    | With protection cover<br>                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                       | H16B-AD-LB   | T1510163000-000                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                       |                                                                                     |                                                                                                                                                                                                                                                       |              |                                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
|  |  <table border="1" data-bbox="323 1142 542 1238"><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>High</td><td>81</td></tr></table> | Construction                                                                        | H                                                                                                                                                                                                                                                     | Low          | 56                                                                                 | High                                                                     | 81 | 1 Side entry<br>Low construction | M20<br>M25 | PG16<br>PG21                     | H16B-SGR-LB-PG16<br>H16B-SGR-LB-PG21<br>H16B-SGR-LB-M20<br>H16B-SGR-LB-M25 | T1610163116-000<br>T1610163121-000<br>T1610163120-000<br>T1610163125-000 |
|                                                                                     |                                                                                                                                                                                                                                                       | Construction                                                                        | H                                                                                                                                                                                                                                                     |              |                                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
|                                                                                     |                                                                                                                                                                                                                                                       | Low                                                                                 | 56                                                                                                                                                                                                                                                    |              |                                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
|                                                                                     |                                                                                                                                                                                                                                                       | High                                                                                | 81                                                                                                                                                                                                                                                    |              |                                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
|                                                                                     |                                                                                                                                                                                                                                                       | 2 Side entry                                                                        | M20<br>M25                                                                                                                                                                                                                                            | PG16<br>PG21 | H16B-SGR-LB-2PG16<br>H16B-SGR-LB-2PG21<br>H16B-SGR-LB-2M20<br>H16B-SGR-LB-2M25     | T1610163216-000<br>T1610163221-000<br>T1610163220-000<br>T1610163225-000 |    |                                  |            |                                  |                                                                            |                                                                          |
|                                                                                     |                                                                                                                                                                                                                                                       | 1 Side entry<br>High construction                                                   | M25<br>M32                                                                                                                                                                                                                                            | PG21<br>PG29 | H16B-SGRH-LB-PG21<br>H16B-SGRH-LB-PG29<br>H16B-SGRH-LB-M25<br>H16B-SGRH-LB-M32     | T1650163121-000<br>T1650163129-000<br>T1650163125-000<br>T1650163132-000 |    |                                  |            |                                  |                                                                            |                                                                          |
|                                                                                     |                                                                                                                                                                                                                                                       | 2 Side entry                                                                        | M25<br>M32                                                                                                                                                                                                                                            | PG21<br>PG29 | H16B-SGRH-LB-2PG21<br>H16B-SGRH-LB-2PG29<br>H16B-SGRH-LB-2M25<br>H16B-SGRH-LB-2M32 | T1650163221-000<br>T1650163229-000<br>T1650163225-000<br>T1650163232-000 |    |                                  |            |                                  |                                                                            |                                                                          |
|                                                                                     |                                                                                                                                                                                                                                                       |  |  <table border="1" data-bbox="323 1545 542 1641"><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>High</td><td>81</td></tr></table> | Construction | H                                                                                  | Low                                                                      | 56 | High                             | 81         | 1 Side entry<br>Low construction | M20<br>M25                                                                 | PG16<br>PG21                                                             |
| Construction                                                                        | H                                                                                                                                                                                                                                                     |                                                                                     |                                                                                                                                                                                                                                                       |              |                                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
| Low                                                                                 | 56                                                                                                                                                                                                                                                    |                                                                                     |                                                                                                                                                                                                                                                       |              |                                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
| High                                                                                | 81                                                                                                                                                                                                                                                    |                                                                                     |                                                                                                                                                                                                                                                       |              |                                                                                    |                                                                          |    |                                  |            |                                  |                                                                            |                                                                          |
| 2 Side entry                                                                        | M20<br>M25                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                       | PG16<br>PG21 | H16B-SDR-LB-2PG16<br>H16B-SDR-LB-2PG21<br>H16B-SDR-LB-2M20<br>H16B-SDR-LB-2M25     | T1620163216-000<br>T1620163221-000<br>T1620163220-000<br>T1620163225-000 |    |                                  |            |                                  |                                                                            |                                                                          |
| 1 Side entry<br>High construction                                                   | M25<br>M32                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                       | PG21<br>PG29 | H16B-SDRH-LB-PG21<br>H16B-SDRH-LB-PG29<br>H16B-SDRH-LB-M25<br>H16B-SDRH-LB-M32     | T1660163121-000<br>T1660163129-000<br>T1660163125-000<br>T1660163132-000 |    |                                  |            |                                  |                                                                            |                                                                          |
| 2 Side entry                                                                        | M25<br>M32                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                       | PG21<br>PG29 | H16B-SDRH-LB-2PG21<br>H16B-SDRH-LB-2PG29<br>H16B-SDRH-LB-2M25<br>H16B-SDRH-LB-2M32 | T1660163221-000<br>T1660163229-000<br>T1660163225-000<br>T1660163232-000 |    |                                  |            |                                  |                                                                            |                                                                          |

## HIP.16/40, HIP-K.16/40, EMV-K.16/40 housings

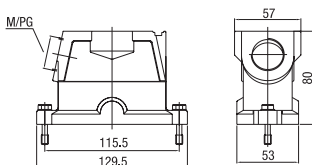
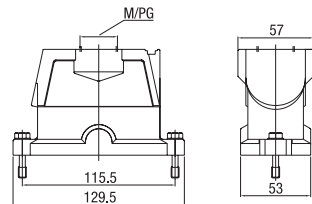
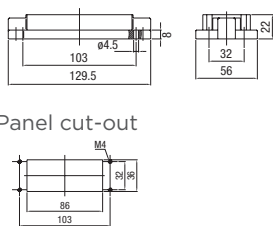
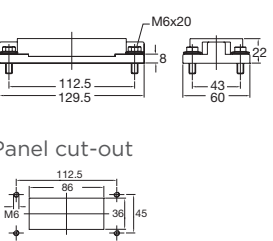
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         |                                                                                                      | Metr. | PG       | Type                                                                                        | Part Number                               |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------|----------|---------------------------------------------------------------------------------------------|-------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                      |       |          |                                                                                             |                                           |
|    |                     | M32   | 21<br>29 | <b>HIP</b><br>HIP.16/40.STS.1.21.G<br>HIP.16/40.STS.1.29.G<br>HIP.16/40.STS.1.M32.G         | 1-1102649-5<br>1-1102651-5<br>0-1106454-2 |
|                                                                                     |                                                                                                      | M32   | 29       | <b>HIP-K</b><br>HIP-K.16/40.STS.1.29.G<br>HIP-K.16/40.STS.1.M32.G                           | 2-1102651-5<br>0-1106444-2                |
|                                                                                     |                                                                                                      | M32   | 29<br>21 | <b>EMV-K</b><br>EMV-K.16/40.STS.1.29.G<br>EMV-K.16/40.STS.1.M32.G<br>EMV-K.16/40.STS.1.21.G | 4-1102723-5<br>0-1106446-4<br>4-1102722-5 |
| Hood: Top entry                                                                     |                                                                                                      |       |          |                                                                                             |                                           |
|  |                    | M32   | 21<br>29 | <b>HIP</b><br>HIP.16/40.STO.1.21.G<br>HIP.16/40.STO.1.29.G<br>HIP.16/40.STO.1.M32.G         | 1-1102653-5<br>1-1102655-5<br>0-1106454-1 |
|                                                                                     |                                                                                                      | M32   | 21<br>29 | <b>HIP-K</b><br>HIP-K.16/40.STO.2.21.G<br>HIP-K.16/40.STO.1.29.G<br>HIP-K.16/40.STO.1.M32.G | 0-1108534-1<br>2-1102655-5<br>0-1106444-1 |
|                                                                                     |                                                                                                      | M32   | 29       | <b>EMV-K</b><br>EMV-K.16/40.STO.1.29.G<br>EMV-K.16/40.STO.1.M32.G                           | 4-1102725-5<br>0-1106446-3                |
| Surface mounted housing: Bottom entry                                               |                                                                                                      |       |          |                                                                                             |                                           |
|  | <br>Panel cut-out |       |          | <b>HIP</b><br>HIP.16/40.AG                                                                  | 1-1102656-5                               |
|                                                                                     |                                                                                                      |       |          | <b>HIP-K</b><br>HIP-K.16/40.AG                                                              | 2-1102656-5                               |
|                                                                                     |                                                                                                      |       |          | <b>EMV-K</b><br>EMV-K.16/40.AG                                                              | 4-1102728-5                               |
|  | <br>Panel cut-out |       |          | <b>HIP</b><br>HIP.16/40.AG.M6                                                               | 1-1102618-5                               |
|                                                                                     |                                                                                                      |       |          | <b>HIP-K</b><br>HIP-K.16/40.AG.M6                                                           | 2-1102618-5                               |
|                                                                                     |                                                                                                      |       |          | <b>EMV-K</b><br>EMV-K.16/40.AG.M6                                                           | 4-1102730-5                               |

## HIP.16/40, HIP-K.16/40, EMV-K.16/40 housings

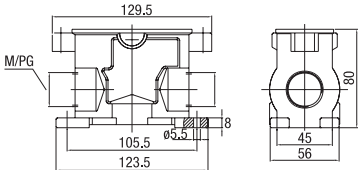
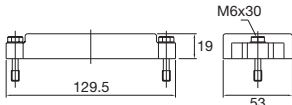
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                               | PG         | Type                                                                                     | Part Number                                                                              |                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------|
| Surface mounted housing: Side entry                                                 |                                                                                     |            |                                                                                          |                                                                                          |                                           |
|    |    | 2xM32      | 21<br>2x21                                                                               | <b>HIP</b><br>HIP.16/40.SG.1.21.G<br>HIP.16/40.SG.2.21.G<br>HIP.16/40.SG.2.M32.G         | 1-1102616-5<br>1-1102617-5<br>0-1106453-1 |
|                                                                                     |                                                                                     | 2xM32      | 21<br>2x21                                                                               | <b>HIP-K</b><br>HIP-K.16/40.SG.1.21.G<br>HIP-K.16/40.SG.2.21.G<br>HIP-K.16/40.SG.2.M32.G | 5-1102616-5<br>2-1102617-5<br>0-1106443-1 |
|                                                                                     | 2xM32                                                                               | 21<br>2x21 | <b>EMV-K</b><br>EMV-K.16/40.SG.1.21.Z<br>EMV-K.16/40.SG.2.21.Z<br>EMV-K.16/40.SG.2.M32.G | 4-1102726-5<br>4-1102727-5<br>0-1106445-2                                                |                                           |
|                                                                                     |                                                                                     |            |                                                                                          |                                                                                          |                                           |
|                                                                                     |                                                                                     |            |                                                                                          |                                                                                          |                                           |
|                                                                                     |                                                                                     |            |                                                                                          |                                                                                          |                                           |
| Protective covers for housings                                                      |                                                                                     |            |                                                                                          |                                                                                          |                                           |
|  |  |            |                                                                                          | <b>HIP</b><br>HIP/EMV.16/40.SKB                                                          | 3-1106203-5                               |
|                                                                                     |                                                                                     |            |                                                                                          | <b>HIP-K</b><br>HIP-K.16/40.SKB                                                          | 4-1106203-5                               |

## HK4/8 technical characteristics

Specifications .....DIN EN 60 664-1  
 ..... DIN EN 61 984  
 Number of contacts .....4/8 + PE

### INSERTS

Rated current  
 Power contact .....80A max  
 Signal contact ..... 16A max  
 (See current carrying capacity)  
 Working voltage  
 Power contact .....400V  
 Signal contact .....400V  
 Test voltage urms  
 Power contact .....6KV  
 Signal contact .....6KV  
 Pollution degree .....3  
 Insulation resistance ..... $\geq 10^{10}\Omega$   
 Material ..... Polycarbonate  
 Temperature range ..... -40°C... +125°C  
 Flammability acc. to UL94 .....V0  
 Working voltage acc. to UL/CSA..... 600V/400V  
 Mechanical working life-mating cycles ..... $\geq 500$

### CONTACTS

Material .....Copper alloy  
 Surface .....Hard silver-plated  
 .....Hard gold-plated  
 Contact resistance  
 Power contact ..... $\leq 0.1m\Omega$   
 Signal contact..... $\leq 5m\Omega$   
 Terminal ..... Crimp terminal  
 - mm<sup>2</sup>  
 Power contact .....1.5-16mm<sup>2</sup>  
 Signal contact..... 0.5-2.5mm<sup>2</sup>  
 - AWG  
 Power contact ..... 16-6  
 Signal contact..... 20-14

- Tightening/test torque

- Power contact

|                 |     |     |   |   |    |    |
|-----------------|-----|-----|---|---|----|----|
| mm <sup>2</sup> | 1.5 | 2.5 | 4 | 6 | 10 | 16 |
| Nm              | 1.2 | 2   | 3 | 3 | 3  | 3  |

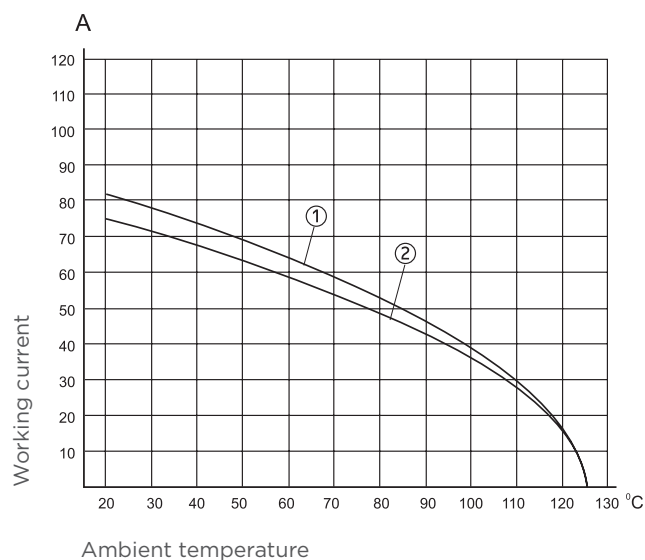
- Signal contact .....0.5 Nm

### HOODS, HOUSINGS

Material ..... Die cast aluminium  
 Surface .....Powder-coated (RAL 7037)  
 Locking element.....Stainless steel, steel-zinc plated  
 Temperature range ..... -40°C... +125°C  
 Degree of protection acc. to DIN40 050 .....IP65

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
 Control and test procedures according to DIN IEC 60512-3.



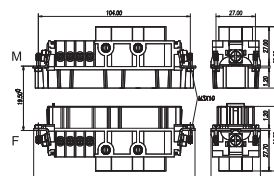
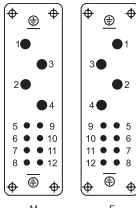


## HK4/8 inserts

## INSERTS FOR H24B HOOD/HOUSING

690V/400V MAX. 80A/16A

4/8+⊕

| Dimensions (mm)                                                                    |                                                                                   | Type        | Part Number     |                 |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------|-----------------|-----------------|
|                                                                                    |                                                                                   |             | Male insert     | Female insert   |
| Screw terminal                                                                     | Size chart                                                                        |             |                 |                 |
|   |  | HK4/8-012-M | T2100122101-000 |                 |
|                                                                                    |                                                                                   | HK4/8-012-F |                 | T2100122201-000 |
| Contact arrangement view from termination side                                     |                                                                                   |             |                 |                 |
|  |                                                                                   |             |                 |                 |

## HWK3/3/6 technical characteristics

Specifications .....DIN EN 60 664-1  
..... DIN EN 61 984  
Number of contacts .....3/3/6 + PE

### INSERTS

Rated current  
Power 1 contact..... 100A max  
Power 2 contact..... 40A max  
Signal contact..... 16A max  
(See current carrying capacity)  
Working voltage  
Power 1 contact  
Conductor - ground ..... 400V  
Conductor - conductor ..... 690V  
Power 2 contact  
Conductor - ground ..... 400V  
Conductor - conductor ..... 690V  
Signal contact  
Conductor - ground ..... 250V  
Conductor - conductor ..... 400V  
Test voltage urms  
Power 1 contact..... 6KV  
Power 2 contact..... 6KV  
Signal contact ..... 3KV  
Pollution degree ..... 3  
Insulation resistance .....  $\geq 10^{10}\Omega$   
Material ..... Polycarbonate  
Temperature range ..... -40°C... +125°C  
Flammability acc. to UL94 ..... V0

### CONTACTS

Material ..... Copper alloy  
Surface ..... Hard silver-plated  
..... Hard gold-plated  
Contact resistance  
Power contact .....  $\leq 0.1m\Omega$   
Signal contact.....  $\leq 5m\Omega$   
Terminal ..... Screw terminal  
- mm<sup>2</sup>  
Power 1 contact..... 16-35mm<sup>2</sup>  
Power 2 contact..... 2.5-6mm<sup>2</sup>  
Signal contact..... 0.5-2.5mm<sup>2</sup>  
- AWG  
Power 1 contact..... 16-6  
Power 2 contact..... 20-14  
Signal contact..... 20-14  
- Tightening/test torque  
- Power contact  

|                 |     |     |   |   |    |    |
|-----------------|-----|-----|---|---|----|----|
| mm <sup>2</sup> | 1.5 | 2.5 | 4 | 6 | 10 | 16 |
| Nm              | 1.2 | 2   | 3 | 3 | 3  | 3  |

  
- Signal contact ..... 0.5 Nm

### CURRENT CARRYING CAPACITY

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals.  
Control and test procedures according to DIN IEC 60512-3.

### HOODS, HOUSINGS

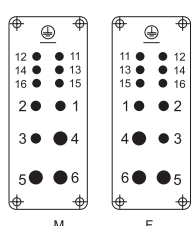
Material ..... Die cast aluminium  
Surface ..... Powder-coated (RAL 7037)  
Locking element..... Stainless steel, steel-zinc plated  
Temperature range ..... -40°C... +125°C  
Degree of protection acc. to DIN40 050 ..... IP65

# HWK3/3/6 inserts

INSERTS FOR H24B HOOD/HOUSING

3/3/6+Ⓢ

690V MAX. 100A  
690V MAX. 40A  
400V MAX. 16A

| Dimensions (mm)                                                                   |                                                                                   | Type          | Part Number     |                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------|-----------------|-----------------|
|                                                                                   |                                                                                   |               | Male insert     | Female insert   |
| Screw terminal                                                                    | Contact arrangement view from termination side                                    |               |                 |                 |
|  |  | HK3/3/6-012-M | T2093362101-000 |                 |
|                                                                                   |                                                                                   | HK3/3/6-012-F |                 | T2093362201-000 |

## CONTACTS

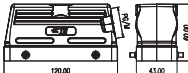
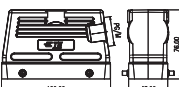
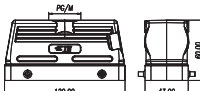
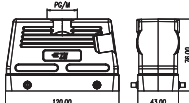
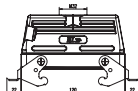
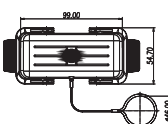
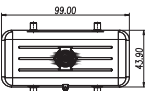
Material .....Copper alloy  
Surface .....Hard silver-plated  
.....Hard gold-plated  
Contact resistance  
Power contact ..... ≤0.1mΩ  
Signal contact..... ≤5mΩ  
Terminal ..... Screw terminal  
100A contact pin  
- mm<sup>2</sup>  
Power 1 contact..... 16-35 mm<sup>2</sup>  
Power 2 contact..... 2.5-6 mm<sup>2</sup>  
Signal contact..... 0.5-2.5 mm<sup>2</sup>  
- AWG  
Power 1 contact..... 6-2  
Power 2 contact..... 14-10  
Signal contact..... 20-14  
- Tightening/test torque  
- Power contact  

|                 |     |     |   |   |    |    |
|-----------------|-----|-----|---|---|----|----|
| mm <sup>2</sup> | 1.5 | 2.5 | 4 | 6 | 10 | 16 |
| Nm              | 1.2 | 2   | 3 | 3 | 3  | 3  |

  
- Signal contact..... 0.5Nm

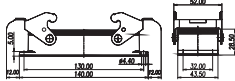
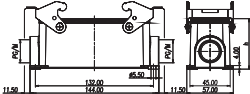
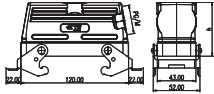
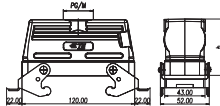
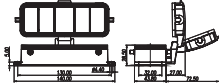
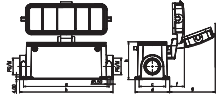
## H24B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                                              | Metr.             | PG           | Type                                                                           | Part Number                                                                                 |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------|------|-------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                                                                              |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | Low construction<br>                                                                                                                                                                        | M25<br>M32        | PG16<br>PG21 | H24B-TS-PG16<br>H24B-TS-PG21<br>H24B-TS-M25<br>H24B-TS-M32                     | T1210240116-000<br>T1210240121-000<br>T1210240125-000<br>T1210240132-000                    |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|    | High construction<br>                                                                                                                                                                       | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TSH-PG21<br>H24B-TSH-PG29<br>H24B-TSH-M25<br>H24B-TSH-M32<br>H24B-TSH-M40 | T1230240121-000<br>T1230240129-000<br>T1230240125-000<br>T1230240132-000<br>T1230240140-000 |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                                                                              |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|   | Low construction<br>                                                                                                                                                                       | M25<br>M32        | PG16<br>PG21 | H24B-TG-PG16<br>H24B-TG-PG21<br>H24B-TG-M25<br>H24B-TG-M32                     | T1220240116-000<br>T1220240121-000<br>T1220240125-000<br>T1220240132-000                    |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | High construction<br>                                                                                                                                                                     | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TGH-PG21<br>H24B-TGH-PG29<br>H24B-TGH-M25<br>H24B-TGH-M32<br>H24B-TGH-M40 | T1240240121-000<br>T1240240129-000<br>T1240240125-000<br>T1240240132-000<br>T1240240140-000 |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                                                                              |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>High</td><td>78.5</td></tr></table></div> <div>Low construction<br/>High construction</div> | Construction      | H            | Low                                                                            | 62.5                                                                                        | High | 78.5 | M25<br>M32<br><br>M25<br>M32<br>M40 | PG21<br><br>PG21<br>PG29 | H24B-TBFS-PG21<br>H24B-TBFS-M25<br>H24B-TBFS-M32<br><br>H24B-TBFHS-PG21<br>H24B-TBFHS-PG29<br>H24B-TBFHS-M25<br>H24B-TBFHS-M32<br>H24B-TBFHS-M40 | T1710241121-000<br>T1710241125-000<br>T1710241132-000<br><br>T1750241121-000<br>T1750241129-000<br>T1750241125-000<br>T1750241132-000<br>T1750241140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                            |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| Low                                                                                 | 62.5                                                                                                                                                                                                                                                                         |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| High                                                                                | 78.5                                                                                                                                                                                                                                                                         |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                                                                              |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                                                                           |                   |              | H24B-KDTP                                                                      | T1010241400-000                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
| Housing protection cover                                                            |                                                                                                                                                                                                                                                                              |                   |              |                                                                                |                                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |
|  |                                                                                                                                                                                           |                   |              | H24B-KDBP                                                                      | T1010242100-000                                                                             |      |      |                                     |                          |                                                                                                                                                  |                                                                                                                                                          |

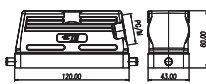
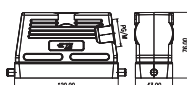
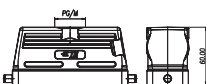
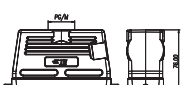
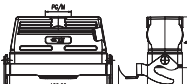
## H24B with 2 levers on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Metr.        | PG | Type     | Part Number     |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----|----------|-----------------|-------|----|-----------------------------------------------------------------------|----------------------------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|-------|-----|-----|----|----|----|----|----|-----------------------------------------------------------------------|----------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |    | H24B-AGS | T1410241000-000 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Surface mounted: Side entry                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                           | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table></div>                                                                                                                                                                                                                                                                                                                                   | Construction | H  | Low      | 56              | Hight | 81 | 1 Side entry<br>Low construction<br>2 Side entry<br>High construction | M25<br>M25<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H24B-SGRS-PG21<br>H24B-SGRS-M25<br>H24B-SGRS-2PG21<br>H24B-SGRS-2M25<br>H24B-SGRHS-PG21<br>H24B-SGRHS-PG29<br>H24B-SGRHS-M25<br>H24B-SGRHS-M32<br>H24B-SGRHS-2PG21<br>H24B-SGRHS-2PG29<br>H24B-SGRHS-2M25<br>H24B-SGRHS-2M32 | T1440241121-000<br>T1440241125-000<br>T1440241221-000<br>T1440241225-000<br>T1470241121-000<br>T1470241129-000<br>T1470241125-000<br>T1470241132-000<br>T1470241221-000<br>T1470241229-000<br>T1470241225-000<br>T1470241232-000 |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Side entry housing with two levers                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                         | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>76</td></tr></table></div>                                                                                                                                                                                                                                                                                                                                 | Construction | H  | Low      | 60              | Hight | 76 | Low construction<br>High construction                                 | M20<br>M25<br>M25<br>M32               | PG16<br>PG21<br>PG21<br>PG29                 | H24B-TSBS-PG16<br>H24B-TSBS-PG21<br>H24B-TSBS-M20<br>H24B-TSBS-M25<br>H24B-TSBHS-PG21<br>H24B-TSBHS-PG29<br>H24B-TSBHS-M25<br>H24B-TSBHS-M32                                                                                 | T1250243116-000<br>T1250243121-000<br>T1250243120-000<br>T1250243125-000<br>T1270243121-000<br>T1270243129-000<br>T1270243125-000<br>T1270243132-000                                                                             |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Top entry housing with two levers                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
|                                                                                         | <div><table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>60</td></tr><tr><td>Hight</td><td>76</td></tr></table></div>                                                                                                                                                                                                                                                                                                                                 | Construction | H  | Low      | 60              | Hight | 76 | Low construction<br>High construction                                 | M20<br>M25<br>M25<br>M32               | PG16<br>PG21<br>PG21<br>PG29                 | H24B-TGBS-PG16<br>H24B-TGBS-PG21<br>H24B-TGBS-M20<br>H24B-TGBS-M25<br>H24B-TGBHS-PG21<br>H24B-TGBHS-PG29<br>H24B-TGBHS-M25<br>H24B-TGBHS-M32                                                                                 | T1260243116-000<br>T1260243121-000<br>T1260243120-000<br>T1260243125-000<br>T1280243121-000<br>T1280243129-000<br>T1280243125-000<br>T1280243132-000                                                                             |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Construction                                                                                                                                                               | H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Bulkhead mounted with 4 bolts                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |    |          |                 |       |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| <br> | With protection cover<br><div></div><br><div></div> <table><tr><td>Construction</td><td>A</td><td>B</td><td>C</td><td>D</td><td>F</td><td>G</td><td>H</td></tr><tr><td>Low</td><td>132</td><td>144</td><td>45</td><td>57</td><td>20</td><td>65</td><td>56</td></tr><tr><td>Hight</td><td>132</td><td>144</td><td>45</td><td>57</td><td>20</td><td>65</td><td>81</td></tr></table> | Construction | A  | B        | C               | D     | F  | G                                                                     | H                                      | Low                                          | 132                                                                                                                                                                                                                          | 144                                                                                                                                                                                                                              | 45 | 57 | 20 | 65 | 56 | Hight | 132 | 144 | 45 | 57 | 20 | 65 | 81 | 1 Side entry<br>Low construction<br>2 Side entry<br>High construction | M25<br>M25<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H24B-AD-BO<br>H24B-SDR-BO-PG21<br>H24B-SDR-BO-M25<br>H24B-SDR-BO-2PG21<br>H24B-SDR-BO-2M25<br>H24B-SDRH-BO-PG21<br>H24B-SDRH-BO-PG29<br>H24B-SDRH-BO-M25<br>H24B-SDRH-BO-M32<br>H24B-SDRH-BO-2PG21<br>H24B-SDRH-BO-2PG29<br>H24B-SDRH-BO-2M25<br>H24B-SDRH-BO-2M32 | T1430240000-000<br>T1460240121-000<br>T1460240125-000<br>T1460240221-000<br>T1460240225-000<br>T1490240121-000<br>T1490240129-000<br>T1490240125-000<br>T1490240132-000<br>T1490240221-000<br>T1490240229-000<br>T1490240225-000<br>T1490240232-000 |
| Construction                                                                                                                                                               | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | B            | C  | D        | F               | G     | H  |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Low                                                                                                                                                                        | 132                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 144          | 45 | 57       | 20              | 65    | 56 |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |
| Hight                                                                                                                                                                      | 132                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 144          | 45 | 57       | 20              | 65    | 81 |                                                                       |                                        |                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |    |    |    |    |    |       |     |     |    |    |    |    |    |                                                                       |                                        |                                              |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                     |

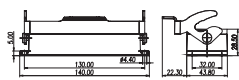
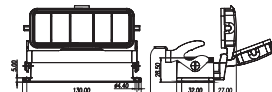
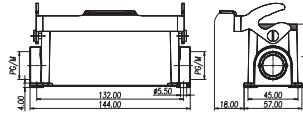
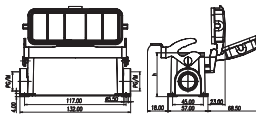
## H24B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     |                                                                                                                                                                                                                                                                               | Metr.             | PG           | Type                                                                                          | Part Number                                                                                 |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------|------|-------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                                                                               |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|    | Low construction<br>                                                                                                                                                                         | M25<br>M32        | PG21<br>PG29 | H24B-TS-RO-PG21<br>H24B-TS-RO-PG29<br>H24B-TS-RO-M25<br>H24B-TS-RO-M32                        | T1310240121-000<br>T1310240129-000<br>T1310240125-000<br>T1310240132-000                    |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|    | High construction<br>                                                                                                                                                                        | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TSH-RO-PG21<br>H24B-TSH-RO-PG29<br>H24B-TSH-RO-M25<br>H24B-TSH-RO-M32<br>H24B-TSH-RO-M40 | T1330240121-000<br>T1330240129-000<br>T1330240125-000<br>T1330240132-000<br>T1330240140-000 |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                                                                               |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|   | Low construction<br>                                                                                                                                                                         | M25<br>M32        | PG21<br>PG29 | H24B-TG-RO-PG21<br>H24B-TG-RO-PG29<br>H24B-TG-RO-M25<br>H24B-TG-RO-M32                        | T1320240121-000<br>T1320240129-000<br>T1320240125-000<br>T1320240132-000                    |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  | High construction<br>                                                                                                                                                                      | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TGH-RO-PG21<br>H24B-TGH-RO-PG29<br>H24B-TGH-RO-M25<br>H24B-TGH-RO-M32<br>H24B-TGH-RO-M40 | T1340240121-000<br>T1340240129-000<br>T1340240125-000<br>T1340240132-000<br>T1340240140-000 |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Cable-to-cable hood                                                                 |                                                                                                                                                                                                                                                                               |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  | <div><table><tr><th>Construction</th><th>H</th></tr><tr><td>Low</td><td>62.5</td></tr><tr><td>Hight</td><td>78.5</td></tr></table></div> <div>Low construction<br/>High construction</div> | Construction      | H            | Low                                                                                           | 62.5                                                                                        | Hight | 78.5 | M25<br>M32<br><br>M25<br>M32<br>M40 | PG21<br>PG29<br><br>PG21<br>PG29 | H24B-TBF-LB-PG21<br>H24B-TBF-LB-PG29<br>H24B-TBF-LB-M25<br>H24B-TBF-LB-M32<br><br>H24B-TBFH-LB-PG21<br>H24B-TBFH-LB-PG29<br>H24B-TBFH-LB-M25<br>H24B-TBFH-LB-M32<br>H24B-TBFH-LB-M40 | T1730242121-000<br>T1730242129-000<br>T1730242125-000<br>T1730242132-000<br><br>T1770243121-000<br>T1770243129-000<br>T1770243125-000<br>T1770243132-000<br>T1770243140-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                             |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Low                                                                                 | 62.5                                                                                                                                                                                                                                                                          |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Hight                                                                               | 78.5                                                                                                                                                                                                                                                                          |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
| Protection covers for hoods                                                         |                                                                                                                                                                                                                                                                               |                   |              |                                                                                               |                                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |
|  |                                                                                                                                                                                                                                                                               |                   |              | H24B-KDTP-LB                                                                                  | T1010241500-000                                                                             |       |      |                                     |                                  |                                                                                                                                                                                      |                                                                                                                                                                             |

## H24B with 1 lever on the hoods/housings

POWDER-COATED, RAL 7037

| Dimensions (mm)                                                                     | Metr.                                                                                                                                                                                                                                                                                                                                                                                                                          | PG           | Type | Part Number |                 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------|-------------|-----------------|-------|----|------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                |              |      |             |                 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|    |                                                                                                                                                                                                                                                                                                                                               |              |      | H24B-AG-LB  | T1500243000-000 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|    | With protection cover<br>                                                                                                                                                                                                                                                                                                                     |              |      | H24B-AD-LB  | T1510243000-000 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Surface mounted: Side entry                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                |              |      |             |                 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|  | <div><div>1 Side entry</div><div>Low construction</div><div>2 Side entry</div><div>1 Side entry</div><div>High construction</div><div>2 Side entry</div><div>1 Side entry</div><div>High construction</div></div>  <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table> | Construction | H    | Low         | 56              | Hight | 81 | M20<br>M25<br><br>M20<br>M25<br><br>M25<br>M32<br><br>M25<br>M32 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H24B-SGR-LB-PG16<br>H24B-SGR-LB-PG21<br>H24B-SGR-LB-M20<br>H24B-SGR-LB-M25<br>H24B-SGR-LB-2PG16<br>H24B-SGR-LB-2PG21<br>H24B-SGR-LB-2M20<br>H24B-SGR-LB-2M25<br><br>H24B-SGRH-LB-PG21<br>H24B-SGRH-LB-PG29<br>H24B-SGRH-LB-M25<br>H24B-SGRH-LB-M32<br>H24B-SGRH-LB-2PG21<br>H24B-SGRH-LB-2PG29<br>H24B-SGRH-LB-2M25<br>H24B-SGRH-LB-2M32 | T1610243116-000<br>T1610243121-000<br>T1610243120-000<br>T1610243125-000<br>T1610243216-000<br>T1610243221-000<br>T1610243220-000<br>T1610243225-000<br><br>T1650243121-000<br>T1650243129-000<br>T1650243125-000<br>T1650243132-000<br>T1650243221-000<br>T1650243229-000<br>T1650243225-000<br>T1650243232-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                                                                                                                                                                              |              |      |             |                 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Low                                                                                 | 56                                                                                                                                                                                                                                                                                                                                                                                                                             |              |      |             |                 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Hight                                                                               | 81                                                                                                                                                                                                                                                                                                                                                                                                                             |              |      |             |                 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
|  | With protection cover<br> <table><tr><td>Construction</td><td>H</td></tr><tr><td>Low</td><td>56</td></tr><tr><td>Hight</td><td>81</td></tr></table>                                                                                                                                                                                         | Construction | H    | Low         | 56              | Hight | 81 | M20<br>M25<br><br>M20<br>M25<br><br>M25<br>M32<br><br>M25<br>M32 | PG16<br>PG21<br><br>PG16<br>PG21<br><br>PG21<br>PG29<br><br>PG21<br>PG29 | H24B-SDR-LB-PG16<br>H24B-SDR-LB-PG21<br>H24B-SDR-LB-M20<br>H24B-SDR-LB-M25<br>H24B-SDR-LB-2PG16<br>H24B-SDR-LB-2PG21<br>H24B-SDR-LB-2M20<br>H24B-SDR-LB-2M25<br><br>H24B-SDRH-LB-PG21<br>H24B-SDRH-LB-PG29<br>H24B-SDRH-LB-M25<br>H24B-SDRH-LB-M32<br>H24B-SDRH-LB-2PG21<br>H24B-SDRH-LB-2PG29<br>H24B-SDRH-LB-2M25<br>H24B-SDRH-LB-2M32 | T1620243116-000<br>T1620243121-000<br>T1620243120-000<br>T1620243125-000<br>T1620243216-000<br>T1620243221-000<br>T1620243220-000<br>T1620243225-000<br><br>T1660243121-000<br>T1660243129-000<br>T1660243125-000<br>T1660243132-000<br>T1660243221-000<br>T1660243229-000<br>T1660243225-000<br>T1660243232-000 |
| Construction                                                                        | H                                                                                                                                                                                                                                                                                                                                                                                                                              |              |      |             |                 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Low                                                                                 | 56                                                                                                                                                                                                                                                                                                                                                                                                                             |              |      |             |                 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |
| Hight                                                                               | 81                                                                                                                                                                                                                                                                                                                                                                                                                             |              |      |             |                 |       |    |                                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                  |

## HIP.24/64, HIP-K.24/64, EMV-K.24/64 housings

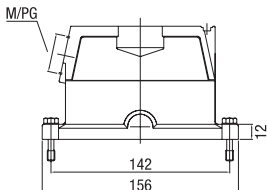
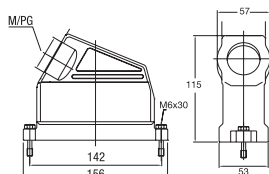
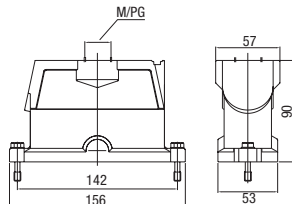
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         |                                                                                     | Metr.             | PG       | Type                                                                                                                    | Part Number                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------|----------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Hood: Side entry, Standard construction                                             |                                                                                     |                   |          |                                                                                                                         |                                                          |
|    |    | M40               | 21<br>29 | <b>HIP</b><br>HIP.24/64.STS.1.21.G<br>HIP.24/64.STS.1.29 G<br>HIP.24/64.STS.1.M40.G                                     | 1-1102658-5<br>1-1102660-5<br>0-1106473-2                |
|                                                                                     |                                                                                     | M40               | 29       | <b>HIP-K</b><br>HIP-K.24/64.STS.1.29.G<br>HIP-K.24/64.STS.1.M40.G                                                       | 2-1102660-5<br>0-1106473-4                               |
|                                                                                     |                                                                                     | M25<br>M32<br>M40 | 29       | <b>EMV-K</b><br>EMV-K.24/64.STS.1.29.G<br>EMV-K.24/64.STS.1.M25.G<br>EMV-K.24/64.STS.1.M32.G<br>EMV-K.24/64.STS.1.M40.G | 4-1102755-5<br>0-1102983-1<br>0-1106461-8<br>0-1106461-3 |
|  |   | M40               | 29<br>36 | <b>HIP</b><br>HIP-KF.24/64.STS.1.29.G<br>HIP-KF.24/64.STS.1.36.G<br>HIP-KF.24/64.STS.1.M40.G                            | 1-1102622-5<br>1-1102623-5<br>0-1106474-1                |
|                                                                                     |                                                                                     | M40               | 29<br>36 | <b>HIP-K</b><br>HIP-KF/K.24/64.STS.1.29.G<br>HIP-KF/K. 24/64.STS.1.36G<br>HIP-KF/K.24/64.STS.1.M40.G                    | 2-1102622-5<br>2-1102623-5<br>0-1106474-2                |
|                                                                                     |                                                                                     | M40               | 29<br>36 | <b>EMV-K</b><br>EMV-KF/K.24/64.STS.1.29.G<br>EMV-KF/K.24/64.STS.1.36.G<br>EMV-KF/K.24/64.STS.1.M40.G                    | 4-1102732-5<br>4-1102733-5<br>0-1106462-2                |
| Hood: Top entry, Standard construction                                              |                                                                                     |                   |          |                                                                                                                         |                                                          |
|  |  | M40               |          |                                                                                                                         |                                                          |
|                                                                                     |                                                                                     | 2xM32<br>M40      | 21<br>29 | <b>HIP</b><br>HIP.24/64.STO.1.21.G<br>HIP.24/64.STO.1.29.G<br>HIP.24/64.STO.1.M40.G                                     | 1-1102662-5<br>1-1102664-5<br>0-1106473-1                |
|                                                                                     |                                                                                     | M40<br>2xM40      | 29       | <b>HIP-K</b><br>HIP-K.24/64.STO.1.29.G<br>HIP-K.24/64.STO.2.M32.G<br>HIP-K.24/64.STO.1.M40.G                            | 2-1102664-5<br>0-1102792-1<br>0-1106473-3                |
|                                                                                     |                                                                                     | 2xM40             | 29       | <b>EMV-K</b><br>EMV-K.24/64.STO.1.29.G<br>EMV-K.24/64.STO.1.M40.G                                                       | 4-1102759-5<br>0-1106461-4                               |
|                                                                                     |                                                                                     | 2xM40             |          |                                                                                                                         |                                                          |



## HIP.10/24, HIP-K.10/24, EMV-K.10/24 housings

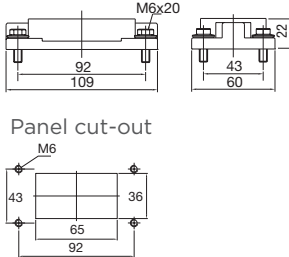
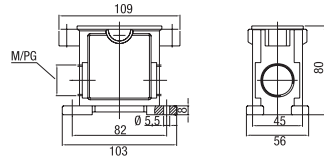
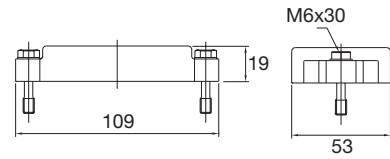
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                               | PG                                                 | Type                                                                                                            | Part Number                                                                                                                                                                                                                                            |                                                                                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Surface mounted housing: Bottom entry                                               |                                                                                     |                                                    |                                                                                                                 |                                                                                                                                                                                                                                                        |                                                                                                                              |
|    |    |                                                    | <b>HIP</b><br>HIP.10/24.AG.M6<br><br><b>HIP-K</b><br>HIP-K.10/24.AG.M6<br><br><b>EMV-K</b><br>EMV-K.10/24.AG.M6 | 1-1102612-5<br><br>2-1102612-5<br><br>4-1102720-5                                                                                                                                                                                                      |                                                                                                                              |
| Surface mounted housing: Side entry                                                 |                                                                                     |                                                    |                                                                                                                 |                                                                                                                                                                                                                                                        |                                                                                                                              |
|   |   | 2xM32<br><br><br><br><br><br><br><br><br><br>2xM32 | 21<br>2x21<br><br><br>21<br>2x21<br><br><br>21<br>2x21                                                          | <b>HIP</b><br>HIP.10/24.SG.1.21.G<br>HIP.10/24.SG.2.21.G<br>HIP.10/24.SG.2.M32.G<br><br><b>HIP-K</b><br>HIP-K.10/24.SG.1.21.G<br>HIP-K.10/24.SG.2.21.G<br><br><b>EMV-K</b><br>EMV-K.10/24.SG.1.21.G<br>EMV-K.10/24.SG.2.21.G<br>EMV-K.10/24.SG.2.M32.G | 1-1102610-5<br>1-1102611-5<br>0-1106435-1<br><br>5-1102610-5<br>2-1102611-5<br><br>5-1102716-5<br>4-1102717-5<br>0-1106426-2 |
| Protective covers for hoods and housing                                             |                                                                                     |                                                    |                                                                                                                 |                                                                                                                                                                                                                                                        |                                                                                                                              |
|  |  |                                                    | <b>HIP</b><br>HIP/EMV.10/24.SKB<br><br><b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.10/24.SKB                              | 3-1106202-5<br><br>4-1106202-5                                                                                                                                                                                                                         |                                                                                                                              |

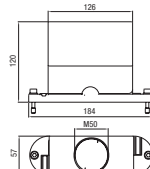
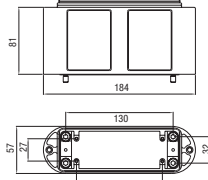
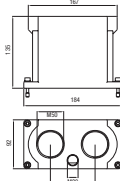
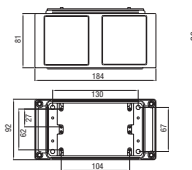
## HF-HIP-K 8/HF-EMV-K 8, HF-HIP-K 12/HF-EMV-K 12 housings

**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

### Screw lock on hood

| Description                                                                         |                                                                                     | Metr.                            | PG             | Type                                                                                                 | Part Number                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------|----------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Hood                                                                                |                                                                                     |                                  |                |                                                                                                      |                                                          |
|    |    | 1xM50<br>1xM50<br>2xM40<br>2xM40 |                | HF-HIP-K.8.Sto.1.M50G<br>HF.8.EMV-K.8.Sto.1.M50G<br>HF.HIP-K.8.Sto.2.M40G<br>HF.EMV-K.8.Sto.2.M40G   | O-1102839-4<br>O-1102839-3<br>O-1102839-2<br>O-1102839-1 |
| Housing bottom                                                                      |                                                                                     |                                  |                |                                                                                                      |                                                          |
|    |   | <b>Height</b>                    |                | HF-HIP-K.8.AG.N<br>HF-EMV-K.8.AG.N<br>HF-HIP-K.8.AG<br>HF-EMV-K.8.AG                                 | O-1102837-2<br>O-1102837-1<br>O-1102836-2<br>O-1102836-1 |
|                                                                                     |                                                                                     |                                  | 20 mm<br>20 mm |                                                                                                      |                                                          |
|                                                                                     |                                                                                     | 81 mm<br>81 mm                   |                |                                                                                                      |                                                          |
|                                                                                     |                                                                                     |                                  |                |                                                                                                      |                                                          |
| Hood                                                                                |                                                                                     |                                  |                |                                                                                                      |                                                          |
|  |  | 2xM40<br>2xM40<br>2xM50<br>2xM50 |                | HF-HIP-K.12.Sto.2.M40G<br>HF-EMV-K.12.Sto.2.M40G<br>HF-HIP-K.12.Sto.2.M50G<br>HF-EMV-K.12.Sto.2.M50G | O-1102840-2<br>O-1102840-1<br>O-1102840-4<br>O-1102840-3 |
| Housing bottom                                                                      |                                                                                     |                                  |                |                                                                                                      |                                                          |
|  |  | <b>Height</b>                    |                | HF-HIP-K.12.AG.N<br>HF-EMV-K.12.AG.N<br>HF-HIP-K.12.AG<br>HF-EMVK-K.12.AG                            | O-1102838-2<br>O-1102838-1<br>O-1102192-2<br>O-1102192-1 |
|                                                                                     |                                                                                     |                                  | 20 mm<br>20 mm |                                                                                                      |                                                          |
|                                                                                     |                                                                                     | 81 mm<br>81 mm                   |                |                                                                                                      |                                                          |
|                                                                                     |                                                                                     |                                  |                |                                                                                                      |                                                          |

---

## Connectors for Power Supply and Power Circuits

The demand for shortest possible periods of machine shutdowns and assembly times requires the use of connectors at the interfaces of the connector wires, as well as energy feeding and power circuits.

To satisfy the demand of the various applications the series Power Connector was designed.

On the basis of the standard series HSB.6/35 (power supply up to 35 A - 6-poles) the development and the elaboration of this series is being continued rigorously as a result, almost any application up to current of 350 A can be realized by using a series of different power contacts.

Due to the modular structure the different varieties of customer requirements in this sector can be met.

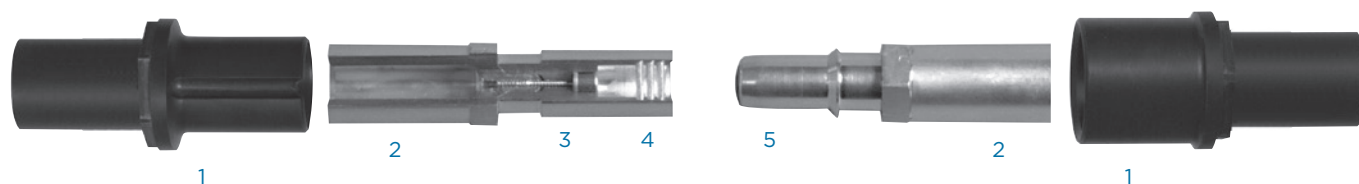
We also offer solutions for your application specific requirements.

### POWER CONTACT SERIE HPC GRADED BY DIMENSIONAL LEVELS UP TO 350 A FOR VARIOUS INDUSTRIAL APPLICATIONS

65 % higher current consumption than other available contact systems of the same size.

F. e. Tulip contact 250 A - Coil spring contact 350 A.

## Coil Spring Power Contact



- 1 Insulating material plastic
- 2 Crimp ferrule
- 3 Female contact
- 4 Coil spring
- 5 Male contact

### CRIMP FERRULE

- Optimum material adaptation according to customer's application
- Adaptation to special customer wire size and crimping tools
- Same crimp ferrule for male, female and grounding contact
- Robust crimp ferrule for tough industrial applications

### MALE/FEMALE CONTACT

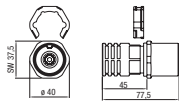
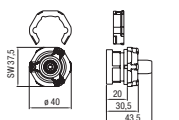
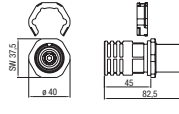
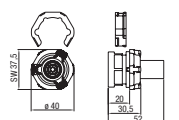
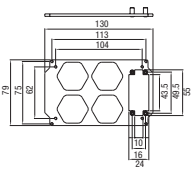
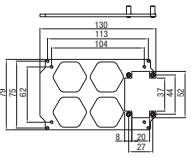
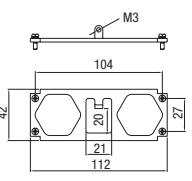
- Wear-resistant basic material
- Worn parts can be individually exchanged
- Surface coating according to customer application
- 30% reduced mating and pulling forces
- 50% increase of making cycles
- Variable wire termination

## Connector overview

|                       |                   |
|-----------------------|-------------------|
| <b>Series</b>         | <b>HF-13</b>      |
| <b>Power circuit</b>  | <b>350A (3KV)</b> |
| Signal circuit        | 16A (400V)        |
| Pollution degree      | 3(C)              |
| Type of terminals     | Crimp             |
| <b>Pole<br/>Modul</b> | 1                 |
| Page                  | 16                |

## HF-13 module

350A/3KV

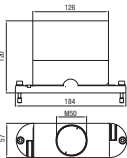
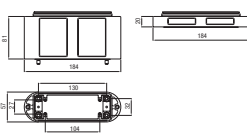
| Description                                                                            | Dimensions (mm)                                                                     | Type        | Part Number |               |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------|-------------|---------------|
|                                                                                        |                                                                                     |             | Male insert | Female insert |
|       |    | HF.13.Sti.  | O-1110950-2 |               |
|       |    | HF.13.Sti.E | O-1110950-4 |               |
|       |    | HF.13.Bu.   |             | O-1110951-2   |
|       |    | HF.13.Bu.E  |             | O-1110951-4   |
|                                                                                        |                                                                                     |             | Top         | Bottom        |
| 3 x for power<br>1 x for earth<br>1 x for signal (HA.10)<br>Assembly in HF.12 Housings |  |             | O-1110955-3 | O-1110955-1   |
| 3 x for power<br>1 x for earth<br>1x for signal (HE.6)<br>Assembly in HF.12 Housings   |  |             | O-1110955-4 | O-1110955-2   |
| 2 x for power<br>1 x signal<br>Assembly in HF.8 Housings                               |  |             | O-1110960-2 | O-1110960-1   |

## HF.8 housings

**EMV-K:** corrosion-resistant, black; **HIP-K:** black

### Screw lock on hood

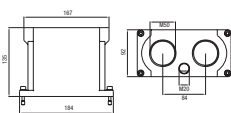
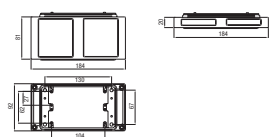
IP 68 / IP 69 K

| Description                                                                                                                                                         | Metr.       | Height | Type                       | Part Number |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|----------------------------|-------------|
| Hood                                                                                                                                                                |             |        |                            |             |
|   | 1xM50       |        | HF-HIP-K.8.Sto.1.M50G      | O-1102839-4 |
|                                                                                                                                                                     | 1xM50       |        | HF.8.EMV-K.8.Sto.1.M50G    | O-1102839-3 |
|                                                                                                                                                                     | 2xM40       |        | HF.HIP-K.8.Sto.2.M40G      | O-1102839-2 |
|                                                                                                                                                                     | 2xM40       |        | HF.EMV-K.8.Sto.2.M40G      | O-1102839-1 |
|                                                                                                                                                                     | 2xM40+1xM16 |        | HF.HIP.K8.Sto.2.M40G.1M16G | O-1102839-6 |
|                                                                                                                                                                     | 2xM40+1xM16 |        | HF.EMV.K8.Sto.2.M40G.1M16G | O-1102839-5 |
| Housing bottom                                                                                                                                                      |             |        |                            |             |
|   |             | 20     | HF-HIP-K.8.AG.N            | O-1102837-2 |
|                                                                                                                                                                     |             | 20     | HF-EMV-K.8.AG.N            | O-1102837-1 |
|                                                                                                                                                                     |             | 81     | HF-HIP-K.8.AG              | O-1102836-2 |
|                                                                                                                                                                     |             | 81     | HF-EMV-K.8.AG              | O-1102836-1 |

## HF.12 housings

### Screw lock on hood

IP 68 / IP 69 K

| Description                                                                                                                                                             | Metr. | Height | Type                        | Part Number |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------|-----------------------------|-------------|
| Hood                                                                                                                                                                    |       |        |                             |             |
|   | 2xM40 |        | HF-HIP-K.12.Sto.2.M40.1M20G | O-1102840-2 |
|                                                                                                                                                                         | 2xM40 |        | HF-EMV-K.12.Sto.2.M40.1M20G | O-1102840-1 |
|                                                                                                                                                                         | 2xM50 |        | HF-HIP-K.12.Sto.2.M50.1M20G | O-1102840-4 |
|                                                                                                                                                                         | 2xM50 |        | HF-EMV-K.12.Sto.2.M50.1M20G | O-1102840-3 |
| Housing bottom                                                                                                                                                          |       |        |                             |             |
|   |       | 20     | HF-HIP-K.12.AG.N            | O-1102838-2 |
|                                                                                                                                                                         |       | 20     | HF-EMV-K.12.AG.N            | O-1102838-1 |
|                                                                                                                                                                         |       | 81     | HF-HIP-K.12.AG              | O-1102192-2 |
|                                                                                                                                                                         |       | 81     | HF-EMVK-K.12.AG             | O-1102192-1 |

**EMV-K:** Protection against electro magnetic interference, pressure-tight, corrosion-resistant

### Screw lock on hood

**IP 68 / IP 69 K**

Surface mounted housing: side entry



## Crimping sleeves

CRIMPING SLEEVES FOR CONTACT SERIES HF-13

MAX. 350A

| Description                                                                       | Dimensions (mm)                                                                    | Type                                                                                                                                                                                                  | Part Number                                                                            |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Crimp barrel for pin-/socket side<br>- shrink tube<br>- crimp barrel<br>- adapter |  | CH.50mm <sup>2</sup> -13/16mm<br>CH.70mm <sup>2</sup> -13/16mm<br>CH.95mm <sup>2</sup> -13/16mm<br>CH.105mm <sup>2</sup> -13/16mm<br>CH.120mm <sup>2</sup> -13/16mm<br>CH.150mm <sup>2</sup> -13/16mm | 0-1110953-5<br>0-1110953-6<br>0-1110953-7<br>0-1110953-8<br>0-1110953-9<br>1-1110953-1 |

## SUITABLE TOOL

| Description                         |                                                                                     | Type                                                                                                                                                                                                                        | Part Number                                                                                           |
|-------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Crimping tool without crimping jaws |    | HSS-CSZ.2.5-70mm <sup>2</sup>                                                                                                                                                                                               | 1-1105653-8                                                                                           |
| Crimping jaws for HSL, HSS          |   | CB-HSS-CSZ.6mm <sup>2</sup><br>CB-HSS-CSZ.10mm <sup>2</sup><br>CB-HSS-CSZ.16mm <sup>2</sup><br>CB-HSS-CSZ.25mm <sup>2</sup><br>CB-HSS-CSZ.35mm <sup>2</sup><br>CB-HSS-CSZ.50mm <sup>2</sup><br>CB-HSS-CSZ.70mm <sup>2</sup> | 2-1105653-8<br>3-1105653-8<br>4-1105653-8<br>5-1105653-8<br>6-1105653-8<br>7-1105653-8<br>8-1105653-8 |
| Hydraulic Crimping tool             |  | HF-CHZ                                                                                                                                                                                                                      | 0-1110956-1                                                                                           |
| Dies                                |  | SET-50-150mm <sup>2</sup><br>150mm <sup>2</sup> -KZ22<br>120mm <sup>2</sup> -KZ20<br>95mm <sup>2</sup> -KZ18<br>70mm <sup>2</sup> -KZ16<br>50mm <sup>2</sup> -KZ14                                                          | 0-1110956-7<br>0-1110956-6<br>0-1110956-5<br>0-1110956-4<br>0-1110956-3<br>0-1110956-2                |

## Notes

[illegible]

## IP68, IP65 Hoods and Housings overview



### 1. Specifications

DIN VDE 0110 Concerning clearance and clearance distances

DIN VDE 0627 Connectors and plug devices

### 2. Standards

DIN EN 60 664-1

DIN EN 61 984

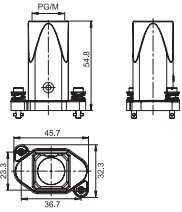
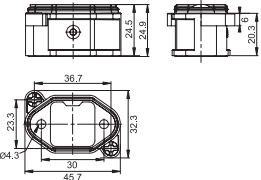
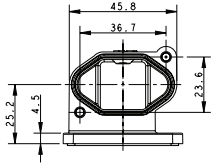
### 3. Approvals



RoHS

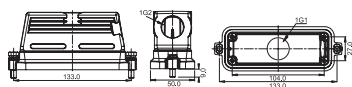
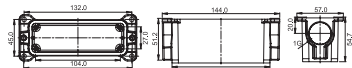
## HPR (IP68) series hoods/housings

### H3APR (IP68) SERIES

| Opposite angle locking                                                              |                                                                                     | Metr. | PG   | Type                            | Part Number                                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|------|---------------------------------|-------------------------------------------------------------------------------|
| Top entry                                                                           |                                                                                     |       |      |                                 |                                                                               |
|    |    | M20   | PG16 | H3APR-MTG-PG16<br>H3APR-MTG-M20 | T1920030116-000<br>T1920030120-000                                            |
| Bulkhead mounted: Bottom entry                                                      |                                                                                     |       |      |                                 |                                                                               |
|    |    |       |      | H3APR-MAG                       | T1930030000-000                                                               |
| Bulkhead mounted: Side entry                                                        |                                                                                     |       |      |                                 |                                                                               |
|  |  |       |      | H3APR-MAGS                      | T1946030000-000 (Black)<br>T1946032000-000 (Grey)<br>T1946031000-000 (Silver) |

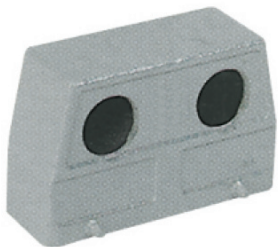
## HB hoods/housings with central locking lever

### HB (IP67) SERIES

| Central locking                                                                   |                                                                                   | Size | Metr.             | PG               | Type                                                                                                                   | Part Number                                                                                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-------------------|------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
|  |  | H24B | M25<br>M32<br>M40 | PG21<br>PG29     | <b>Top entry</b><br>H24BK-TGHC-PG21<br>H24BK-TGHC-PG29<br>H24BK-TGHC-M25<br>H24BK-TGHC-M32<br>H24BK-TGHC-M40           | T1822242121-000<br>T1822242129-000<br>T1822242125-000<br>T1822242132-000<br>T1822242140-000 |
|                                                                                   |                                                                                   |      |                   | PG21             | <b>Side entry</b><br>H24BK-TSHC-PG21<br>H24BK-TSHC-M25<br>H24BK-TSHC-M32                                               | T1812242121-000<br>T1812242125-000<br>T1812242132-000                                       |
| Surface mounted side entry                                                        |                                                                                   |      |                   |                  |                                                                                                                        |                                                                                             |
|  |  | H24B | M25<br><br>M25    | PG21<br><br>PG21 | <b>1 side entry</b><br>H24BK-SGR-PG21<br>H24BK-SGR-M25<br><br><b>2 side entry</b><br>H24BK-SGR-2PG21<br>H24BK-SGR-2M25 | T1852242121-000<br>T1852242125-000<br><br>T1852242221-000<br>T1852242225-000                |

## Special hoods

### SPECIAL HOODS (IP65) SERIES

| Double cable entry                                                                 | Size | Metr. | PG     | Type                            | Part Number                        |
|------------------------------------------------------------------------------------|------|-------|--------|---------------------------------|------------------------------------|
| Hood: Top entry                                                                    |      |       |        |                                 |                                    |
|   | H10B | 2xM20 | 2xPG16 | H10B-TGH-2PG16<br>H10B-TGH-2M20 | T1240102116-000<br>T1240102120-000 |
|                                                                                    | H16B | 2xM25 | 2xPG21 | H16B-TGH-2PG21<br>H16B-TGH-2M25 | T1240162121-000<br>T1240162125-000 |
|                                                                                    | H24B | 2xM25 | 2xPG21 | H24B-TGH-2PG21<br>H24B-TGH-2M25 | T1240242121-000<br>T1240242125-000 |
|                                                                                    |      |       |        |                                 |                                    |
|                                                                                    |      |       |        |                                 |                                    |
|                                                                                    |      |       |        |                                 |                                    |
| Hood: Side entry                                                                   |      |       |        |                                 |                                    |
|  | H10B | 2xM20 | 2xPG16 | H10B-TFH-2PG16<br>H10B-TFH-2M20 | T1230102116-000<br>T1230102120-000 |
|                                                                                    | H16B | 2xM25 | 2xPG21 | H16B-TFH-2PG21<br>H16B-TFH-2M25 | T1230162121-000<br>T1230162125-000 |
|                                                                                    | H24B | 2xM25 | 2xPG21 | H24B-TFH-2PG21<br>H24B-TFH-2M25 | T1230242121-000<br>T1230242125-000 |
|                                                                                    |      |       |        |                                 |                                    |
|                                                                                    |      |       |        |                                 |                                    |
|                                                                                    |      |       |        |                                 |                                    |

## HA series hoods/housings

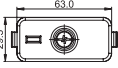
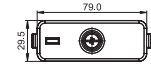
H3A INCLUDE METAL AND PLASTIC SHELLS

H3A6 LEVERS INCLUDE METAL, PLASTIC AND STAINLESS STEEL

| H3A metal hoods, housings                                                           | Metr.                                        | PG   | Type                                             | H3A thermoplastic hoods, housings                                                                     | Metr.                                        | PG   | Type                                          |
|-------------------------------------------------------------------------------------|----------------------------------------------|------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------|------|-----------------------------------------------|
| Top entry                                                                           |                                              |      |                                                  | Top entry                                                                                             |                                              |      |                                               |
|    | M20                                          | PG11 | H3A-MTG-PG11<br>H3A-MTG-M20                      |                      | M20                                          | PG11 | H3A-TG-PG11<br>H3A-TG-M20                     |
| Side entry                                                                          |                                              |      |                                                  | Side entry                                                                                            |                                              |      |                                               |
|    | M20                                          | PG11 | H3A-MTS-PG11<br>H3A-MTS-M20                      |                      | M20                                          | PG11 | H3A-TS-PG11<br>H3A-TS-M20                     |
| Bulkhead mounting: Bottom entry                                                     |                                              |      |                                                  | Bulkhead mounting: Bottom entry                                                                       |                                              |      |                                               |
|    |                                              |      | H3A-MAG                                          |                      |                                              |      | H3A-AG                                        |
| Bulkhead mounting: Side entry                                                       |                                              |      |                                                  | Bulkhead mounting: Side entry                                                                         |                                              |      |                                               |
|  |                                              |      | H3A-MAGS                                         |                    |                                              |      | H3A-AGS                                       |
| Surface mounting: Side entry                                                        |                                              |      |                                                  | Surface mounting: Side entry                                                                          |                                              |      |                                               |
|  | M16<br>M20                                   | PG11 | H3A-MAGSV-PG11<br>H3A-MAGSV-M16<br>H3A-MAGSV-M20 |                    | M16<br>M20                                   | PG11 | H3A-AGSV-PG11<br>H3A-AGSV-M16<br>H3A-AGSV-M20 |
| Cable-to-cable hood                                                                 |                                              |      |                                                  | Cable-to-cable hood                                                                                   |                                              |      |                                               |
|  | M20                                          | PG11 | H3A-MTGVB-PG11<br>H3A-MTGVB-M20                  |                    | M20                                          | PG11 | H3A-TGVB-PG11<br>H3A-TGVB-M20                 |
| Protection covers for hoods (thermoplastic)                                         |                                              |      |                                                  | Protection covers for hoods                                                                           |                                              |      |                                               |
|  | Note: For mounted male insert and hood       |      | H3A-KDTP                                         |                    | Note: For mounted male insert and hood       |      | H3A-KDTP                                      |
| Metal protection covers for hoods                                                   |                                              |      |                                                  | Protection covers for hoods                                                                           |                                              |      |                                               |
|  | Note: For mounted female insert and housings |      | H3A-KDB                                          | <br>White    Grey | Note: For mounted female insert and housings |      | H3A-KDBP (White)<br>H3A-KDBPG (Grey)          |

## HA series hoods/housings

H10A INCLUDE METAL AND STAINLESS STEEL LEVER  
H16A INCLUDE METAL AND STAINLESS STEEL LEVER

| H10A metal hoods, housings                                                          | Metr.                                                      | PG                           | Type                                                                                                                                                 | H16A metal hoods, housings                                                          | Metr.                                                      | PG                           | Type                                                                                                                                         |
|-------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                            |                              |                                                                                                                                                      | Hood: Side entry                                                                    |                                                            |                              |                                                                                                                                              |
|    | Low construction<br>High construction<br>M20<br>M25        | PG16<br>PG21                 | H10A-TS-PG16<br>H10A-TS-PG21<br>H10A-TS-M20<br>H10A-TS-M25                                                                                           |    | Low construction<br>High construction<br>M20<br>M25<br>M25 | PG16<br>PG21<br>PG21         | H16A-TS-PG16<br>H16A-TS-PG21<br>H16A-TS-M20<br>H16A-TS-M25<br>H16A-TSH-PG21<br>H16A-TSH-M25                                                  |
| Hood: Top entry                                                                     |                                                            |                              |                                                                                                                                                      | Hood: Top entry                                                                     |                                                            |                              |                                                                                                                                              |
|    | Low construction<br>High construction<br>M20<br>M25        | PG16<br>PG21                 | H10A-TG-PG16<br>H10A-TG-PG21<br>H10A-TG-M20<br>H10A-TG-M25                                                                                           |    | Low construction<br>High construction<br>M20<br>M25<br>M25 | PG16<br>PG21<br>PG21         | H16A-TG-PG16<br>H16A-TG-PG21<br>H16A-TG-M20<br>H16A-TG-M25<br>H16A-TGH-PG21<br>H16A-TGH-M25                                                  |
| Protection covers for hood                                                          |                                                            |                              |                                                                                                                                                      | Protection covers for hood                                                          |                                                            |                              |                                                                                                                                              |
|   |                                                            |                              | H10A-KDT                                                                                                                                             |   |                                                            |                              | H16A-KDT                                                                                                                                     |
| Bulkhead mounted                                                                    |                                                            |                              |                                                                                                                                                      | Bulkhead mounted                                                                    |                                                            |                              |                                                                                                                                              |
|  |                                                            |                              | H10A-AGS                                                                                                                                             |  |                                                            |                              | H16A-AGS                                                                                                                                     |
|  |                                                            |                              | H10A-ADS                                                                                                                                             |  |                                                            |                              | H16A-ADS                                                                                                                                     |
| Surface mounted: Side entry                                                         |                                                            |                              |                                                                                                                                                      | Surface mounted: Side entry                                                         |                                                            |                              |                                                                                                                                              |
|  | 1 Side entry<br>2 Side entry<br>M20<br>M25<br>M20<br>M25   | PG16<br>PG21<br>PG16<br>PG21 | H10A-SGRS-PG16<br>H10A-SGRS-PG21<br>H10A-SGRS-M20<br>H10A-SGRS-M25<br>H10A-SGRS-2PG16<br>H10A-SGRS-2PG21<br>H10A-SGRS-2M20<br>H10A-SGRS-2M25         |  | 1 Side entry<br>2 Side entry<br>M20<br>M25<br>M20<br>M25   | PG16<br>PG21<br>PG16<br>PG21 | H16A-SGRS-PG16<br>H16A-SGRS-PG21<br>H16A-SGRS-M20<br>H16A-SGRS-M25<br>H16A-SGRS-2PG16<br>H16A-SGRS-2PG21<br>H16A-SGRS-2M20<br>H16A-SGRS-2M25 |
|  | 1 Side entry<br>2 Side entry<br>M20<br>M25<br>M20<br>M25   | PG16<br>PG21<br>PG16<br>PG21 | H10A-SDRMS-PG16<br>H10A-SDRMS-PG21<br>H10A-SDRMS-M20<br>H10A-SDRMS-M25<br>H10A-SDRMS-2PG16<br>H10A-SDRMS-2PG21<br>H10A-SDRMS-2M20<br>H10A-SDRMS-2M25 |  | 1 Side entry<br>2 Side entry<br>M20<br>M25<br>M20<br>M25   | PG16<br>PG21<br>PG16<br>PG21 | H16A-SDRS-PG16<br>H16A-SDRS-PG21<br>H16A-SDRS-M20<br>H16A-SDRS-M25<br>H16A-SDRS-2PG16<br>H16A-SDRS-2PG21<br>H16A-SDRS-2M20<br>H16A-SDRS-2M25 |
| Cable-to-cable hood                                                                 |                                                            |                              |                                                                                                                                                      | Cable-to-cable hood                                                                 |                                                            |                              |                                                                                                                                              |
|  | Low construction<br>High construction<br>M20<br>M25<br>M25 | PG16<br>PG21                 | H10A-TBFS-PG16<br>H10A-TBFS-M20<br>H10A-TBFS-M25<br>H10A-TBFHS-PG21<br>H10A-TBFHS-M25                                                                |  | Low construction<br>High construction<br>M20<br>M25<br>M25 | PG16<br>PG21                 | H16A-TBFS-PG16<br>H16A-TBFS-M20<br>H16A-TBFS-M25<br>H16A-TBFHS-PG21<br>H16A-TBFHS-M25                                                        |



## HA series hoods/housings

| H32A metal hoods, housings                                                          | Metr.                                                    | PG                           | Type                                                                                                                                 | H8A thermoplastic hoods, housings                                                   | Metr. | PG   | Type                      |
|-------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|------|---------------------------|
| Hood: Side entry                                                                    |                                                          |                              |                                                                                                                                      | Hood: Side entry                                                                    |       |      |                           |
|    | M25<br>M32<br>M40                                        | PG21<br>PG29<br>PG36         | H32A-TS-PG21<br>H32A-TS-PG29<br>H32A-TS-PG36<br>H32A-TS-M25<br>H32A-TS-M32<br>H32A-TS-M40                                            |    | M20   | PG16 | H8A-TS-PG16<br>H8A-TS-M20 |
| Hood: Top entry                                                                     |                                                          |                              |                                                                                                                                      | Hood: Top entry                                                                     |       |      |                           |
|    | M25<br>M32<br>M40                                        | PG21<br>PG29<br>PG36         | H32A-TG-PG21<br>H32A-TG-PG29<br>H32A-TG-PG36<br>H32A-TG-M25<br>H32A-TG-M32<br>H32A-TG-M40                                            |    | M20   | PG16 | H8A-TG-PG16<br>H8A-TG-M20 |
| Bulkhead mounted                                                                    |                                                          |                              |                                                                                                                                      | Bulkhead mounted                                                                    |       |      |                           |
|  |                                                          |                              | H32A-AG                                                                                                                              |  |       |      | H8A-AG                    |
| Surface mounted: Side entry                                                         |                                                          |                              |                                                                                                                                      |                                                                                     |       |      |                           |
|  | 1 Side entry<br>M25<br>M32<br>2 Side entry<br>M25<br>M32 | PG21<br>PG29<br>PG21<br>PG29 | H32A-SGR-PG21<br>H32A-SGR-PG29<br>H32A-SGR-M25<br>H32A-SGR-M32<br>H32A-SGR-2PG21<br>H32A-SGR-2PG29<br>H32A-SGR-2M25<br>H32A-SGR-2M32 |                                                                                     |       |      |                           |

## H6B series hoods/housings

H6B LEVERS INCLUDE METAL, PLASTIC AND STAINLESS STEEL  
H6B COVERS INCLUDE PLASTIC AND METAL COVERS

| H6B metal hoods                                                                     | Metr.                                                                    | PG                   | Type                                                                                                                                 | H6B metal housings                                                                  | Metr.                                                                                                                                                         | PG                                                           | Type                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                          |                      |                                                                                                                                      | Bulkhead mounted                                                                    |                                                                                                                                                               |                                                              |                                                                                                                                                                                                                                                                                      |
|    | M20<br>M25                                                               | PG16<br>PG21         | H6B-TS-PG16<br>H6B-TS-PG21<br>H6B-TS-M20<br>H6B-TS-M25                                                                               |    |                                                                                                                                                               |                                                              | H6B-AGS                                                                                                                                                                                                                                                                              |
|    | M20<br>M25<br>M32                                                        | PG21<br>PG29         | H6B-TSH-PG21<br>H6B-TSH-PG29<br>H6B-TSH-M20<br>H6B-TSH-M25<br>H6B-TSH-M32                                                            |    |                                                                                                                                                               |                                                              | H6B-ADS                                                                                                                                                                                                                                                                              |
| Hood: Top entry                                                                     |                                                                          |                      |                                                                                                                                      | Surface mounted: Side entry                                                         |                                                                                                                                                               |                                                              |                                                                                                                                                                                                                                                                                      |
|   | M20<br>M25                                                               | PG16<br>PG21         | H6B-TG-PG16<br>H6B-TG-PG21<br>H6B-TG-M20<br>H6B-TG-M25                                                                               |   | 1 Side entry<br>Low construction<br>M20<br>M25<br>2 Side entry<br>M20<br>M25<br>High construction<br>1 Side entry<br>M25<br>M32<br>2 Side entry<br>M25<br>M32 | PG16<br>PG21<br>PG16<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H6B-SGRS-PG16<br>H6B-SGRS-PG21<br>H6B-SGRS-M20<br>H6B-SGRS-M25<br>H6B-SGRS-2PG16<br>H6B-SGRS-2PG21<br>H6B-SGRS-2M20<br>H6B-SGRS-2M25<br>H6B-SGRHS-PG21<br>H6B-SGRHS-PG29<br>H6B-SGRHS-M25<br>H6B-SGRHS-M32<br>H6B-SGRHS-2PG21<br>H6B-SGRHS-2PG29<br>H6B-SGRHS-2M25<br>H6B-SGRHS-2M32 |
|  | M20<br>M25<br>M32                                                        | PG21<br>PG29         | H6B-TGH-PG21<br>H6B-TGH-PG29<br>H6B-TGH-M20<br>H6B-TGH-M25<br>H6B-TGH-M32                                                            |  | 1 Side entry<br>Low construction<br>M20<br>M25<br>2 Side entry<br>M20<br>M25<br>High construction<br>1 Side entry<br>M25<br>M32<br>2 Side entry<br>M25<br>M32 | PG16<br>PG21<br>PG16<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29 | H6B-SDRS-PG16<br>H6B-SDRS-PG21<br>H6B-SDRS-M20<br>H6B-SDRS-M25<br>H6B-SDRS-2PG16<br>H6B-SDRS-2PG21<br>H6B-SDRS-2M20<br>H6B-SDRS-2M25<br>H6B-SDRHS-PG21<br>H6B-SDRHS-PG29<br>H6B-SDRHS-M25<br>H6B-SDRHS-M32<br>H6B-SDRHS-2PG21<br>H6B-SDRHS-2PG29<br>H6B-SDRHS-2M25<br>H6B-SDRHS-2M32 |
| Cable-to-cable hood                                                                 |                                                                          |                      |                                                                                                                                      |                                                                                     |                                                                                                                                                               |                                                              |                                                                                                                                                                                                                                                                                      |
|  | Low construction<br>M20<br>M25<br>High construction<br>M20<br>M25<br>M32 | PG16<br>PG21<br>PG29 | H6B-TBFS-PG16<br>H6B-TBFS-M20<br>H6B-TBFS-M25<br>H6B-TBFHS-PG21<br>H6B-TBFHS-PG29<br>H6B-TBFHS-M20<br>H6B-TBFHS-M25<br>H6B-TBFHS-M32 |                                                                                     |                                                                                                                                                               |                                                              |                                                                                                                                                                                                                                                                                      |
| Protection covers for hoods                                                         |                                                                          |                      |                                                                                                                                      |                                                                                     |                                                                                                                                                               |                                                              |                                                                                                                                                                                                                                                                                      |
|  |                                                                          |                      | H6B-KDTP                                                                                                                             |                                                                                     |                                                                                                                                                               |                                                              |                                                                                                                                                                                                                                                                                      |

## H10B with 2 levers on the hoods/housings

H10B LEVERS INCLUDE METAL, PLASTIC AND STAINLESS STEEL

H10B COVERS INCLUDE PLASTIC AND METAL COVERS

| H10B metal hoods                                                                    | Metr.             | PG           | Type                                                                           | H10B metal housings                                                                 | Metr.                             | PG         | Type         |                                                                                                                                                                            |  |
|-------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Hood: Side entry                                                                    |                   |              |                                                                                | Bulkhead mounted                                                                    |                                   |            |              |                                                                                                                                                                            |  |
|    | M20<br>M25        | PG16<br>PG21 | H10B-TS-PG16<br>H10B-TS-PG21<br>H10B-TS-M20<br>H10B-TS-M25                     |    |                                   |            | H10B-AGS     |                                                                                                                                                                            |  |
|                                                                                     |                   |              |                                                                                | Surface mounted: Side entry                                                         |                                   |            |              |                                                                                                                                                                            |  |
|    | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TSH-PG21<br>H10B-TSH-PG29<br>H10B-TSH-M20<br>H10B-TSH-M25<br>H10B-TSH-M32 |    | 1 Side entry<br>Low construction  | M20<br>M25 | PG16<br>PG21 | H10B-SGRS-PG16<br>H10B-SGRS-PG21<br>H10B-SGRS-M20<br>H10B-SGRS-M25<br>H10B-SGRS-2PG16<br>H10B-SGRS-2PG21<br>H10B-SGRS-2M20<br>H10B-SGRS-2M25                               |  |
|                                                                                     |                   |              |                                                                                |                                                                                     | 2 Side entry                      | M20<br>M25 | PG16<br>PG21 | H10B-SGRS-2PG16<br>H10B-SGRS-2PG21<br>H10B-SGRS-2M20<br>H10B-SGRS-2M25                                                                                                     |  |
|                                                                                     |                   |              |                                                                                |                                                                                     | 1 Side entry<br>High construction | M25<br>M32 | PG21<br>PG29 | H10B-SGRHS-PG21<br>H10B-SGRHS-PG29<br>H10B-SGRHS-M25<br>H10B-SGRHS-M32<br>H10B-SGRHS-2PG21<br>H10B-SGRHS-2PG29<br>H10B-SGRHS-2M25<br>H10B-SGRHS-2M32                       |  |
|                                                                                     |                   |              |                                                                                |                                                                                     | 2 Side entry                      | M25<br>M32 | PG21<br>PG29 | H10B-SGRHS-2PG21<br>H10B-SGRHS-2PG29<br>H10B-SGRHS-2M25<br>H10B-SGRHS-2M32                                                                                                 |  |
| Hood: Top entry                                                                     |                   |              |                                                                                | Side entry housing with two levers                                                  |                                   |            |              |                                                                                                                                                                            |  |
|   | M20<br>M25        | PG16<br>PG21 | H10B-TG-PG16<br>H10B-TG-PG21<br>H10B-TG-M20<br>H10B-TG-M25                     |  | Low construction                  | M20<br>M25 | PG16<br>PG21 | H10B-TSBS-PG16<br>H10B-TSBS-PG21<br>H10B-TSBS-M20<br>H10B-TSBS-M25                                                                                                         |  |
|                                                                                     |                   |              |                                                                                |                                                                                     | High construction                 | M25<br>M32 | PG21<br>PG29 | H10B-TSBHS-PG21<br>H10B-TSBHS-PG29<br>H10B-TSBHS-M25<br>H10B-TSBHS-M32                                                                                                     |  |
|  | M20<br>M25<br>M32 | PG21<br>PG29 | H10B-TGH-PG21<br>H10B-TGH-PG29<br>H10B-TGH-M20<br>H10B-TGH-M25<br>H10B-TGH-M32 | Top entry housing with two levers                                                   |                                   |            |              |                                                                                                                                                                            |  |
|                                                                                     |                   |              |                                                                                |  | Low construction                  | M20<br>M25 | PG16<br>PG21 | H10B-TGBS-PG16<br>H10B-TGBS-PG21<br>H10B-TGBS-M20<br>H10B-TGBS-M25                                                                                                         |  |
|                                                                                     |                   |              |                                                                                |                                                                                     | High construction                 | M25<br>M32 | PG21<br>PG29 | H10B-TGBHS-PG21<br>H10B-TGBHS-PG29<br>H10B-TGBHS-M25<br>H10B-TGBHS-M32                                                                                                     |  |
| Cable-to-cable hood                                                                 |                   |              |                                                                                | Bulkhead mounted with 4 bolts                                                       |                                   |            |              |                                                                                                                                                                            |  |
|  | Low construction  | M20<br>M25   | PG16                                                                           |  | 1 Side entry<br>Low construction  | M20<br>M25 | PG16<br>PG21 | H10B-AD-BO<br>H10B-SDR-BO-PG16<br>H10B-SDR-BO-PG21<br>H10B-SDR-BO-M20<br>H10B-SDR-BO-M25<br>H10B-SDR-BO-2PG16<br>H10B-SDR-BO-2PG21<br>H10B-SDR-BO-2M20<br>H10B-SDR-BO-2M25 |  |
|                                                                                     | High construction | M25<br>M32   | PG21<br>PG29                                                                   |                                                                                     | 2 Side entry                      | M20<br>M25 | PG16<br>PG21 | H10B-SDR-BO-2PG16<br>H10B-SDR-BO-2PG21<br>H10B-SDR-BO-2M20<br>H10B-SDR-BO-2M25                                                                                             |  |
|                                                                                     |                   |              |                                                                                |                                                                                     | 1 Side entry<br>High construction | M25<br>M32 | PG21<br>PG29 | H10B-SDRH-BO-PG21<br>H10B-SDRH-BO-PG29<br>H10B-SDRH-BO-M25<br>H10B-SDRH-BO-M32<br>H10B-SDRH-BO-2PG21<br>H10B-SDRH-BO-2PG29<br>H10B-SDRH-BO-2M25<br>H10B-SDRH-BO-2M32       |  |
|                                                                                     |                   |              |                                                                                |                                                                                     | 2 Side entry                      | M25<br>M32 | PG21<br>PG29 | H10B-SDRH-BO-2PG21<br>H10B-SDRH-BO-2PG29<br>H10B-SDRH-BO-2M25<br>H10B-SDRH-BO-2M32                                                                                         |  |
| Protection covers for hoods                                                         |                   |              |                                                                                |                                                                                     |                                   |            |              |                                                                                                                                                                            |  |
|  |                   |              | H10B-KDTP                                                                      |                                                                                     |                                   |            |              |                                                                                                                                                                            |  |
| Housing protection cover                                                            |                   |              |                                                                                |                                                                                     |                                   |            |              |                                                                                                                                                                            |  |
|  |                   |              | H10B-KDBP                                                                      |                                                                                     |                                   |            |              |                                                                                                                                                                            |  |

## H10B with 1 lever on the hoods/housings

H10B LEVERS INCLUDE METAL, PLASTIC AND STAINLESS STEEL

H10B COVERS INCLUDE PLASTIC AND METAL COVERS

| H10B metal hoods                                                                    | Metr.                    | PG                   | Type                                                                                                                                     | H10B metal housings                                                                 | Metr.                                             | PG                           | Type                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|--------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                          |                      |                                                                                                                                          | Bulkhead mounted                                                                    |                                                   |                              |                                                                                                                                                                      |
|    | M20<br>M25               | PG16<br>PG21         | H10B-TS-RO-PG16<br>H10B-TS-RO-PG21<br>H10B-TS-RO-M20<br>H10B-TS-RO-M25                                                                   |    |                                                   |                              | H10B-AG-LB                                                                                                                                                           |
|    | M20<br>M25<br>M32        | PG21<br>PG29         | H10B-TSH-RO-PG21<br>H10B-TSH-RO-PG29<br>H10B-TSH-RO-M20<br>H10B-TSH-RO-M25<br>H10B-TSH-RO-M32                                            |    |                                                   |                              | H10B-AD-LB                                                                                                                                                           |
| Hood: Top entry                                                                     |                          |                      |                                                                                                                                          | Surface mounted: Side entry                                                         |                                                   |                              |                                                                                                                                                                      |
|   | M20<br>M25               | PG16<br>PG21         | H10B-TG-RO-PG16<br>H10B-TG-RO-PG21<br>H10B-TG-RO-M20<br>H10B-TG-RO-M25                                                                   |   | 1 Side entry<br>Low construction<br>2 Side entry  | PG16<br>PG21<br>PG16<br>PG21 | H10B-SGR-LB-PG16<br>H10B-SGR-LB-PG21<br>H10B-SGR-LB-M20<br>H10B-SGR-LB-M25<br>H10B-SGR-LB-2PG16<br>H10B-SGR-LB-2PG21<br>H10B-SGR-LB-2M20<br>H10B-SGR-LB-2M25         |
|                                                                                     |                          |                      |                                                                                                                                          |   | 1 Side entry<br>High construction<br>2 Side entry | PG21<br>PG29<br>PG21<br>PG29 | H10B-SGRH-LB-PG21<br>H10B-SGRH-LB-PG29<br>H10B-SGRH-LB-M25<br>H10B-SGRH-LB-M32<br>H10B-SGRH-LB-2PG21<br>H10B-SGRH-LB-2PG29<br>H10B-SGRH-LB-2M25<br>H10B-SGRH-LB-2M32 |
|  | M20<br>M25<br>M32        | PG21<br>PG29         | H10B-TGH-RO-PG21<br>H10B-TGH-RO-PG29<br>H10B-TGH-RO-M20<br>H10B-TGH-RO-M25<br>H10B-TGH-RO-M32                                            |  | 1 Side entry<br>Low construction<br>2 Side entry  | PG16<br>PG21<br>PG16<br>PG21 | H10B-SDR-LB-PG16<br>H10B-SDR-LB-PG21<br>H10B-SDR-LB-M20<br>H10B-SDR-LB-M25<br>H10B-SDR-LB-2PG16<br>H10B-SDR-LB-2PG21<br>H10B-SDR-LB-2M20<br>H10B-SDR-LB-2M25         |
|                                                                                     |                          |                      |                                                                                                                                          |  | 1 Side entry<br>High construction<br>2 Side entry | PG21<br>PG29<br>PG21<br>PG29 | H10B-SDRH-LB-PG21<br>H10B-SDRH-LB-PG29<br>H10B-SDRH-LB-M25<br>H10B-SDRH-LB-M32<br>H10B-SDRH-LB-2PG21<br>H10B-SDRH-LB-2PG29<br>H10B-SDRH-LB-2M25<br>H10B-SDRH-LB-2M32 |
| Cable-to-cable hood                                                                 |                          |                      |                                                                                                                                          |                                                                                     |                                                   |                              |                                                                                                                                                                      |
|  | M20<br>M25<br>M25<br>M32 | PG16<br>PG21<br>PG29 | H10B-TBF-LB-PG16<br>H10B-TBF-LB-M20<br>H10B-TBF-LB-M25<br>H10B-TBFH-LB-PG21<br>H10B-TBFH-LB-PG29<br>H10B-TBFH-LB-M25<br>H10B-TBFH-LB-M32 |                                                                                     |                                                   |                              |                                                                                                                                                                      |
| Protection covers for hoods                                                         |                          |                      |                                                                                                                                          |                                                                                     |                                                   |                              |                                                                                                                                                                      |
|  |                          |                      | H10B-KDTP-LB                                                                                                                             |                                                                                     |                                                   |                              |                                                                                                                                                                      |

## H16B with 2 levers on the hoods/housings

H16B LEVERS INCLUDE METAL, PLASTIC AND STAINLESS STEEL

H16B COVERS INCLUDE PLASTIC AND METAL COVERS

| H16B metal hoods                                                                    | Metr.                                 | PG                              | Type                                                                                                                                                                 | H16B metal housings                                                                 | Metr.                                                                                                 | PG                                     | Type                                                                                                                                                                         |                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                       |                                 |                                                                                                                                                                      | Bulkhead mounted                                                                    |                                                                                                       |                                        |                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|    | M25<br>M32                            | PG16<br>PG21                    | H16B-TS-PG16<br>H16B-TS-PG21<br>H16B-TS-M25<br>H16B-TS-M32                                                                                                           |    |                                                                                                       |                                        | H16B-AGS                                                                                                                                                                     |                                                                                                                                                                                                                                                      |
|    | M25<br>M32<br>M40                     | PG21<br>PG29                    | H16B-TSH-PG21<br>H16B-TSH-PG29<br>H16B-TSH-M25<br>H16B-TSH-M32<br>H16B-TSH-M40                                                                                       | Surface mounted: Side entry                                                         |                                                                                                       |                                        |                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|                                                                                     |                                       |                                 |                                                                                                                                                                      |    | 1 Side entry<br>Low construction<br>2 Side entry<br>1 Side entry<br>High construction<br>2 Side entry | M25<br>M25<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29                                                                                                                                 | H16B-SGRS-PG21<br>H16B-SGRS-M25<br>H16B-SGRS-2PG21<br>H16B-SGRS-2M25<br>H16B-SGRHS-PG21<br>H16B-SGRHS-PG29<br>H16B-SGRHS-M25<br>H16B-SGRHS-M32<br>H16B-SGRHS-2PG21<br>H16B-SGRHS-2PG29<br>H16B-SGRHS-2M25<br>H16B-SGRHS-2M32                         |
| Hood: Top entry                                                                     |                                       |                                 |                                                                                                                                                                      | Side entry housing with two levers                                                  |                                                                                                       |                                        |                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|  | M25<br>M32                            | PG16<br>PG21                    | H16B-TG-PG16<br>H16B-TG-PG21<br>H16B-TG-M25<br>H16B-TG-M32                                                                                                           |  | Low construction<br>High construction                                                                 | M20<br>M25<br>M25<br>M32               | PG16<br>PG21<br>PG21<br>PG29<br>H16B-TSBS-PG16<br>H16B-TSBS-PG21<br>H16B-TSBS-M20<br>H16B-TSBS-M25<br>H16B-TSBHS-PG21<br>H16B-TSBHS-PG29<br>H16B-TSBHS-M25<br>H16B-TSBHS-M32 |                                                                                                                                                                                                                                                      |
|  | M25<br>M32<br>M40                     | PG21<br>PG29                    | H16B-TGH-PG21<br>H16B-TGH-PG29<br>H16B-TGH-M25<br>H16B-TGH-M32<br>H16B-TGH-M40                                                                                       | Top entry housing with two levers                                                   |                                                                                                       |                                        |                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|                                                                                     |                                       |                                 |                                                                                                                                                                      |  | Low construction<br>High construction                                                                 | M20<br>M25<br>M25<br>M32               | PG16<br>PG21<br>PG21<br>PG29<br>H16B-TGBS-PG16<br>H16B-TGBS-PG21<br>H16B-TGBS-M20<br>H16B-TGBS-M25<br>H16B-TGBHS-PG21<br>H16B-TGBHS-PG29<br>H16B-TGBHS-M25<br>H16B-TGBHS-M32 |                                                                                                                                                                                                                                                      |
| Cable-to-cable hood                                                                 |                                       |                                 |                                                                                                                                                                      | Bulkhead mounted with 4 bolts                                                       |                                                                                                       |                                        |                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|  | Low construction<br>High construction | M25<br>M32<br>M25<br>M32<br>M40 | PG21<br>PG21<br>PG29<br>H16B-TBFS-PG21<br>H16B-TBFS-M25<br>H16B-TBFS-M32<br>H16B-TBFHS-PG21<br>H16B-TBFHS-PG29<br>H16B-TBFHS-M25<br>H16B-TBFHS-M32<br>H16B-TBFHS-M40 |  |                                                                                                       |                                        | H16B-AD-BO                                                                                                                                                                   |                                                                                                                                                                                                                                                      |
| Protection covers for hoods                                                         |                                       |                                 |                                                                                                                                                                      |  | 1 Side entry<br>Low construction<br>2 Side entry<br>1 Side entry<br>High construction<br>2 Side entry | M25<br>M25<br>M25<br>M32<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29                                                                                                                                 | H16B-SDR-BO-PG21<br>H16B-SDR-BO-M25<br>H16B-SDR-BO-2PG21<br>H16B-SDR-BO-2M25<br>H16B-SDRH-BO-PG21<br>H16B-SDRH-BO-PG29<br>H16B-SDRH-BO-M25<br>H16B-SDRH-BO-M32<br>H16B-SDRH-BO-2PG21<br>H16B-SDRH-BO-2PG29<br>H16B-SDRH-BO-2M25<br>H16B-SDRH-BO-2M32 |
|  |                                       |                                 | H16B-KDTP                                                                                                                                                            |                                                                                     |                                                                                                       |                                        |                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
| Housing protection cover                                                            |                                       |                                 |                                                                                                                                                                      |                                                                                     |                                                                                                       |                                        |                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|  |                                       |                                 | H16B-KDBP                                                                                                                                                            |                                                                                     |                                                                                                       |                                        |                                                                                                                                                                              |                                                                                                                                                                                                                                                      |

## H16B with 1 lever on the hoods/housings

H16B LEVERS INCLUDE METAL, PLASTIC AND STAINLESS STEEL  
H16B COVERS INCLUDE PLASTIC AND METAL COVERS

| H16B metal hoods                                                                    | Metr.                                  | PG           | Type                                                                                               | H16B metal housings                                                                 | Metr.                                           | PG           | Type                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|----------------------------------------|--------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                        |              |                                                                                                    | Bulkhead mounted                                                                    |                                                 |              |                                                                                                                                                                      |
|    | M25<br>M32                             | PG21<br>PG29 | H16B-TS-RO-PG21<br>H16B-TS-RO-PG29<br>H16B-TS-RO-M25<br>H16B-TS-RO-M32                             |    |                                                 |              | H16B-AG-LB                                                                                                                                                           |
|    | M25<br>M32<br>M40                      | PG21<br>PG29 | H16B-TSH-RO-PG21<br>H16B-TSH-RO-PG29<br>H16B-TSH-RO-M25<br>H16B-TSH-RO-M32<br>H16B-TSH-RO-M40      |    |                                                 |              | H16B-AD-LB                                                                                                                                                           |
| Hood: Top entry                                                                     |                                        |              |                                                                                                    | Surface mounted: Side entry                                                         |                                                 |              |                                                                                                                                                                      |
|   | M25<br>M32                             | PG21<br>PG29 | H16B-TG-RO-PG21<br>H16B-TG-RO-PG29<br>H16B-TG-RO-M25<br>H16B-TG-RO-M32                             |   | 1 Side entry<br>Low construction<br>M20<br>M25  | PG16<br>PG21 | H16B-SGR-LB-PG16<br>H16B-SGR-LB-PG21<br>H16B-SGR-LB-M20<br>H16B-SGR-LB-M25<br>H16B-SGR-LB-2PG16<br>H16B-SGR-LB-2PG21<br>H16B-SGR-LB-2M20<br>H16B-SGR-LB-2M25         |
|                                                                                     |                                        |              |                                                                                                    |  | 2 Side entry<br>High construction<br>M20<br>M25 | PG16<br>PG21 | H16B-SGR-LB-M25<br>H16B-SGR-LB-2PG16<br>H16B-SGR-LB-2PG21<br>H16B-SGR-LB-2M20<br>H16B-SGR-LB-2M25                                                                    |
|                                                                                     |                                        |              |                                                                                                    |                                                                                     | 1 Side entry<br>High construction<br>M25<br>M32 | PG21<br>PG29 | H16B-SGRH-LB-PG21<br>H16B-SGRH-LB-PG29<br>H16B-SGRH-LB-M25<br>H16B-SGRH-LB-M32<br>H16B-SGRH-LB-2PG21<br>H16B-SGRH-LB-2PG29<br>H16B-SGRH-LB-2M25<br>H16B-SGRH-LB-2M32 |
|                                                                                     |                                        |              |                                                                                                    |                                                                                     | 2 Side entry<br>M25<br>M32                      | PG21<br>PG29 |                                                                                                                                                                      |
|  | M25<br>M32<br>M40                      | PG21<br>PG29 | H16B-TGH-RO-PG21<br>H16B-TGH-RO-PG29<br>H16B-TGH-RO-M25<br>H16B-TGH-RO-M32<br>H16B-TGH-RO-M40      |  | 1 Side entry<br>Low construction<br>M20<br>M25  | PG16<br>PG21 | H16B-SDR-LB-PG16<br>H16B-SDR-LB-PG21<br>H16B-SDR-LB-M20<br>H16B-SDR-LB-M25<br>H16B-SDR-LB-2PG16<br>H16B-SDR-LB-2PG21<br>H16B-SDR-LB-2M20<br>H16B-SDR-LB-2M25         |
|                                                                                     |                                        |              |                                                                                                    |  | 2 Side entry<br>High construction<br>M20<br>M25 | PG16<br>PG21 | H16B-SDR-LB-M25<br>H16B-SDR-LB-2PG16<br>H16B-SDR-LB-2PG21<br>H16B-SDR-LB-2M20<br>H16B-SDR-LB-2M25                                                                    |
|                                                                                     |                                        |              |                                                                                                    |                                                                                     | 1 Side entry<br>High construction<br>M25<br>M32 | PG21<br>PG29 | H16B-SDRH-LB-PG21<br>H16B-SDRH-LB-PG29<br>H16B-SDRH-LB-M25<br>H16B-SDRH-LB-M32<br>H16B-SDRH-LB-2PG21<br>H16B-SDRH-LB-2PG29<br>H16B-SDRH-LB-2M25<br>H16B-SDRH-LB-2M32 |
|                                                                                     |                                        |              |                                                                                                    |                                                                                     | 2 Side entry<br>M25<br>M32                      | PG21<br>PG29 |                                                                                                                                                                      |
| Cable-to-cable hood                                                                 |                                        |              |                                                                                                    |                                                                                     |                                                 |              |                                                                                                                                                                      |
|  | Low construction<br>M25<br>M32         | PG21<br>PG29 | H16B-TBF-LB-PG21<br>H16B-TBF-LB-PG29<br>H16B-TBF-LB-M25<br>H16B-TBF-LB-M32                         |                                                                                     |                                                 |              |                                                                                                                                                                      |
|                                                                                     | High construction<br>M25<br>M32<br>M40 | PG21<br>PG29 | H16B-TBFH-LB-PG21<br>H16B-TBFH-LB-PG29<br>H16B-TBFH-LB-M25<br>H16B-TBFH-LB-M32<br>H16B-TBFH-LB-M40 |                                                                                     |                                                 |              |                                                                                                                                                                      |
| Protection covers for hoods                                                         |                                        |              |                                                                                                    |                                                                                     |                                                 |              |                                                                                                                                                                      |
|  |                                        |              | H16B-KDTP-LB                                                                                       |                                                                                     |                                                 |              |                                                                                                                                                                      |



## H24B with 2 levers on the hoods/housings

H24B LEVERS INCLUDE METAL, PLASTIC AND STAINLESS STEEL

H24B COVERS INCLUDE PLASTIC AND METAL COVERS

| H24B metal hoods                                                                    |                                                                          | Metr.                |                                                                                                                                              |                                                                                     | H24B metal housings                                                                                                                             | Metr.                                                                                                                                           | PG                                                                                                                                                                                                                           | Type                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                          |                      |                                                                                                                                              |                                                                                     | Bulkhead mounted                                                                                                                                |                                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|    | M25<br>M32                                                               | PG16<br>PG21         | H24B-TS-PG16<br>H24B-TS-PG21<br>H24B-TS-M25<br>H24B-TS-M32                                                                                   |    |                                                                                                                                                 |                                                                                                                                                 |                                                                                                                                                                                                                              | H24B-AGS                                                                                                                                                                                                                                             |
|    | M25<br>M32<br>M40                                                        | PG21<br>PG29         | H24B-TSH-PG21<br>H24B-TSH-PG29<br>H24B-TSH-M25<br>H24B-TSH-M32<br>H24B-TSH-M40                                                               | Surface mounted: Side entry                                                         |                                                                                                                                                 |                                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|                                                                                     |                                                                          |                      |                                                                                                                                              |    | 1 Side entry<br>Low construction<br>M25<br>2 Side entry<br>M25<br>1 Side entry<br>High construction<br>M25<br>M32<br>2 Side entry<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29                                                                                                    | H24B-SGRS-PG21<br>H24B-SGRS-M25<br>H24B-SGRS-2PG21<br>H24B-SGRS-2M25<br>H24B-SGRHS-PG21<br>H24B-SGRHS-PG29<br>H24B-SGRHS-M25<br>H24B-SGRHS-M32<br>H24B-SGRHS-2PG21<br>H24B-SGRHS-2PG29<br>H24B-SGRHS-2M25<br>H24B-SGRHS-2M32 |                                                                                                                                                                                                                                                      |
| Hood: Top entry                                                                     |                                                                          |                      |                                                                                                                                              |                                                                                     | Side entry housing with two levers                                                                                                              |                                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|  | M25<br>M32                                                               | PG16<br>PG21         | H24B-TG-PG16<br>H24B-TG-PG21<br>H24B-TG-M25<br>H24B-TG-M32                                                                                   |  | Low construction<br>M20<br>M25<br>High construction<br>M25<br>M32                                                                               | PG16<br>PG21<br>PG21<br>PG29                                                                                                                    | H24B-TSBS-PG16<br>H24B-TSBS-PG21<br>H24B-TSBS-M20<br>H24B-TSBS-M25<br>H24B-TSBHS-PG21<br>H24B-TSBHS-PG29<br>H24B-TSBHS-M25<br>H24B-TSBHS-M32                                                                                 |                                                                                                                                                                                                                                                      |
|  | M25<br>M32<br>M40                                                        | PG21<br>PG29         | H24B-TGH-PG21<br>H24B-TGH-PG29<br>H24B-TGH-M25<br>H24B-TGH-M32<br>H24B-TGH-M40                                                               | Top entry housing with two levers                                                   |                                                                                                                                                 |                                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|                                                                                     |                                                                          |                      |                                                                                                                                              |  | Low construction<br>M20<br>M25<br>High construction<br>M25<br>M32                                                                               | PG16<br>PG21<br>PG21<br>PG29                                                                                                                    | H24B-TGBS-PG16<br>H24B-TGBS-PG21<br>H24B-TGBS-M20<br>H24B-TGBS-M25<br>H24B-TGBHS-PG21<br>H24B-TGBHS-PG29<br>H24B-TGBHS-M25<br>H24B-TGBHS-M32                                                                                 |                                                                                                                                                                                                                                                      |
| Cable-to-cable hood                                                                 |                                                                          |                      |                                                                                                                                              |                                                                                     | Bulkhead mounted with 4 bolts                                                                                                                   |                                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|  | Low construction<br>M25<br>M32<br>High construction<br>M25<br>M32<br>M40 | PG21<br>PG21<br>PG29 | H24B-TBFS-PG21<br>H24B-TBFS-M25<br>H24B-TBFS-M32<br>H24B-TBFHS-PG21<br>H24B-TBFHS-PG29<br>H24B-TBFHS-M25<br>H24B-TBFHS-M32<br>H24B-TBFHS-M40 |  |                                                                                                                                                 |                                                                                                                                                 |                                                                                                                                                                                                                              | H24B-AD-BO                                                                                                                                                                                                                                           |
| Protection covers for hoods                                                         |                                                                          |                      |                                                                                                                                              |                                                                                     |                                                              | 1 Side entry<br>Low construction<br>M25<br>2 Side entry<br>M25<br>1 Side entry<br>High construction<br>M25<br>M32<br>2 Side entry<br>M25<br>M32 | PG21<br>PG21<br>PG21<br>PG29<br>PG21<br>PG29                                                                                                                                                                                 | H24B-SDR-BO-PG21<br>H24B-SDR-BO-M25<br>H24B-SDR-BO-2PG21<br>H24B-SDR-BO-2M25<br>H24B-SDRH-BO-PG21<br>H24B-SDRH-BO-PG29<br>H24B-SDRH-BO-M25<br>H24B-SDRH-BO-M32<br>H24B-SDRH-BO-2PG21<br>H24B-SDRH-BO-2PG29<br>H24B-SDRH-BO-2M25<br>H24B-SDRH-BO-2M32 |
|  |                                                                          |                      | H24B-KDTP                                                                                                                                    |                                                                                     |                                                                                                                                                 |                                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
| Housing protection cover                                                            |                                                                          |                      |                                                                                                                                              |                                                                                     |                                                                                                                                                 |                                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|  |                                                                          |                      | H24B-KDBP                                                                                                                                    |                                                                                     |                                                                                                                                                 |                                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                      |

## H24B with 1 lever on the hoods/housings

| H24B metal hoods                                                                    | Metr.             | PG           | Type                                                                                               | H24B metal housings                                                                 | Metr.                             | PG           | Type                                                                           |                                                                                    |
|-------------------------------------------------------------------------------------|-------------------|--------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------|--------------|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                   |              |                                                                                                    | Bulkhead mounted                                                                    |                                   |              |                                                                                |                                                                                    |
|    | M25<br>M32        | PG21<br>PG29 | H24B-TS-RO-PG21<br>H24B-TS-RO-PG29<br>H24B-TS-RO-M25<br>H24B-TS-RO-M32                             |   |                                   |              | H24B-AG-LB                                                                     |                                                                                    |
|    | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TSH-RO-PG21<br>H24B-TSH-RO-PG29<br>H24B-TSH-RO-M25<br>H24B-TSH-RO-M32<br>H24B-TSH-RO-M40      |   |                                   |              | H24B-AD-LB                                                                     |                                                                                    |
| Hood: Top entry                                                                     |                   |              |                                                                                                    | Surface mounted: Side entry                                                         |                                   |              |                                                                                |                                                                                    |
|    | M25<br>M32        | PG21<br>PG29 | H24B-TG-RO-PG21<br>H24B-TG-RO-PG29<br>H24B-TG-RO-M25<br>H24B-TG-RO-M32                             |   | 1 Side entry<br>Low construction  | M20<br>M25   | PG16<br>PG21                                                                   | H24B-SGR-LB-PG16<br>H24B-SGR-LB-PG21<br>H24B-SGR-LB-M20<br>H24B-SGR-LB-M25         |
|  | M25<br>M32<br>M40 | PG21<br>PG29 | H24B-TGH-RO-PG21<br>H24B-TGH-RO-PG29<br>H24B-TGH-RO-M25<br>H24B-TGH-RO-M32<br>H24B-TGH-RO-M40      |                                                                                     | 2 Side entry<br>Low construction  | M20<br>M25   | PG16<br>PG21                                                                   | H24B-SGR-LB-2PG16<br>H24B-SGR-LB-2PG21<br>H24B-SGR-LB-2M20<br>H24B-SGR-LB-2M25     |
|                                                                                     |                   |              |                                                                                                    | 1 Side entry<br>High construction                                                   | M25<br>M32                        | PG21<br>PG29 | H24B-SGRH-LB-PG21<br>H24B-SGRH-LB-PG29<br>H24B-SGRH-LB-M25<br>H24B-SGRH-LB-M32 |                                                                                    |
|                                                                                     |                   | PG21<br>PG29 | H24B-SGRH-LB-2PG21<br>H24B-SGRH-LB-2PG29<br>H24B-SGRH-LB-2M25<br>H24B-SGRH-LB-2M32                 | 2 Side entry<br>High construction                                                   | M25<br>M32                        | PG21<br>PG29 |                                                                                |                                                                                    |
| Cable-to-cable hood                                                                 |                   |              |                                                                                                    |                                                                                     |                                   |              |                                                                                |                                                                                    |
|  | Low construction  | PG21<br>PG29 | H24B-TBF-LB-PG21<br>H24B-TBF-LB-PG29<br>H24B-TBF-LB-M25<br>H24B-TBF-LB-M32                         |  | 1 Side entry<br>Low construction  | M20<br>M25   | PG16<br>PG21                                                                   | H24B-SDR-LB-PG16<br>H24B-SDR-LB-PG21<br>H24B-SDR-LB-M20<br>H24B-SDR-LB-M25         |
|                                                                                     | High construction | PG21<br>PG29 | H24B-TBFH-LB-PG21<br>H24B-TBFH-LB-PG29<br>H24B-TBFH-LB-M25<br>H24B-TBFH-LB-M32<br>H24B-TBFH-LB-M40 |                                                                                     | 2 Side entry<br>Low construction  | M20<br>M25   | PG16<br>PG21                                                                   | H24B-SDR-LB-2PG16<br>H24B-SDR-LB-2PG21<br>H24B-SDR-LB-2M20<br>H24B-SDR-LB-2M25     |
| Protection covers for hoods                                                         |                   |              |                                                                                                    |  | 1 Side entry<br>High construction | M25<br>M32   | PG21<br>PG29                                                                   | H24B-SDRH-LB-PG21<br>H24B-SDRH-LB-PG29<br>H24B-SDRH-LB-M25<br>H24B-SDRH-LB-M32     |
|  |                   |              | H24B-KDTP-LB                                                                                       |                                                                                     | 2 Side entry<br>High construction | M25<br>M32   | PG21<br>PG29                                                                   | H24B-SDRH-LB-2PG21<br>H24B-SDRH-LB-2PG29<br>H24B-SDRH-LB-2M25<br>H24B-SDRH-LB-2M32 |



## H32B with 2 levers on the hoods/housings

| H32B with 2 levers on the hoods, housings                                           | Metr.                                                                                | PG                                           | Type                                                                                                                                                                                                                                      | H32B with 1 levers on the hoods, housings                                           | Metr.                                                    | PG                   | Type                                                                                                                          |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                                      |                                              |                                                                                                                                                                                                                                           | Hood: Side entry                                                                    |                                                          |                      |                                                                                                                               |
|    | M25<br>M32<br>M40<br>M50                                                             | PG29<br>PG36                                 | H32B-TS-PG29<br>H32B-TS-PG36<br>H32B-TS-M25<br>H32B-TS-M32<br>H32B-TS-M40<br>H32B-TS-M50                                                                                                                                                  |    | M25<br>M32<br>M40<br>M50                                 | PG29<br>PG36         | H32B-TS-RO-PG29<br>H32B-TS-RO-PG36<br>H32B-TS-RO-M25<br>H32B-TS-RO-M32<br>H32B-TS-RO-M40<br>H32B-TS-RO-M50                    |
| Hood: Top entry                                                                     |                                                                                      |                                              |                                                                                                                                                                                                                                           | Hood: Top entry                                                                     |                                                          |                      |                                                                                                                               |
|    | M25<br>M32<br>M40<br>M50                                                             | PG29<br>PG36<br>PG42                         | H32B-TG-PG29<br>H32B-TG-PG36<br>H32B-TG-PG42<br>H32B-TG-M25<br>H32B-TG-M32<br>H32B-TG-M40<br>H32B-TG-M50                                                                                                                                  |    | M25<br>M32<br>M40<br>M50                                 | PG29<br>PG36<br>PG42 | H32B-TG-RO-PG29<br>H32B-TG-RO-PG36<br>H32B-TG-RO-PG42<br>H32B-TG-RO-M25<br>H32B-TG-RO-M32<br>H32B-TG-RO-M40<br>H32B-TG-RO-M50 |
| Bulkhead mounted                                                                    |                                                                                      |                                              |                                                                                                                                                                                                                                           | Bulkhead mounted                                                                    |                                                          |                      |                                                                                                                               |
|   |                                                                                      |                                              | H32B-AG                                                                                                                                                                                                                                   |   |                                                          |                      | H32B-AG-LB                                                                                                                    |
| Surface mounted: Side entry                                                         |                                                                                      |                                              |                                                                                                                                                                                                                                           |                                                                                     |                                                          |                      |                                                                                                                               |
|  | 1 Side entry<br>M32<br>M40<br>M50<br>M63<br>2 Side entry<br>M32<br>M40<br>M50<br>M63 | PG29<br>PG36<br>PG42<br>PG29<br>PG36<br>PG42 | H32B-SGR-PG29<br>H32B-SGR-PG36<br>H32B-SGR-PG42<br>H32B-SGR-M32<br>H32B-SGR-M40<br>H32B-SGR-M50<br>H32B-SGR-M63<br>H32B-SGR-2PG29<br>H32B-SGR-2PG36<br>H32B-SGR-2PG42<br>H32B-SGR-2M32<br>H32B-SGR-2M40<br>H32B-SGR-2M50<br>H32B-SGR-2M63 |  |                                                          |                      | H32B-AD-LB                                                                                                                    |
| Cable-to-cable hood                                                                 |                                                                                      |                                              |                                                                                                                                                                                                                                           | Surface mounted: Side entry                                                         |                                                          |                      |                                                                                                                               |
|  | M32<br>M40<br>M50<br>M63                                                             | PG29<br>PG36<br>PG42                         | H32B-TBF-PG29<br>H32B-TBF-PG36<br>H32B-TBF-PG42<br>H32B-TBF-M32<br>H32B-TBF-M40<br>H32B-TBF-M50<br>H32B-TBF-M63                                                                                                                           |  | 1 Side entry<br>M32<br>M40<br>2 Side entry<br>M32<br>M40 | PG29<br>PG29         | H32B-SGR-LB-PG29<br>H32B-SGR-LB-M32<br>H32B-SGR-LB-M40<br>H32B-SGR-LB-2PG29<br>H32B-SGR-LB-2M32<br>H32B-SGR-LB-2M40           |
| Protection covers for hoods                                                         |                                                                                      |                                              |                                                                                                                                                                                                                                           |                                                                                     |                                                          |                      |                                                                                                                               |
|  |                                                                                      |                                              | H32B-KDB                                                                                                                                                                                                                                  |  | 1 Side entry<br>M32<br>M40<br>2 Side entry<br>M32<br>M40 | PG29<br>PG29         | H32B-SDR-LB-PG29<br>H32B-SDR-LB-M32<br>H32B-SDR-LB-M40<br>H32B-SDR-LB-2PG29<br>H32B-SDR-LB-2M32<br>H32B-SDR-LB-2M40           |

## H48B series hoods/housings

| H48B metal hoods                                                                    | Metr.                                                                  | PG                                           | Type                                                                                                                                                                                                     | EMC metal hoods                                                                     | Metr. | PG | Type                                                                                                                |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|----|---------------------------------------------------------------------------------------------------------------------|
| Hood: Side entry                                                                    |                                                                        |                                              |                                                                                                                                                                                                          | Hood: Side entry                                                                    |       |    |                                                                                                                     |
|    | M32<br>M40<br>M50<br>M63                                               | PG29<br>PG36<br>PG42                         | H48B-TS-PG29<br>H48B-TS-PG36<br>H48B-TS-PG42<br>H48B-TS-M32<br>H48B-TS-M40<br>H48B-TS-M50<br>H48B-TS-M63                                                                                                 |    |       |    | H6B-TSH-EMCS<br>H10B-TSH-EMCS<br>H16B-TSH-EMCS<br>H24B-TSH-EMCS                                                     |
| Hood: Top entry                                                                     |                                                                        |                                              |                                                                                                                                                                                                          | Hood: Top entry                                                                     |       |    |                                                                                                                     |
|    | M32<br>M40<br>M50<br>M63                                               | PG29<br>PG36<br>PG42                         | H48B-TG-PG29<br>H48B-TG-PG36<br>H48B-TG-PG42<br>H48B-TG-M32<br>H48B-TG-M40<br>H48B-TG-M50<br>H48B-TG-M63                                                                                                 |    |       |    | H6B-TGH-EMCS<br>H10B-TGH-EMCS<br>H16B-TGH-EMCS<br>H24B-TGH-EMCS                                                     |
| Bulkhead mounted                                                                    |                                                                        |                                              |                                                                                                                                                                                                          | Bulkhead mounted                                                                    |       |    |                                                                                                                     |
|    |                                                                        |                                              | H48B-AG                                                                                                                                                                                                  |    |       |    | H6B-AG-EMCS<br>H10B-AG-EMCS<br>H16B-AG-EMCS<br>H24B-AG-EMCS                                                         |
|  |                                                                        |                                              | H48B-AD-LB                                                                                                                                                                                               |  |       |    | H3A-MTS-EMC-M20<br>H3A-MTS-EMC-PG11<br>H6B-TSBHS-EMC<br>H10B-TSBHS-EMC<br>H16B-TSBHS-EMC<br>H24B-TSBHS-EMC          |
| Surface mounted: Side entry                                                         |                                                                        |                                              |                                                                                                                                                                                                          | Hood: Top entry                                                                     |       |    |                                                                                                                     |
|  | 1 Side entry<br>M32<br>M40<br>M50<br>2 Side entry<br>M32<br>M40<br>M50 | PG29<br>PG36<br>PG42<br>PG29<br>PG36<br>PG42 | H48B-SGR-PG29<br>H48B-SGR-PG36<br>H48B-SGR-PG42<br>H48B-SGR-M32<br>H48B-SGR-M40<br>H48B-SGR-M50<br>H48B-SGR-2PG29<br>H48B-SGR-2PG36<br>H48B-SGR-2PG42<br>H48B-SGR-2M32<br>H48B-SGR-2M40<br>H48B-SGR-2M50 |  |       |    | H3A-MTG-EMC-PG11<br>H3A-MTG-EMC-M20<br>H6B-TGBHS-EMC<br>H10B-TGBHS-EMC<br>H16B-TGBHS-EMC<br>H24B-TGBHS-EMC          |
| Surface mounted with cover                                                          |                                                                        |                                              |                                                                                                                                                                                                          | Bulkhead mounted                                                                    |       |    |                                                                                                                     |
|  | 1 Side entry<br>M32<br>M40<br>M50<br>2 Side entry<br>M32<br>M40<br>M50 | PG29<br>PG36<br>PG42<br>PG29<br>PG36<br>PG42 | H48B-SDR-PG29<br>H48B-SDR-PG36<br>H48B-SDR-PG42<br>H48B-SDR-M32<br>H48B-SDR-M40<br>H48B-SDR-M50<br>H48B-SDR-2PG29<br>H48B-SDR-2PG36<br>H48B-SDR-2PG42<br>H48B-SDR-2M32<br>H48B-SDR-2M40<br>H48B-SDR-2M50 |  |       |    | H3A-MAG-S-EMC<br>H3A-MAG-EMC<br>H3A-MAGS-EMC<br>H6B-AG-BO-EMC<br>H10B-AG-BO-EMC<br>H16B-AG-BO-EMC<br>H24B-AG-BO-EMC |

## HIP.24/64, HIP-K.24/64, EMV-K.24/64 housings

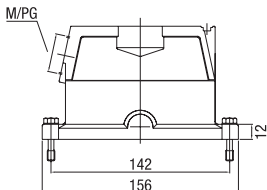
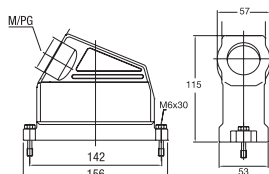
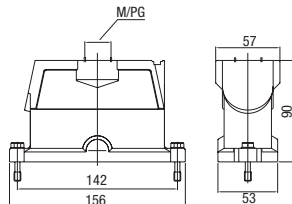
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         |                                                                                     | Metr.             | PG       | Type                                                                                                             | Part Number                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------|----------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Hood: Side entry, Standard construction                                             |                                                                                     |                   |          |                                                                                                                  |                                                          |
|    |    | M40               | 21<br>29 | HIP<br>HIP.24/64.STS.1.21.G<br>HIP.24/64.STS.1.29 G<br>HIP.24/64.STS.1.M40.G                                     | 1-1102658-5<br>1-1102660-5<br>0-1106473-2                |
|                                                                                     |                                                                                     | M40               | 29       | HIP-K<br>HIP-K.24/64.STS.1.29.G<br>HIP-K.24/64.STS.1.M40.G                                                       | 2-1102660-5<br>0-1106473-4                               |
|                                                                                     |                                                                                     | M25<br>M32<br>M40 | 29       | EMV-K<br>EMV-K.24/64.STS.1.29.G<br>EMV-K.24/64.STS.1.M25.G<br>EMV-K.24/64.STS.1.M32.G<br>EMV-K.24/64.STS.1.M40.G | 4-1102755-5<br>0-1102983-1<br>0-1106461-8<br>0-1106461-3 |
|  |   | M40               | 29<br>36 | HIP<br>HIP-KF.24/64.STS.1.29.G<br>HIP-KF.24/64.STS.1.36.G<br>HIP-KF.24/64.STS.1.M40.G                            | 1-1102622-5<br>1-1102623-5<br>0-1106474-1                |
|                                                                                     |                                                                                     | M40               | 29<br>36 | HIP-K<br>HIP-KF/K.24/64.STS.1.29.G<br>HIP-KF/K. 24/64.STS.1.36G<br>HIP-KF/K.24/64.STS.1.M40.G                    | 2-1102622-5<br>2-1102623-5<br>0-1106474-2                |
|                                                                                     |                                                                                     | M40               | 29<br>36 | EMV-K<br>EMV-KF/K.24/64.STS.1.29.G<br>EMV-KF/K.24/64.STS.1.36.G<br>EMV-KF/K.24/64.STS.1.M40.G                    | 4-1102732-5<br>4-1102733-5<br>0-1106462-2                |
| Hood: Top entry, Standard construction                                              |                                                                                     |                   |          |                                                                                                                  |                                                          |
|  |  | M40               |          |                                                                                                                  |                                                          |
|                                                                                     |                                                                                     | 2xM32<br>M40      | 21<br>29 | HIP<br>HIP.24/64.STO.1.21.G<br>HIP.24/64.STO.1.29.G<br>HIP.24/64.STO.1.M40.G                                     | 1-1102662-5<br>1-1102664-5<br>0-1106473-1                |
|                                                                                     |                                                                                     | M40<br>2xM40      | 29       | HIP-K<br>HIP-K.24/64.STO.1.29.G<br>HIP-K.24/64.STO.2.M32.G<br>HIP-K.24/64.STO.1.M40.G                            | 2-1102664-5<br>0-1102792-1<br>0-1106473-3                |
|                                                                                     |                                                                                     | 2xM40             | 29       | EMV-K<br>EMV-K.24/64.STO.1.29.G<br>EMV-K.24/64.STO.1.M40.G                                                       | 4-1102759-5<br>0-1106461-4                               |
|                                                                                     |                                                                                     | 2xM40             |          |                                                                                                                  |                                                          |

## HIP.24/64, HIP-K.24/64, EMV-K.24/64 housings

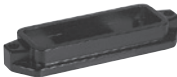
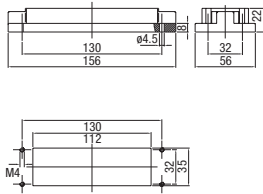
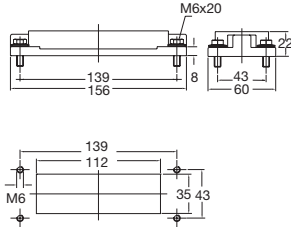
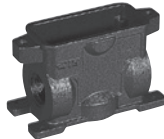
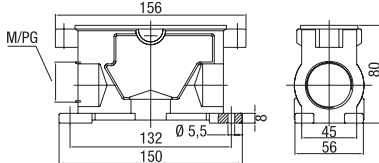
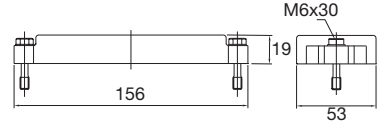
**HIP:** Pressure-tight, silver-grey

**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h

**EMV-K:** Protection against electro-magnetic interference, pressure-tight, housings corrosion-resistant, black

Pressure-tight up to 5 bar

IP 68 / IP 69 K

| Description                                                                         | Metr.                                                                               | PG    | Type                                                                              | Part Number                                                                              |                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------|
| Surface mounted housing: Bottom entry, Standard construction                        |                                                                                     |       |                                                                                   |                                                                                          |                                           |
|    |    |       | <b>HIP</b><br>HIP.24/64.AG                                                        | 1-1102665-5                                                                              |                                           |
|                                                                                     |                                                                                     |       | <b>HIP-K</b><br>HIP-K.24/64.AG                                                    | 2-1102665-5                                                                              |                                           |
|                                                                                     |                                                                                     |       | <b>EMV-K</b><br>EMV-K.24/64.AG                                                    | 4-1102760-5                                                                              |                                           |
|    |   |       | <b>HIP</b><br>HIP.24/64.AG.M6                                                     | 1-1102626-5                                                                              |                                           |
|                                                                                     |                                                                                     |       | <b>HIP-K</b><br>HIP-K.24/64.AG.M6<br>HIP-K.24/64.AG.M6.D<br>HIP-K-I.24/64.AG.M6.D | 2-1102626-5<br>2-1102628-5<br>0-1108533-1                                                |                                           |
|                                                                                     |                                                                                     |       | <b>EMV-K</b><br>EMV-K.24/64.AG.M6                                                 | 4-1102736-5                                                                              |                                           |
| Surface mounted housing: Side entry, Standard construction                          |                                                                                     |       |                                                                                   |                                                                                          |                                           |
|  |  | 2xM40 | 29<br>2x29                                                                        | <b>HIP</b><br>HIP.24/64.SG.1.29.G<br>HIP.24/64.SG.2.29.G<br>HIP.24/64.SG.2.M40.G         | 1-1102624-5<br>1-1102625-5<br>0-1106472-1 |
|                                                                                     |                                                                                     | 2xM40 | 29<br>2x29                                                                        | <b>HIP-K</b><br>HIP-K.24/64.SG.1.29.G<br>HIP-K.24/64.SG.2.29.G<br>HIP-K.24/64.SG.2.M40.G | 5-1102624-5<br>2-1102625-5<br>0-1106472-2 |
|                                                                                     |                                                                                     | 2xM40 | 29<br>2x29                                                                        | <b>EMV-K</b><br>EMV-K.24/64.SG.1.29.G<br>EMV-K.24/64.SG.2.29.G<br>EMV-K.24/64.SG.2.M40.G | 4-1102734-5<br>4-1102735-5<br>0-1106460-2 |
| Protective cover housings                                                           |                                                                                     |       |                                                                                   |                                                                                          |                                           |
|  |  |       | <b>HIP</b><br>HIP/EMV.24/64.SKB                                                   | 3-1106204-5                                                                              |                                           |
|                                                                                     |                                                                                     |       | <b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.24/64.SKB                                       | 4-1106204-5                                                                              |                                           |

**HIP:** Pressure-tight, silver-grey  
**HIP-K:** Housings corrosion-resistant, black, according to DIN IEC 68 T2-52 and ASTM B117-09 > 1000h  
**EMV-K:** Protection against electro-magnetic interference, pressure-tight, IP68 - IP69K, housings corrosion-resistant, black

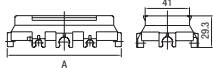
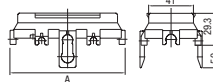
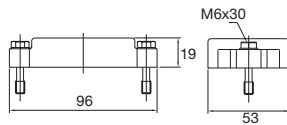
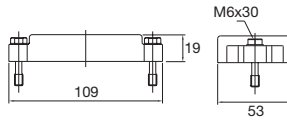
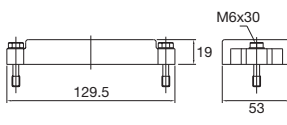
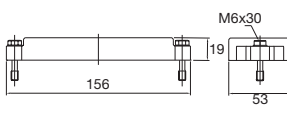
| Description                                                                         |                                                                                     | Metr.                            | PG             | Type                                                                                                 | Part Number                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------|----------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Hood                                                                                |                                                                                     |                                  |                |                                                                                                      |                                                          |
|    |    | 1xM50<br>1xM50<br>2xM40<br>2xM40 |                | HF-HIP-K.8.Sto.1.M50G<br>HF.8.EMV-K.8.Sto.1.M50G<br>HF.HIP-K.8.Sto.2.M40G<br>HF.EMV-K.8.Sto.2.M40G   | O-1102839-4<br>O-1102839-3<br>O-1102839-2<br>O-1102839-1 |
| Housing bottom                                                                      |                                                                                     |                                  |                |                                                                                                      |                                                          |
|    |   | <b>Height</b>                    |                |                                                                                                      |                                                          |
|                                                                                     |                                                                                     | 81 mm<br>81 mm                   | 20 mm<br>20 mm | HF-HIP-K.8.AG.N<br>HF-EMV-K.8.AG.N<br>HF-HIP-K.8.AG<br>HF-EMV-K.8.AG                                 | O-1102837-2<br>O-1102837-1<br>O-1102836-2<br>O-1102836-1 |
| Hood                                                                                |                                                                                     |                                  |                |                                                                                                      |                                                          |
|  |  | 2xM40<br>2xM40<br>2xM50<br>2xM50 |                | HF-HIP-K.12.Sto.2.M40G<br>HF-EMV-K.12.Sto.2.M40G<br>HF-HIP-K.12.Sto.2.M50G<br>HF-EMV-K.12.Sto.2.M50G | O-1102840-2<br>O-1102840-1<br>O-1102840-4<br>O-1102840-3 |
| Housing bottom                                                                      |                                                                                     |                                  |                |                                                                                                      |                                                          |
|  |  | <b>Height</b>                    |                |                                                                                                      |                                                          |
|                                                                                     |                                                                                     | 81 mm<br>81 mm                   | 20 mm<br>20 mm | HF-HIP-K.12.AG.N<br>HF-EMV-K.12.AG.N<br>HF-HIP-K.12.AG<br>HF-EMVK-K.12.AG                            | O-1102838-2<br>O-1102838-1<br>O-1102192-2<br>O-1102192-1 |

## Protective covers for hoods/housings

Reinforced plastic shell (UV-resistant), Versions with/without attachment string

Metal-Version

Size 3, 4, 6 + 8

| Description                                                                         |                                                                                                                                                                                                    |                                                  | Type                       | Part Number |     |   |     |                    |                            |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------|-------------|-----|---|-----|--------------------|----------------------------|
| Protective cover for hoods and housings with bolts                                  |                                                                                                                                                                                                    |                                                  |                            |             |     |   |     |                    |                            |
|    |  <table><tr><th>Size</th><th>A=mm</th></tr><tr><td>6</td><td>105</td></tr><tr><td>8</td><td>132</td></tr></table> | Size                                             | A=mm                       | 6           | 105 | 8 | 132 | SKP.6<br>SKP.8     | O-1110684-3<br>O-1110661-3 |
| Size                                                                                | A=mm                                                                                                                                                                                               |                                                  |                            |             |     |   |     |                    |                            |
| 6                                                                                   | 105                                                                                                                                                                                                |                                                  |                            |             |     |   |     |                    |                            |
| 8                                                                                   | 132                                                                                                                                                                                                |                                                  |                            |             |     |   |     |                    |                            |
| Size 6/8                                                                            |                                                                                                                                                                                                    | with attachment string<br>SKP.6.F<br>SKP.8.F     | O-1106258-3<br>O-1106258-4 |             |     |   |     |                    |                            |
| Protective cover for hoods with central locking clip                                |                                                                                                                                                                                                    |                                                  |                            |             |     |   |     |                    |                            |
|    |  <table><tr><th>Size</th><th>A=mm</th></tr><tr><td>6</td><td>105</td></tr><tr><td>8</td><td>132</td></tr></table> | Size                                             | A=mm                       | 6           | 105 | 8 | 132 | SKP.6/R<br>SKP.8/R | O-1110684-4<br>O-1110661-4 |
| Size                                                                                | A=mm                                                                                                                                                                                               |                                                  |                            |             |     |   |     |                    |                            |
| 6                                                                                   | 105                                                                                                                                                                                                |                                                  |                            |             |     |   |     |                    |                            |
| 8                                                                                   | 132                                                                                                                                                                                                |                                                  |                            |             |     |   |     |                    |                            |
| Size 6/8                                                                            |                                                                                                                                                                                                    | with attachment string<br>SKP.6/R.F<br>SKP.8/R.F | O-1106259-3<br>O-1106259-4 |             |     |   |     |                    |                            |
| Protective covers for housings series HIP, EMV, EMV-K                               |                                                                                                                                                                                                    |                                                  |                            |             |     |   |     |                    |                            |
|  |                                                                                                                 | <b>HIP</b><br>HIP/EMV.6/16.SKB                   | 3-1106201-5                |             |     |   |     |                    |                            |
|  |                                                                                                                 | <b>HIP-K</b><br>HIP-K/EMV-K.6/16.SKB             | 4-1106201-5                |             |     |   |     |                    |                            |
|  |                                                                                                                 | <b>HIP</b><br>HIP/EMV.10/24.SKB                  | 3-1106202-5                |             |     |   |     |                    |                            |
|  |                                                                                                                 | <b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.10/24.SKB      | 4-1106202-5                |             |     |   |     |                    |                            |
|  |                                                                                                                 | <b>HIP</b><br>HIP/EMV.16/40.SKB                  | 3-1106203-5                |             |     |   |     |                    |                            |
|  |                                                                                                                 | <b>HIP-K</b><br>HIP-K.16/40.SKB                  | 4-1106203-5                |             |     |   |     |                    |                            |
|  |                                                                                                                 | <b>HIP</b><br>HIP/EMV.24/64.SKB                  | 3-1106204-5                |             |     |   |     |                    |                            |
|  |                                                                                                                 | <b>HIP-K/EMV-K</b><br>HIP-K/EMV-K.24/64.SKB      | 4-1106204-5                |             |     |   |     |                    |                            |

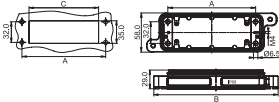
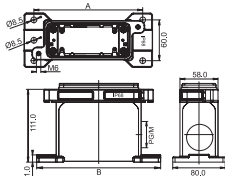
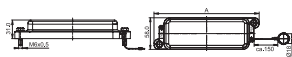
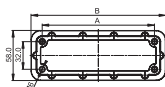
## HBPR (IP68) SERIES

Hood: Side entry

Hood: Top entry

## HPR (IP68) series hoods/housings

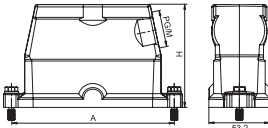
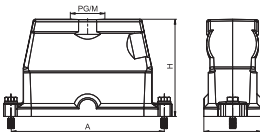
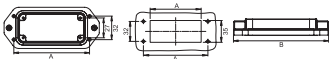
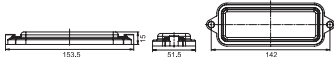
### HBPR (IP68) SERIES

| Opposite angle locking                                                              |                                                                                                                                                                                                                                                                                                                                                                                                           | Size | Metr. | PG    | Type   | Part Number |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-------|--------|-------------|-----|-------------------------------------|------------|--------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------|----|--------|-----------------------------------------------------|--------------------------------------------------------------------------|----|--------|-----|-----|-----|-------------------------------------|--|--|-------------------------------------------------|--------------------------------------------------------------------------|
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
|    | <div><table><tr><th>SIZE</th><th>A</th><th>B</th><th>C</th></tr><tr><td>H6BPR</td><td>70</td><td>133</td><td>48</td></tr><tr><td>H10BPR</td><td>83</td><td>146</td><td>60</td></tr><tr><td>H16BPR</td><td>103</td><td>166</td><td>82</td></tr><tr><td>H24BPR</td><td>130</td><td>193</td><td>108</td></tr></table></div> | SIZE | A     | B     | C      | H6BPR       | 70  | 133                                 | 48         | H10BPR       | 83                                                                         | 146                                                                      | 60 | H16BPR | 103                                                 | 166                                                                      | 82 | H24BPR | 130 | 193 | 108 | H6BPR<br>H10BPR<br>H16BPR<br>H24BPR |  |  | H6BPR-AG<br>H10BPR-AG<br>H16BPR-AG<br>H24BPR-AG | T1930060000-000<br>T1930100000-000<br>T1930160000-000<br>T1930240000-000 |
| SIZE                                                                                | A                                                                                                                                                                                                                                                                                                                                                                                                         | B    | C     |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| H6BPR                                                                               | 70                                                                                                                                                                                                                                                                                                                                                                                                        | 133  | 48    |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| H10BPR                                                                              | 83                                                                                                                                                                                                                                                                                                                                                                                                        | 146  | 60    |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| H16BPR                                                                              | 103                                                                                                                                                                                                                                                                                                                                                                                                       | 166  | 82    |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| H24BPR                                                                              | 130                                                                                                                                                                                                                                                                                                                                                                                                       | 193  | 108   |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| Straight surface mounted                                                            |                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
|   | <div><table><tr><th>SIZE</th><th>A</th><th>B</th></tr><tr><td>H10BPR</td><td>140</td><td>169</td></tr></table></div>                                                                                                                                                                                                    | SIZE | A     | B     | H10BPR | 140         | 169 | H6BPR<br>H10BPR<br>H16BPR<br>H24BPR | M25<br>M32 | PG21<br>PG29 | H10BPR-SGRH-PG21<br>H10BPR-SGRH-PG29<br>H10BPR-SGRH-M25<br>H10BPR-SGRH-M32 | T1950100121-000<br>T1950100129-000<br>T1950100125-000<br>T1950100132-000 |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| SIZE                                                                                | A                                                                                                                                                                                                                                                                                                                                                                                                         | B    |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| H10BPR                                                                              | 140                                                                                                                                                                                                                                                                                                                                                                                                       | 169  |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| Cover                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
|  | <div><table><tr><th>SIZE</th><th>A</th></tr><tr><td>H6BPR</td><td>133</td></tr><tr><td>H10BPR</td><td>146</td></tr><tr><td>H16BPR</td><td>166</td></tr><tr><td>H24BPR</td><td>193</td></tr></table></div>                                                                                                              | SIZE | A     | H6BPR | 133    | H10BPR      | 146 | H16BPR                              | 166        | H24BPR       | 193                                                                        | H6BPR<br>H10BPR<br>H16BPR<br>H24BPR                                      |    |        | H6BPR-KDB<br>H10BPR-KDB<br>H16BPR-KDB<br>H24BPR-KDB | T1990060000-000<br>T1990100000-000<br>T1990160000-000<br>T1990240000-000 |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| SIZE                                                                                | A                                                                                                                                                                                                                                                                                                                                                                                                         |      |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| H6BPR                                                                               | 133                                                                                                                                                                                                                                                                                                                                                                                                       |      |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| H10BPR                                                                              | 146                                                                                                                                                                                                                                                                                                                                                                                                       |      |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| H16BPR                                                                              | 166                                                                                                                                                                                                                                                                                                                                                                                                       |      |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| H24BPR                                                                              | 193                                                                                                                                                                                                                                                                                                                                                                                                       |      |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| Frame                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
|  | <div><table><tr><th>SIZE</th><th>A</th><th>B</th></tr><tr><td>H24BPR</td><td>130</td><td>156</td></tr></table></div>                                                                                                                                                                                                   | SIZE | A     | B     | H24BPR | 130         | 156 | H24BPR                              |            |              | H24BPR-FRAME                                                               | T1990240001-000                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| SIZE                                                                                | A                                                                                                                                                                                                                                                                                                                                                                                                         | B    |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |
| H24BPR                                                                              | 130                                                                                                                                                                                                                                                                                                                                                                                                       | 156  |       |       |        |             |     |                                     |            |              |                                                                            |                                                                          |    |        |                                                     |                                                                          |    |        |     |     |     |                                     |  |  |                                                 |                                                                          |



## HPR (IP68) series hoods/housings

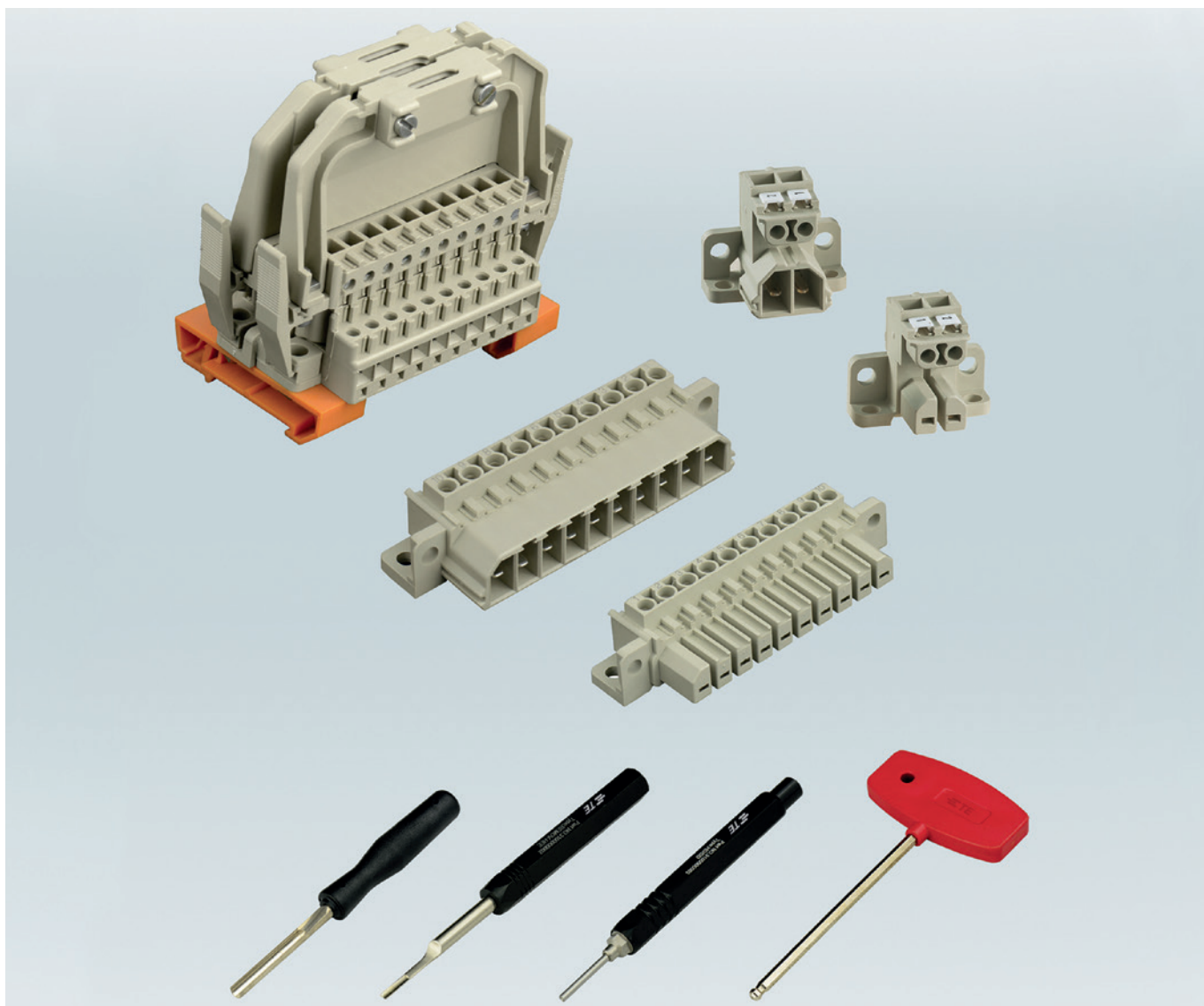
### HBPR (IP68) SERIES

| Central locking                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | Size              | Metr.            | PG               | Type            | Part Number     |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|------------------|-----------------|-----------------|-----------------|--------|-----|--------|--------|-----|----|--------|-----|-----|-------|-------------------|------|-----------------|-----------------|-------------------------------------|--|--|-----------|-----------------|
| Hood: Side entry                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|    |  <table border="1"><thead><tr><th>SIZE</th><th>A</th><th>H</th></tr></thead><tbody><tr><td>H6BPR</td><td>96</td><td>70</td></tr><tr><td>H10BPR</td><td>110</td><td>70</td></tr><tr><td>H16BPR</td><td>130</td><td>80</td></tr><tr><td>H24BPR</td><td>156</td><td>80</td></tr></tbody></table>                                                            | SIZE              | A                | H                | H6BPR           | 96              | 70              | H10BPR | 110 | 70     | H16BPR | 130 | 80 | H24BPR | 156 | 80  | H6BPR | M32               | PG21 | H6BPR-TSHC-PG21 | T1912061121-000 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | SIZE              | A                | H                |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H6BPR             | 96               | 70               |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H10BPR            | 110              | 70               |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     | H16BPR                                                                                                                                                                                                                                                                                                                                                                                                                                    | 130               | 80               |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     | H24BPR                                                                                                                                                                                                                                                                                                                                                                                                                                    | 156               | 80               |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H6BPR-TSHC-M25    | T1912061125-000  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     | PG21                                                                                                                                                                                                                                                                                                                                                                                                                                      | H10BPR-TSHC-PG21  | T1912101121-000  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     | PG29                                                                                                                                                                                                                                                                                                                                                                                                                                      | H10BPR-TSHC-PG29  | T1912101129-000  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  |                 | H10BPR-TSHC-M25 | T1912101125-000 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  |                 | H10BPR-TSHC-M32 | T1912101132-000 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     | H10BPR                                                                                                                                                                                                                                                                                                                                                                                                                                    | M25<br>M32<br>M40 | PG21             | H16BPR-TSHC-PG21 | T1912161121-000 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| PG29                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | H16BPR-TSHC-PG29 | T1912161129-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | H16BPR-TSHC-M25  | T1912161125-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | H16BPR-TSHC-M32  | T1912161132-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  | H16BPR-TSHC-M40 | T1912161140-000 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| H16BPR                                                                              | M25<br>M32<br>M40                                                                                                                                                                                                                                                                                                                                                                                                                         | PG21              | H24BPR-TSHC-PG21 | T1912241121-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | PG29              | H24BPR-TSHC-PG29 | T1912241129-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | PG36              | H24BPR-TSHC-PG36 | T1912241136-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | H24BPR-TSHC-M25  | T1912241125-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  | H24BPR-TSHC-M32 | T1912241132-000 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  | H24BPR-TSHC-M40 | T1912241140-000 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| H24BPR                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| Hood: Top entry                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|  |  <table border="1"><thead><tr><th>SIZE</th><th>A</th><th>H</th></tr></thead><tbody><tr><td>H6BPR</td><td>96</td><td>70</td></tr><tr><td>H10BPR</td><td>110</td><td>70</td></tr><tr><td>H16BPR</td><td>130</td><td>80</td></tr><tr><td>H24BPR</td><td>156</td><td>80</td></tr></tbody></table>                                                          | SIZE              | A                | H                | H6BPR           | 96              | 70              | H10BPR | 110 | 70     | H16BPR | 130 | 80 | H24BPR | 156 | 80  | H6BPR | M25<br>M32<br>M40 | PG21 | H6BPR-TGHC-PG21 | T1922061121-000 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | SIZE              | A                | H                |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H6BPR             | 96               | 70               |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H10BPR            | 110              | 70               |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     | H16BPR                                                                                                                                                                                                                                                                                                                                                                                                                                    | 130               | 80               |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     | H24BPR                                                                                                                                                                                                                                                                                                                                                                                                                                    | 156               | 80               |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     | PG29                                                                                                                                                                                                                                                                                                                                                                                                                                      | H6BPR-TGHC-PG29   | T1922061129-000  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     | PG36                                                                                                                                                                                                                                                                                                                                                                                                                                      | H6BPR-TGHC-PG36   | T1922061136-000  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H6BPR-TGHC-M25    | T1922061125-000  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  |                 | H6BPR-TGHC-M32  | T1922061132-000 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  |                 | H6BPR-TGHC-M40  | T1922061140-000 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     | H10BPR                                                                                                                                                                                                                                                                                                                                                                                                                                    | M25<br>M32<br>M40 | PG21             | H10BPR-TGHC-PG21 | T1922101121-000 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| PG29                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | H10BPR-TGHC-PG29 | T1922101129-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| PG36                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | H10BPR-TGHC-PG36 | T1922101136-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | H10BPR-TGHC-M25  | T1922101125-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  | H10BPR-TGHC-M32 | T1922101132-000 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  | H10BPR-TGHC-M40 | T1922101140-000 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| H16BPR                                                                              | M25<br>M32<br>M40                                                                                                                                                                                                                                                                                                                                                                                                                         | PG21              | H16BPR-TGHC-PG21 | T1922161121-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | PG29              | H16BPR-TGHC-PG29 | T1922161129-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | PG36              | H16BPR-TGHC-PG36 | T1922161136-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | H16BPR-TGHC-M25  | T1922161125-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  | H16BPR-TGHC-M32 | T1922161132-000 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  | H16BPR-TGHC-M40 | T1922161140-000 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| H24BPR                                                                              | M25<br>M32<br>M40                                                                                                                                                                                                                                                                                                                                                                                                                         | PG21              | H24BPR-TGHC-PG21 | T1922241121-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | PG29              | H24BPR-TGHC-PG29 | T1922241129-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | PG36              | H24BPR-TGHC-PG36 | T1922241136-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | H24BPR-TGHC-M25  | T1922241125-000  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  | H24BPR-TGHC-M32 | T1922241132-000 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  | H24BPR-TGHC-M40 | T1922241140-000 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| Bulkhead mounted                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|  |  <table border="1"><thead><tr><th>SIZE</th><th>A</th><th>B</th><th>C</th></tr></thead><tbody><tr><td>H6BPR</td><td>70</td><td>96</td><td>48</td></tr><tr><td>H10BPR</td><td>83</td><td>110</td><td>60</td></tr><tr><td>H16BPR</td><td>103</td><td>130</td><td>82</td></tr><tr><td>H24BPR</td><td>130</td><td>156</td><td>108</td></tr></tbody></table> | SIZE              | A                | B                | C               | H6BPR           | 70              | 96     | 48  | H10BPR | 83     | 110 | 60 | H16BPR | 103 | 130 | 82    | H24BPR            | 130  | 156             | 108             | H6BPR<br>H10BPR<br>H16BPR<br>H24BPR |  |  | H6BPR-AGC | T1932061000-000 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | SIZE              | A                | B                | C               |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H6BPR             | 70               | 96               | 48              |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H10BPR            | 83               | 110              | 60              |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| H16BPR                                                                              | 103                                                                                                                                                                                                                                                                                                                                                                                                                                       | 130               | 82               |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| H24BPR                                                                              | 130                                                                                                                                                                                                                                                                                                                                                                                                                                       | 156               | 108              |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H10BPR-AGC        | T1932101000-000  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H16BPR-AGC        | T1932161000-000  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           | H24BPR-AGC        | T1932241000-000  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
| Cover                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                  |                  |                 |                 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |
|  |                                                                                                                                                                                                                                                                                                                                                        | H24BPR            |                  |                  | H24BPR-KDBP     | T1990240000-000 |                 |        |     |        |        |     |    |        |     |     |       |                   |      |                 |                 |                                     |  |  |           |                 |

## Notes

[illegible]

## Tools and inserts and rail mounting elements



### 1. Specifications

DIN VDE 0110 Concerning clearance and clearance distances

DIN VDE 0627 Connectors and plug devices

### 2. Standards

DIN EN 60 664-1

DIN EN 61 984

### 3. Approvals



RoHS

## Tools and accessories

### Crimping tools and remove tools

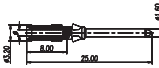
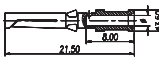
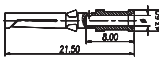
|                                                                                                                                |                                                                                     |                 |                                                                                           |                                                                                      |                 |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------|
| <b>Crimp tool</b><br><br>Wire range: 0.5-4.0mm <sup>2</sup> Suitable for CDM/CDF and CEM/CEF contacts                          |    |                 | <b>Crimp tool</b><br><br>Wire range: 4.0-10.0mm <sup>2</sup><br>Used for CMM/CMF contacts |   |                 |
| <b>Type</b>                                                                                                                    | CRIMPBOX-0.5/4                                                                      |                 | <b>Type</b>                                                                               | CRIMPBOX-4.0/10.0                                                                    |                 |
| <b>Part Number</b>                                                                                                             | T3100000001-000                                                                     |                 | <b>Part Number</b>                                                                        | T3100001001-000                                                                      |                 |
| <b>Crimp tool</b><br><br>Wire range: 0.14-4.0mm <sup>2</sup><br>Suitable for CDM/CDF and CEM/CEF contacts with locator and die |    |                 | <b>Remove tool</b><br><br>Used for CDM/CDF contact series                                 |   |                 |
| <b>Type</b>                                                                                                                    | RSZ.HE-HN.D-HVT                                                                     |                 | <b>Type</b>                                                                               | REMOV-HD                                                                             |                 |
| <b>Part Number</b>                                                                                                             | 1-1105851-8                                                                         |                 | <b>Part Number</b>                                                                        | T3100000003-000                                                                      |                 |
| <b>Remove tool</b><br><br>Used for CEM/CMF contact series                                                                      |   |                 | <b>Remove tool</b><br><br>Used for 5A contacts (Ø1mm)                                     |  |                 |
| <b>Type</b>                                                                                                                    | REMOV-HEE                                                                           | REMOV-HEEE      | <b>Material</b>                                                                           | Metal                                                                                | Plastic         |
| <b>Part Number</b>                                                                                                             | T3100000002-000                                                                     | T3100000016-000 | <b>Part Number</b>                                                                        | T3100000017-000                                                                      | T3100000018-000 |
| <b>Remove tool</b><br><br>Used for CMM/CMF contact series                                                                      |  |                 |                                                                                           |                                                                                      |                 |
| <b>Type</b>                                                                                                                    | REMOV-MM                                                                            |                 |                                                                                           |                                                                                      |                 |
| <b>Part Number</b>                                                                                                             | T3100000013-000                                                                     |                 |                                                                                           |                                                                                      |                 |

### Axial screw tool and crimping tool

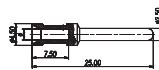
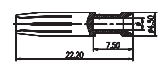
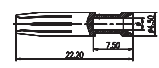
|                                                  |                                                                                     |  |                                                                                         |                                                                                       |  |
|--------------------------------------------------|-------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|
| <b>M3 screw driver</b><br>Used for HA/HE inserts |  |  | <b>Tool</b><br>Used for 100A inserts                                                    |  |  |
| <b>Type</b>                                      | SCREWD-M3                                                                           |  | <b>Type</b>                                                                             | HEXA-D1                                                                               |  |
| <b>Part Number</b>                               | T3100000009-000                                                                     |  | <b>Part Number</b>                                                                      | T3100000010-000                                                                       |  |
| <b>Tool</b><br>Used for 40A inserts              |  |  | <b>Crimping tool</b><br>Wire range: 10.0-120.0mm <sup>2</sup><br>Used for 200A contacts |  |  |
| <b>Type</b>                                      | HEXA-D2                                                                             |  | <b>Type</b>                                                                             | CRIMPBOX-10/120                                                                       |  |
| <b>Part Number</b>                               | T3100000012-000                                                                     |  | <b>Part Number</b>                                                                      | T3100000015-000                                                                       |  |

## Crimp contacts

### 10A Contact

| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 3\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 10A Male<br>crimp contacts<br> | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                 | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
|                                                     |                                | 0.14-0.37       | 26-22 | 8.0                      | CDM-0.14                      | T2020001002-000 | DDM-0.14                    | T2020011002-000 |
|                                                                                                                                      |                                                                                                                 | 0.5             | 20    | 8.0                      | CDM-0.5                       | T2020001005-000 | DDM-0.5                     | T2020011005-000 |
|                                                                                                                                      |                                                                                                                 | 0.75            | 18    | 8.0                      | CDM-0.75                      | T2020001008-000 | DDM-0.75                    | T2020011008-000 |
|                                                                                                                                      |                                                                                                                 | 1.0             | 18    | 8.0                      | CDM-1.0                       | T2020001010-000 | DDM-1.0                     | T2020011010-000 |
|                                                                                                                                      |                                                                                                                 | 1.5             | 16    | 8.0                      | CDM-1.5                       | T2020001015-000 | DDM-1.5                     | T2020011015-000 |
|                                                                                                                                      |                                                                                                                 | 2.5             | 14    | 6.0                      | CDM-2.5                       | T2020001025-000 | DDM-2.5                     | T2020011025-000 |
|                                                                                                                                      |                                                                                                                 |                 |       |                          |                               |                 |                             |                 |
| CDF/Female<br>                                      |                                | 0.14-0.37       | 26-22 | 8.0                      | CDF-0.14                      | T2020002002-000 | DDF-0.14                    | T2020012002-000 |
|                                                                                                                                      |                                                                                                                 | 0.5             | 20    | 8.0                      | CDF-0.5                       | T2020002005-000 | DDF-0.5                     | T2020012005-000 |
|                                                                                                                                      |                                                                                                                 | 0.75            | 18    | 8.0                      | CDF-0.75                      | T2020002008-000 | DDF-0.75                    | T2020012008-000 |
|                                                                                                                                      |                                                                                                                 | 1.0             | 18    | 8.0                      | CDF-1.0                       | T2020002010-000 | DDF-1.0                     | T2020012010-000 |
|                                                                                                                                      |                                                                                                                 | 1.5             | 16    | 8.0                      | CDF-1.5                       | T2020002015-000 | DDF-1.5                     | T2020012015-000 |
|                                                                                                                                      |                                                                                                                 | 2.5             | 14    | 6.0                      | CDF-2.5                       | T2020002025-000 | DDF-2.5                     | T2020012025-000 |
|                                                                                                                                      |                                                                                                                 |                 |       |                          |                               |                 |                             |                 |

### 16A Contact

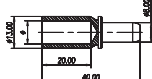
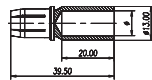
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1\text{m}\Omega$<br>Terminal:<br>crimp connection<br>CEM/Male | 16A Male<br>crimp contacts<br> | Wire gauge      |       | Strip-<br>ping<br>length | Crimp contacts, silver-plated |                 | Crimp contacts, gold-plated |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------|-------------------------------|-----------------|-----------------------------|-----------------|
|                                                                                                                                      |                                                                                                                   | mm <sup>2</sup> | AWG   |                          | Type                          | Part Number     | Type                        | Part Number     |
|                                                   |                                | 0.14-0.37       | 26-22 | 7.5                      | CEM-0.3                       | T2030001002-000 | DEM-0.3                     | T2030011002-000 |
|                                                                                                                                      |                                                                                                                   | 0.5             | 20    | 7.5                      | CEM-0.5                       | T2030001005-000 | DEM-0.5                     | T2030011005-000 |
|                                                                                                                                      |                                                                                                                   | 0.75            | 18    | 7.5                      | CEM-0.75                      | T2030001008-000 | DEM-0.75                    | T2030011008-000 |
|                                                                                                                                      |                                                                                                                   | 1.0             | 18    | 7.5                      | CEM-1.0                       | T2030001010-000 | DEM-1.0                     | T2030011010-000 |
|                                                                                                                                      |                                                                                                                   | 1.5             | 16    | 7.5                      | CEM-1.5                       | T2030001015-000 | DEM-1.5                     | T2030011015-000 |
|                                                                                                                                      |                                                                                                                   | 2.5             | 14    | 7.5                      | CEM-2.5                       | T2030001025-000 | DEM-2.5                     | T2030011025-000 |
|                                                                                                                                      |                                                                                                                   | 4.0             | 12    | 7.5                      | CEM-4.0                       | T2030001040-000 | DEM-4.0                     | T2030011040-000 |
| CEF/Female<br>                                    |                                | 0.14-0.37       | 26-22 | 7.5                      | CEF-0.3                       | T2030002002-000 | DEF-0.3                     | T2030012002-000 |
|                                                                                                                                      |                                                                                                                   | 0.5             | 20    | 7.5                      | CEF-0.5                       | T2030002005-000 | DEF-0.5                     | T2030012005-000 |
|                                                                                                                                      |                                                                                                                   | 0.75            | 18    | 7.5                      | CEF-0.75                      | T2030002008-000 | DEF-0.75                    | T2030012008-000 |
|                                                                                                                                      |                                                                                                                   | 1.0             | 18    | 7.5                      | CEF-1.0                       | T2030002010-000 | DEF-1.0                     | T2030012010-000 |
|                                                                                                                                      |                                                                                                                   | 1.5             | 16    | 7.5                      | CEF-1.5                       | T2030002015-000 | DEF-1.5                     | T2030012015-000 |
|                                                                                                                                      |                                                                                                                   | 2.5             | 14    | 7.5                      | CEF-2.5                       | T2030002025-000 | DEF-2.5                     | T2030012025-000 |
|                                                                                                                                      |                                                                                                                   | 4.0             | 12    | 7.5                      | CEF-4.0                       | T2030002040-000 | DEF-4.0                     | T2030012040-000 |

## Crimp contacts

### 40A Contact

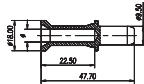
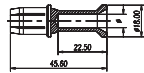
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 0.3m\Omega$<br>Terminal:<br>crimp connection<br>CMM/Male | 40A Male<br>crimp contacts<br>   | Wire gauge      |     | Stripping<br>length<br>mm | Crimp contacts, silver-plated |                 |
|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------|-----|---------------------------|-------------------------------|-----------------|
|                                                                                                                                 |                                                                                                                   | mm <sup>2</sup> | AWG |                           | Type                          | Part Number     |
|                                                |                                                                                                                   | 1.5             | 16  | 8.0                       | CMM-1.5                       | T2040001015-000 |
|                                                                                                                                 |                                                                                                                   | 2.5             | 14  | 8.0                       | CMM-2.5                       | T2040001025-000 |
|                                                                                                                                 |                                                                                                                   | 4.0             | 12  | 8.0                       | CMM-4.0                       | T2040001040-000 |
|                                                                                                                                 |                                                                                                                   | 6.0             | 10  | 8.0                       | CMM-6.0                       | T2040001060-000 |
|                                                                                                                                 |                                                                                                                   |                 |     |                           |                               |                 |
| CMF/Female<br>                                 | 40A Female<br>crimp contacts<br> | 1.5             | 16  | 8.0                       | CMF-1.5                       | T2040002015-000 |
|                                                                                                                                 |                                                                                                                   | 2.5             | 14  | 8.0                       | CMF-2.5                       | T2040002025-000 |
|                                                                                                                                 |                                                                                                                   | 4.0             | 12  | 8.0                       | CMF-4.0                       | T2040002040-000 |
|                                                                                                                                 |                                                                                                                   | 6.0             | 10  | 8.0                       | CMF-6.0                       | T2040002060-000 |
|                                                                                                                                 |                                                                                                                   | 10              | 7   | 8.0                       | CMF-10                        | T2040002100-000 |

### 100A Contact

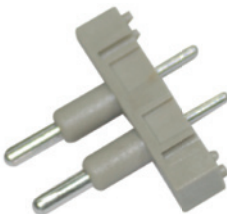
| Tech data<br>Material:<br>copper alloy<br>Contact<br>resistance: $\leq 1m\Omega$<br>Terminal:<br>crimp connection<br>CDM/Male | 100A Male<br>crimp contacts<br>   | Wire gauge      | Ø   | Stripping<br>length<br>mm | Crimp contacts, silver-plated |                 |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------|-----|---------------------------|-------------------------------|-----------------|
|                                                                                                                               |                                                                                                                      | mm <sup>2</sup> |     |                           | Type                          | Part Number     |
|                                            |                                                                                                                      | 10              | 4.3 | 19                        | CNM-10                        | T2050001010-000 |
|                                                                                                                               |                                                                                                                      | 16              | 5.5 | 19                        | CNM-16                        | T2050001016-000 |
|                                                                                                                               |                                                                                                                      | 25              | 7   | 19                        | CNM-25                        | T2050001025-000 |
|                                                                                                                               |                                                                                                                      | 35              | 8.2 | 16                        | CNM-35                        | T2050001035-000 |
| CDF/Female<br>                             | 100A Female<br>crimp contacts<br> | 10              | 4.3 | 19                        | CNF-10                        | T2050002010-000 |
|                                                                                                                               |                                                                                                                      | 16              | 5.5 | 19                        | CNF-16                        | T2050002016-000 |
|                                                                                                                               |                                                                                                                      | 25              | 7   | 19                        | CNF-25                        | T2050002025-000 |
|                                                                                                                               |                                                                                                                      | 35              | 8.2 | 16                        | CNF-35                        | T2050002035-000 |

# Crimp contacts

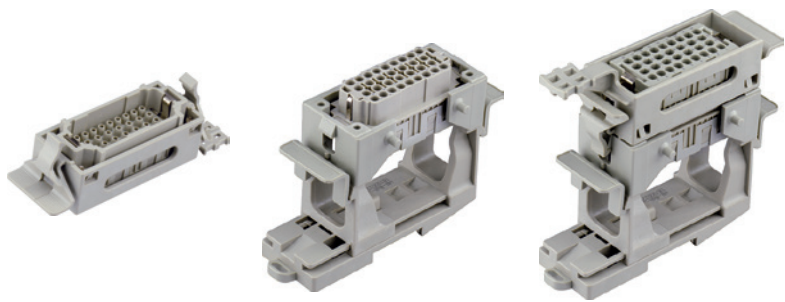
## 200A Contact

|                                                                                                                                                                                                                                     |                                                                                                                        |                       |          |                         |                                      |                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------|----------|-------------------------|--------------------------------------|--------------------|
| <b>Tech data</b><br><b>Material:</b><br>copper<br><b>Contact resistance:</b> ≤0.3mΩ<br><b>Terminal:</b><br>crimp connection<br><b>CHM/Male</b><br> | <b>200A Male crimp contacts</b><br>   | <b>Wire gauge</b>     | <b>Ø</b> | <b>Stripping length</b> | <b>Crimp contacts, silver-plated</b> |                    |
|                                                                                                                                                                                                                                     |                                                                                                                        | <b>mm<sup>2</sup></b> |          | <b>mm</b>               | <b>Type</b>                          | <b>Part Number</b> |
|                                                                                                                                                                                                                                     |                                                                                                                        | 25                    | 7.0      | 22.5                    | CHM-25                               | T2060001025-000    |
|                                                                                                                                                                                                                                     |                                                                                                                        | 35                    | 8.2      | 22.5                    | CHM-35                               | T2060001035-000    |
|                                                                                                                                                                                                                                     |                                                                                                                        | 50                    | 10.0     | 22.5                    | CHM-50                               | T2060001050-000    |
|                                                                                                                                                                                                                                     |                                                                                                                        | 70                    | 11.5     | 22.5                    | CHM-70                               | T2060001070-000    |
| <b>CHF/Female</b><br>                                                                                                                              | <b>200A Female crimp contacts</b><br> | 25                    | 7.0      | 22.5                    | CHF-25                               | T2060002025-000    |
|                                                                                                                                                                                                                                     |                                                                                                                        | 35                    | 8.2      | 22.5                    | CHF-35                               | T2060002035-000    |
|                                                                                                                                                                                                                                     |                                                                                                                        | 50                    | 10.0     | 22.5                    | CHF-50                               | T2060002050-000    |
|                                                                                                                                                                                                                                     |                                                                                                                        | 70                    | 11.5     | 22.5                    | CHF-70                               | T2060002070-000    |
|                                                                                                                                                                                                                                     |                                                                                                                        |                       |          |                         |                                      |                    |

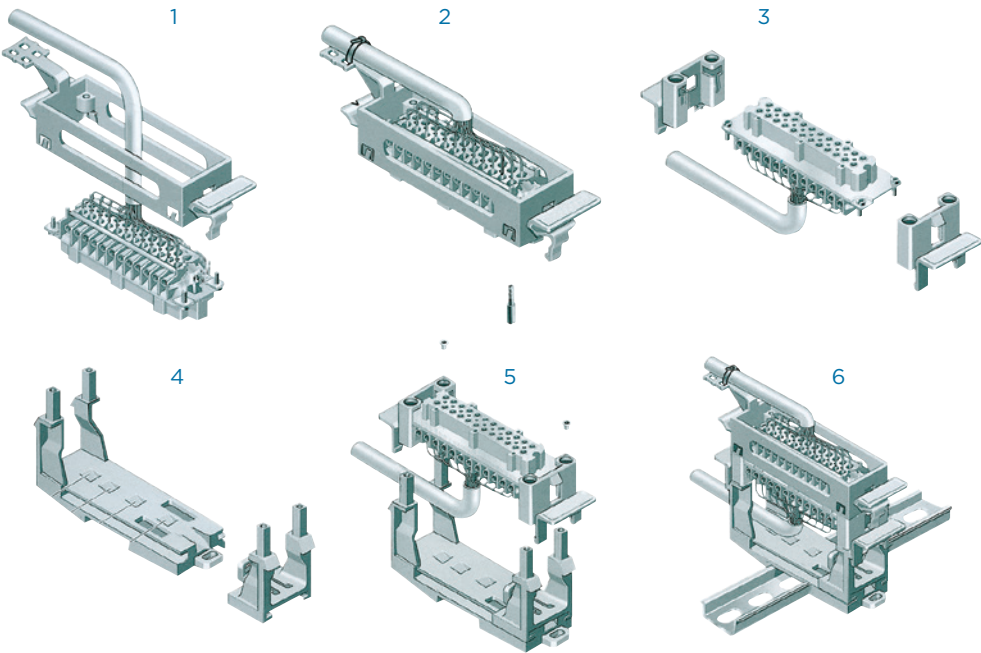
## PCB Adapter

|                                                                                     |                 |                                                                                      |                 |
|-------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------|-----------------|
|  |                 |  |                 |
| <b>Type</b>                                                                         | PCB-adapter-EE  | <b>Type</b>                                                                          | CEF-adapter     |
| <b>Part Number</b>                                                                  | T2040000000-000 | <b>Part Number</b>                                                                   | T2030002000-000 |

# Insert mounting element



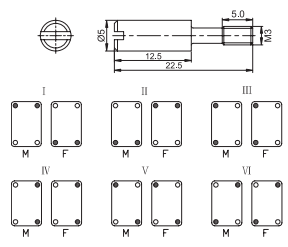
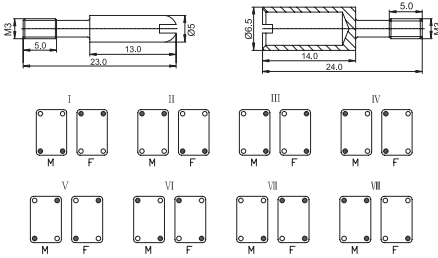
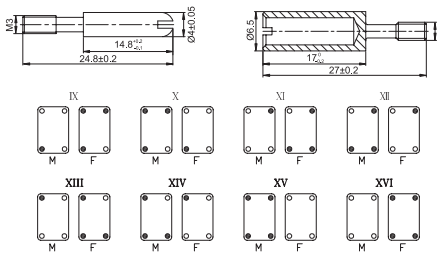
| Set                                                                                                           | Parts order |      | Type          | Part Number     |
|---------------------------------------------------------------------------------------------------------------|-------------|------|---------------|-----------------|
| Insert mounting with carrier element                                                                          |             |      |               |                 |
|  <p>Top →</p> <p>Base →</p> | H6B set     | Top  | H6B-Rail-top  | T1870062101-000 |
|                                                                                                               |             | Base | HB-Rail-base  | T1870002201-000 |
|                                                                                                               | H10B set    | Top  | H10B-Rail-top | T1870102101-000 |
|                                                                                                               |             | Base | HB-Rail-base  | T1870002201-000 |
|                                                                                                               | H16B set    | Top  | H16B-Rail-top | T1870162101-000 |
|                                                                                                               |             | Base | HB-Rail-base  | T1870002201-000 |
|                                                                                                               | H24B set    | Top  | H24B-Rail-top | T1870242101-000 |
|                                                                                                               |             | Base | HB-Rail-base  | T1870002201-000 |



- 1 Attach insert in top carrier element
- 2 Set up strain relief e.g. by cable ties
- 3 Attach fixing clamps to base insert
- 4 Adjust base element to the dimensions of the insert
- 5 Attach base assembly to base element
- 6 Connect top and base inserts



## Installation elements

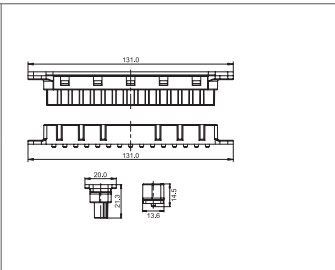
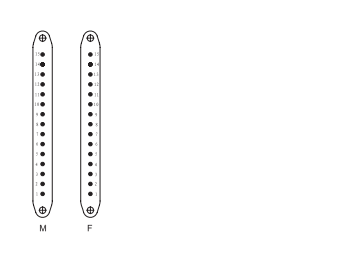
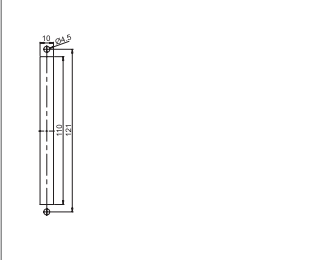
| Coding of hoods/housings and inserts                                                                                        |                                                                                     | Type                                                                                                                                                                           | Part Number                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard code pin<br>(Stainless steel)     |    | Ordinary type<br>CODING-PIN-M3-TM<br>CODING-PIN-M3-TF<br><br>Stainless steel<br>CODING-PIN-M3-STM<br>CODING-PIN-M3-STF                                                         | Ordinary type<br>T0931000423-000<br>T0931006524-000<br><br>Stainless steel<br>T0932000423-000<br>T0932006524-000                                                     |
| Guiding pins<br>(Stainless steel)          |   | Ordinary type<br>King-size<br>CODING-PIN-M3-LTM<br>CODING-PIN-M3-LTF<br><br>Stainless steel,<br>King-size<br>CODING-PIN-M3-LSTM<br>CODING-PIN-M3-LSTF                          | Ordinary type<br>King-size<br>T0931000425-000<br>T0931006527-000<br><br>Stainless steel,<br>King-size<br>T0931100425-000<br>T0931106527-000                          |
| Guiding pins<br>(screw thread extended)  |  | Ordinary type<br>(screw thread extended)<br>CODING-PIN-M3-LTM<br>CODING-PIN-M3-LTF<br><br>Stainless steel<br>(screw thread extended)<br>CODING-PIN-M3-STM<br>CODING-PIN-M3-STF | Ordinary type<br>(screw thread extended)<br>T0931100425-000<br>T0931106527-000<br><br>Ordinary type<br>(screw thread extended)<br>T0931100423-000<br>T0931106524-000 |

# HEE-015 insert

INSERTS MOUNTING WITHOUT HOOD/HOUSING

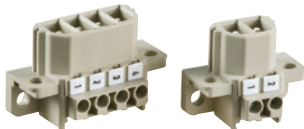
200V MAX. 16A

15+⊕

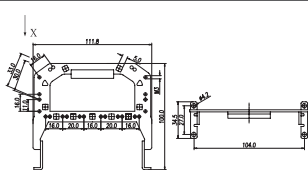
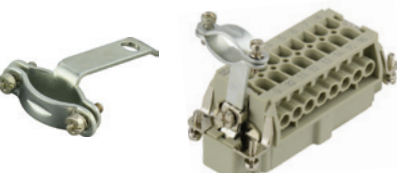
| Dimensions (mm)                                                                    | Type                                                                               | Part Number |                 |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------|-----------------|
|                                                                                    |                                                                                    | Male insert | Female insert   |
| Crimp terminal (Order crimp contacts separately)                                   |                                                                                    |             |                 |
|   |   | HEE-015-M   | T2800152101-000 |
|                                                                                    |  | HEE-015-F   | T2800152201-000 |
| Contact arrangement view from termination side                                     | Panel cut out for inserts for use without hoods/housings                           |             |                 |
|  |  |             |                 |

Order crimp contacts separately  
Female contact type: CSF-1.5  
Female contact p/n: T0080002015-010

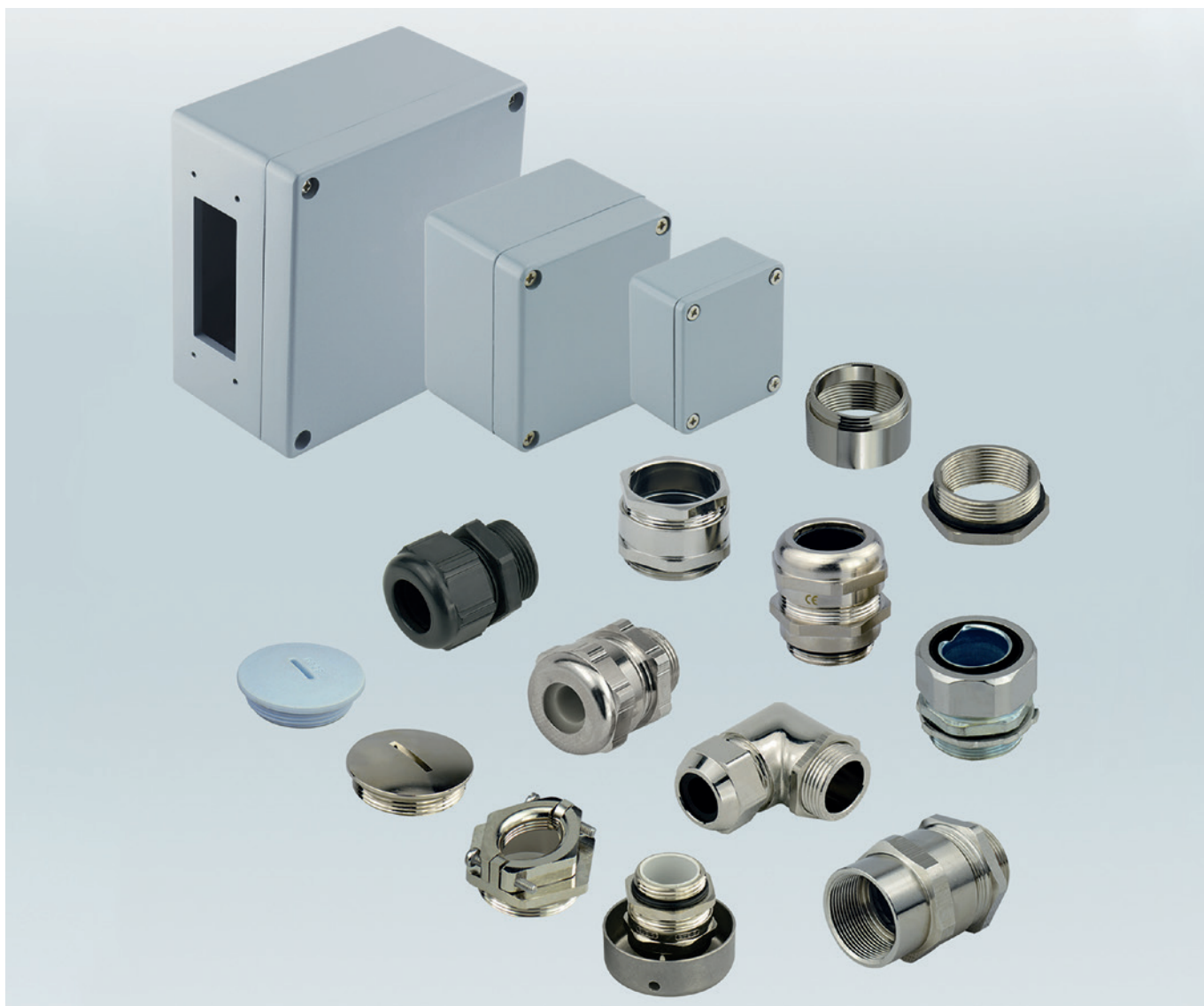
### Other connectors

|                                                                                                                                                                                         |                                                                                   | Designation                                  | Type                   | Part Number                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------|------------------------|------------------------------------|
| <b>3-poles connector</b><br><br><b>Rated:</b> 25A, 500V<br><br><b>Contact surface:</b> Silver plated<br><br><b>Flammability acc. to UL94:</b> V0<br><br><b>Terminal:</b> Screw terminal |  | 3 poles male insert<br>3 poles female insert | HCC-003-M<br>HCC-003-F | T2100032101-000<br>T2100032201-000 |

## Installation elements

| Grip frame, screw adapter and screw                                                 |                                                                                   | Type      | Part Number     |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------|-----------------|
| H24B grip frame (further variants are available on request)                         |                                                                                   |           |                 |
|    |  | HB-SB-024 | T3403121350-000 |
| Screw adapter and screw                                                             |                                                                                   |           |                 |
|    |                                                                                   | HB-GDZ-S  | T3403121000-000 |
|                                                                                     |                                                                                   | HB-GDZ-X  | T3403122000-000 |
| M5 Screw                                                                            |                                                                                   |           |                 |
|   |                                                                                   | FIX-M5    | T0932406003-000 |
| Extend earth terminal                                                               |                                                                                   |           |                 |
|  |                                                                                   | EXTEND-PE | T0926003000-000 |

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Cable glands made from plastic and brass  
EMC cable glands

For hazardous areas in accordance with  
DIN EN 50014  
DIN EN 50019



## Cable fittings and accessories

### Cross reference from PG thread to metric thread

| PG     | M   |
|--------|-----|
| PG11   | M20 |
| PG13.5 |     |
| PG16   | M25 |
| PG21   | M32 |
| PG29   | M40 |
| PG36   |     |
| PG42   | M50 |

|                                                                                                                                                                                                                                                                              | Metr.     | PG     | Clamp range (mm)     | Type                               | Part Number                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|----------------------|------------------------------------|-------------------------------------------------------|
| Cable glands, brass nicked plated                                                                                                                                                                                                                                            |           |        |                      |                                    |                                                       |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Press seal material:</b> PA<br/> <b>Seal material:</b> NBR<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP68</p> |           | PG7    | 2-5<br>3-6.5         | DLX-7-MTS<br>DLX-7-MS              | T3609070111-000<br>T3609070101-000                    |
|                                                                                                                                                                                                                                                                              |           | PG9    | 2-6<br>4-8           | DLX-9-MTS<br>DLX-9-MS              | T3609090111-000<br>T3609090101-000                    |
|                                                                                                                                                                                                                                                                              |           | PG11   | 3-7<br>5-10          | DLX-11-MTS<br>DLX-11-MS            | T3609110111-000<br>T3609110101-000                    |
|                                                                                                                                                                                                                                                                              |           | PG13.5 | 5-9<br>6-12          | DLX-13-MTS<br>DLX-13-MS            | T3609130111-000<br>T3609130101-000                    |
|                                                                                                                                                                                                                                                                              |           | PG16   | 7-12<br>10-14        | DLX-16-MTS<br>DLX-16-MS            | T3609160111-000<br>T3609160101-000                    |
|                                                                                                                                                                                                                                                                              |           | PG21   | 9-16<br>13-18        | DLX-21-MTS<br>DLX-21-MS            | T3609210111-000<br>T3609210101-000                    |
|                                                                                                                                                                                                                                                                              |           | PG29   | 13-20<br>18-25       | DLX-29-MTS<br>DLX-29-MS            | T3609290111-000<br>T3609290101-000                    |
|                                                                                                                                                                                                                                                                              |           | PG36   | 20-26<br>22-32       | DLX-36-MTS<br>DLX-36-MS            | T3609360111-000<br>T3609360101-000                    |
|                                                                                                                                                                                                                                                                              |           | PG42   | 25-31<br>32-38       | DLX-42-MTS<br>DLX-42-MS            | T3609420111-000<br>T3609420101-000                    |
|                                                                                                                                                                                                                                                                              |           | PG48   | 29-35<br>37-44       | DLX-48-MTS<br>DLX-48-MS            | T3609480111-000<br>T3609480101-000                    |
|                                                                                                                                                                                                                                                                              | M12 X 1.5 |        | 2-5<br>3-6.5         | DLX-12-MT<br>DLX-12-M              | T3609120112-000<br>T3609120102-000                    |
|                                                                                                                                                                                                                                                                              | M16 X 1.5 |        | 2-6<br>4-8<br>5-10   | DLX-16-MT<br>DLX-16-M<br>DLX-16-MB | T3609160112-000<br>T3609160102-000<br>T3609160122-000 |
|                                                                                                                                                                                                                                                                              | M20 X 1.5 |        | 5-9<br>6-12<br>10-14 | DLX-20-MT<br>DLX-20-M<br>DLX-20-MB | T3609200112-000<br>T3609200102-000<br>T3609200122-000 |
|                                                                                                                                                                                                                                                                              | M25 X 1.5 |        | 9-16<br>13-18        | DLX-25-MT<br>DLX-25-M              | T3609250112-000<br>T3609250102-000                    |
|                                                                                                                                                                                                                                                                              | M32 X 1.5 |        | 13-20<br>18-25       | DLX-32-MT<br>DLX-32-M              | T3609320112-000<br>T3609320102-000                    |
|                                                                                                                                                                                                                                                                              | M40 X 1.5 |        | 20-26<br>22-32       | DLX-40-MT<br>DLX-40-M              | T3609400112-000<br>T3609400102-000                    |
|                                                                                                                                                                                                                                                                              | M50 X 1.5 |        | 25-31<br>32-38       | DLX-50-MT<br>DLX-50-M              | T3609500112-000<br>T3609500102-000                    |
|                                                                                                                                                                                                                                                                              | M63 X 1.5 |        | 29-35<br>37-44       | DLX-63-MT<br>DLX-63-M              | T3609630112-000<br>T3609630102-000                    |

## Cable fittings and accessories

|                                                                                                                                                                                                                                                                             | Metr.     | PG     | Clamp range (mm) | Type                    | Part Number                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|------------------|-------------------------|------------------------------------|
| Cable glands, polyamide                                                                                                                                                                                                                                                     |           |        |                  |                         |                                    |
|  <p> <b>Material:</b> Polyamide<br/> <b>Press seal material:</b> PA<br/> <b>Seal material:</b> NBR<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP68         </p> |           | PG7    | 2-5<br>3-6.5     | DLX-7-PT<br>DLX-7-P     | T3209070161-000<br>T3209070160-000 |
|                                                                                                                                                                                                                                                                             |           | PG9    | 2-6<br>4-8       | DLX-9-PT<br>DLX-9-P     | T3209090161-000<br>T3209090160-000 |
|                                                                                                                                                                                                                                                                             |           | PG11   | 3-7<br>5-10      | DLX-11-PT<br>DLX-11-P   | T3209110161-000<br>T3209110160-000 |
|                                                                                                                                                                                                                                                                             |           | PG13.5 | 5-9<br>6-12      | DLX-13-PT<br>DLX-13-P   | T3209130161-000<br>T3209130160-000 |
|                                                                                                                                                                                                                                                                             |           | PG16   | 7-12<br>10-14    | DLX-16-PT<br>DLX-16-P   | T3209160161-000<br>T3209160160-000 |
|                                                                                                                                                                                                                                                                             |           | PG21   | 9-16<br>13-18    | DLX-21-PT<br>DLX-21-P   | T3209210161-000<br>T3209210160-000 |
|                                                                                                                                                                                                                                                                             |           | PG29   | 13-20<br>18-25   | DLX-29-PT<br>DLX-29-P   | T3209290161-000<br>T3209290160-000 |
|                                                                                                                                                                                                                                                                             |           | PG36   | 20-26<br>22-32   | DLX-36-PT<br>DLX-36-P   | T3209360161-000<br>T3209360160-000 |
|                                                                                                                                                                                                                                                                             |           | PG42   | 25-31<br>32-38   | DLX-42-PT<br>DLX-42-P   | T3209420161-000<br>T3209420160-000 |
|                                                                                                                                                                                                                                                                             |           | PG48   | 29-35<br>37-44   | DLX-48-PT<br>DLX-48-P   | T3209480161-000<br>T3209480160-000 |
|                                                                                                                                                                                                                                                                             | M12 X 1.5 |        | 2-5<br>3-6.5     | DLX-12-PMT<br>DLX-12-PM | T3209120112-000<br>T3209120102-000 |
|                                                                                                                                                                                                                                                                             | M16 X 1.5 |        | 2-6<br>4-8       | DLX-16-PMT<br>DLX-16-PM | T3209160112-000<br>T3209160102-000 |
|                                                                                                                                                                                                                                                                             | M20 X 1.5 |        | 5-9<br>6-12      | DLX-20-PMT<br>DLX-20-PM | T3209200112-000<br>T3209200102-000 |
|                                                                                                                                                                                                                                                                             | M25 X 1.5 |        | 9-16<br>13-18    | DLX-25-PMT<br>DLX-25-PM | T3209250112-000<br>T3209250102-000 |
|                                                                                                                                                                                                                                                                             | M32 X 1.5 |        | 13-20<br>18-25   | DLX-32-PMT<br>DLX-32-PM | T3209320112-000<br>T3209320102-000 |
|                                                                                                                                                                                                                                                                             | M40 X 1.5 |        | 20-26<br>22-32   | DLX-40-PMT<br>DLX-40-PM | T3209400112-000<br>T3209400102-000 |
|                                                                                                                                                                                                                                                                             | M50 X 1.5 |        | 25-31<br>32-38   | DLX-50-PMT<br>DLX-50-PM | T3209500112-000<br>T3209500102-000 |
|                                                                                                                                                                                                                                                                             | M63 X 1.5 |        | 29-35<br>37-44   | DLX-63-PMT<br>DLX-63-PM | T3209630112-000<br>T3209630102-000 |

## Cable fittings and accessories

|                                                                                                                                                                                                                                                                                                                                    | Metr.     | PG     | Clamp range (mm) | Type         | Part Number     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|------------------|--------------|-----------------|
| Multiple sealing insert metal cable gland                                                                                                                                                                                                                                                                                          |           |        |                  |              |                 |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Seal material:</b> TPE/EPDM<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP65<br/> <b>Seal material colors:</b> White<br/>           (other colors need consulting)</p> |           | PG13.5 | 2 x 3            | DLX-13-KMS   | T3729130101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG16   | 3 x 4            | DLX-16-KMS   | T3729160101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG16   | 2 x 5            | DLX-16-KMS   | T3729160201-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG21   | 4 x 6.5          | DLX-21-1KMS  | T3729210101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG21   | 3 x 7            | DLX-21-2KMS  | T3729210201-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG21   | 2 x 6            | DLX-21-3KMS  | T3729210301-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG21   | 2 x 8            | DLX-21-4KMS  | T3729210401-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG29   | 6 x 6.5          | DLX-29-1KMS  | T3729290101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG29   | 4 x 9            | DLX-29-2KMS  | T3729290201-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG29   | 3 x 9            | DLX-29-3KMS  | T3729290301-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG36   | 5 x 9            | DLX-36-1KMS  | T3729360101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG36   | 6 x 8            | DLX-36-2KMS  | T3729360201-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG42   | 4 x 12           | DLX-42-1KMS  | T3729420101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG42   | 5 x 10           | DLX-42-2KMS  | T3729420201-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG48   | 6 x 12           | DLX-48-1KMS  | T3729480101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG48   | 3 x 18           | DLX-48-2KMS  | T3729480201-000 |
|                                                                                                                                                                                                                                                                                                                                    | M16 X 1.5 |        | 2 x 3            | DLX-16-KM    | T3729160102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M20 X 1.5 |        | 3 x 4            | DLX-20-KM    | T3729200102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M20 X 1.5 |        | 2 x 5            | DLX-20-KM    | T3729200202-000 |
|                                                                                                                                                                                                                                                                                                                                    | M25 X 1.5 |        | 4 x 6.5          | DLX-25-1KM   | T3729250102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M25 X 1.5 |        | 3 x 7            | DLX-25-2KM   | T3729250202-000 |
|                                                                                                                                                                                                                                                                                                                                    | M25 X 1.5 |        | 2 x 6            | DLX-25-3KM   | T3729250302-000 |
|                                                                                                                                                                                                                                                                                                                                    | M25 X 1.5 |        | 2 x 8            | DLX-25-4KM   | T3729250402-000 |
|                                                                                                                                                                                                                                                                                                                                    | M32 X 1.5 |        | 6 x 6.5          | DLX-32-1KM   | T3729320102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M32 X 1.5 |        | 4 x 9            | DLX-32-2KM   | T3729320202-000 |
|                                                                                                                                                                                                                                                                                                                                    | M32 X 1.5 |        | 3 x 9            | DLX-32-3KM   | T3729320302-000 |
|                                                                                                                                                                                                                                                                                                                                    | M40 X 1.5 |        | 5 x 9            | DLX-40-1KM   | T3729400102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M40 X 1.5 |        | 6 x 8            | DLX-40-2KM   | T3729400202-000 |
|                                                                                                                                                                                                                                                                                                                                    | M50 X 1.5 |        | 4 x 12           | DLX-50-1KM   | T3729500102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M50 X 1.5 |        | 5 x 10           | DLX-50-2KM   | T3729500202-000 |
|                                                                                                                                                                                                                                                                                                                                    | M63 X 1.5 |        | 6 x 12           | DLX-63-1KM   | T3729630102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M63 X 1.5 |        | 3 x 18           | DLX-63-2KM   | T3729630202-000 |
| Multiple sealing insert nylon cable gland                                                                                                                                                                                                                                                                                          |           |        |                  |              |                 |
|  <p><b>Material:</b> PA<br/> <b>Seal material:</b> EPDM<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP65<br/> <b>Seal material colors:</b> White<br/>           (other colors need consulting)</p>                    |           | PG13.5 | 2 x 3            | DLX-13-KPMS  | T3229130101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG16   | 3 x 4            | DLX-16-KPMS  | T3229160101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG16   | 2 x 5            | DLX-16-KPMS  | T3229160201-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG21   | 4 x 6.5          | DLX-21-1KPMS | T3229210101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG21   | 3 x 7            | DLX-21-2KPMS | T3229210201-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG21   | 2 x 6            | DLX-21-3KPMS | T3229210301-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG21   | 2 x 8            | DLX-21-4KPMS | T3229210401-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG29   | 6 x 6.5          | DLX-29-1KPMS | T3229290101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG29   | 4 x 9            | DLX-29-2KPMS | T3229290201-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG29   | 3 x 9            | DLX-29-3KPMS | T3229290301-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG36   | 5 x 9            | DLX-36-1KPMS | T3229360101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG36   | 6 x 8            | DLX-36-2KPMS | T3229360201-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG42   | 4 x 12           | DLX-42-1KPMS | T3229420101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG42   | 5 x 10           | DLX-42-2KPMS | T3229420201-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG48   | 6 x 12           | DLX-48-1KPMS | T3229480101-000 |
|                                                                                                                                                                                                                                                                                                                                    |           | PG48   | 3 x 18           | DLX-48-2KPMS | T3229480201-000 |
|                                                                                                                                                                                                                                                                                                                                    | M16 X 1.5 |        | 2 x 3            | DLX-16-KPM   | T3229160102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M20 X 1.5 |        | 3 x 4            | DLX-20-KPM   | T3229200102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M20 X 1.5 |        | 2 x 5            | DLX-20-KPM   | T3229200202-000 |
|                                                                                                                                                                                                                                                                                                                                    | M25 X 1.5 |        | 4 x 6.5          | DLX-25-1KPM  | T3229250102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M25 X 1.5 |        | 3 x 7            | DLX-25-2KPM  | T3229250202-000 |
|                                                                                                                                                                                                                                                                                                                                    | M25 X 1.5 |        | 2 x 6            | DLX-25-3KPM  | T3229250302-000 |
|                                                                                                                                                                                                                                                                                                                                    | M25 X 1.5 |        | 2 x 8            | DLX-25-4KPM  | T3229250402-000 |
|                                                                                                                                                                                                                                                                                                                                    | M32 X 1.5 |        | 6 x 6.5          | DLX-32-1KPM  | T3229320102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M32 X 1.5 |        | 4 x 9            | DLX-32-2KPM  | T3229320202-000 |
|                                                                                                                                                                                                                                                                                                                                    | M32 X 1.5 |        | 3 x 9            | DLX-32-3KPM  | T3229320302-000 |
|                                                                                                                                                                                                                                                                                                                                    | M40 X 1.5 |        | 5 x 9            | DLX-40-1KPM  | T3229400102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M40 X 1.5 |        | 6 x 8            | DLX-40-2KPM  | T3229400202-000 |
|                                                                                                                                                                                                                                                                                                                                    | M50 X 1.5 |        | 4 x 12           | DLX-50-1KPM  | T3229500102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M50 X 1.5 |        | 5 x 10           | DLX-50-2KPM  | T3229500202-000 |
|                                                                                                                                                                                                                                                                                                                                    | M63 X 1.5 |        | 6 x 12           | DLX-63-1KPM  | T3229630102-000 |
|                                                                                                                                                                                                                                                                                                                                    | M63 X 1.5 |        | 3 x 18           | DLX-63-2KPM  | T3229630202-000 |



## Cable fittings and accessories

|                                                                                                                                                                                                                                                                                                                                                                                                                                              | Metr.                                                                                                           | PG     | Clamp range (mm)                       | Type                                                | Part Number                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------|----------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------|
| Special sealing insert gland                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                 |        |                                        |                                                     |                                                                          |
| <br><br>Sealing with different colors<br><br><br><br><b>Material:</b> Nickel plated brass<br><b>Seal material:</b> TPE/EPDM<br><b>Temperature range:</b> -40°C ~ +100°C<br><b>Protection:</b> IP65<br><b>Seal material colors:</b> Black<br>(other colors need consulting) | M16 X 1.5<br><br>M20 X 1.5<br><br>M25 X 1.5<br><br>M32 X 1.5<br><br>M40 X 1.5                                   | PG9    | 2~3.5<br>3.5~6<br>6~9                  | DLX-9-MSET<br>DLX-9-MSEZ<br>DLX-9-MSE               | T3709090111-000<br>T3709090121-000<br>T3709090101-000                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG11   | 6~8.5<br>8.5~11<br>11 ~13.5            | DLX-11-MSET<br>DLX-11-MSEZ<br>DLX-11-MSE            | T3709110111-000<br>T3709110121-000<br>T3709110101-000                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG13.5 | 8.5~11<br>11~13.5<br>13.5~15           | DLX-13-MSET<br>DLX-13-MSEZ<br>DLX-13-MSE            | T3709130111-000<br>T3709130121-000<br>T3709130101-000                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG16   | 9~12<br>12~14<br>14~16                 | DLX-16-MSET<br>DLX-16-MSEZ<br>DLX-16-MSE            | T3709160111-000<br>T3709160121-000<br>T3709160101-000                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG21   | 13.5~16<br>16~17.5<br>17.5~19          | DLX-21-MSET<br>DLX-21-MSEZ<br>DLX-21-MSE            | T3709210111-000<br>T3709210121-000<br>T3709210101-000                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG29   | 17.5~21<br>21~22.5<br>22.5~25          | DLX-29-MSET<br>DLX-29-MSEZ<br>DLX-29-MSE            | T3709290111-000<br>T3709290121-000<br>T3709290101-000                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG36   | 20~24<br>24~28<br>28~32                | DLX-36-MSET<br>DLX-36-MSEZ<br>DLX-36-MSE            | T3709360111-000<br>T3709360121-000<br>T3709360101-000                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 2~3.5<br>3.5~6<br>6~9                  | DLX-16-MET<br>DLX-16-MEZ<br>DLX-16-ME               | T3709160112-000<br>T3709160122-000<br>T3709160102-000                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 8.5~11<br>11~13.5<br>13.5~15           | DLX-20-MET<br>DLX-20-MEZ<br>DLX-20-ME               | T3709200112-000<br>T3709200122-000<br>T3709200102-000                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 13.5~16<br>16~17.5<br>17.5~19<br>18~22 | DLX-25-MET<br>DLX-25-MEZ<br>DLX-25-ME<br>DLX-25-MEA | T3709250112-000<br>T3709250122-000<br>T3709250102-000<br>T3709250132-000 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 17.5~21<br>21~22.5<br>22.5~25          | DLX-32-MET<br>DLX-32-MEZ<br>DLX-32-ME               | T3709320112-000<br>T3709320122-000<br>T3709320102-000                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 20~24<br>24~28<br>28~32                | DLX-40-MET<br>DLX-40-MEZ<br>DLX-40-ME               | T3709400112-000<br>T3709400122-000<br>T3709400102-000                    |
| EMC cable glands                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                 |        |                                        |                                                     |                                                                          |
| <br><br><b>Material:</b> Nickel plated brass<br><b>Press seal material:</b> PA<br><b>Seal material:</b> EPDM<br><b>Temperature range:</b> -40°C ~ +100°C<br><b>Protection:</b> IP68                                                                                                                                                                       | M16 X 1.5<br><br>M20 X 1.5<br><br>M25 X 1.5<br><br>M32 X 1.5<br><br>M40 X 1.5<br><br>M50 X 1.5<br><br>M63 X 1.5 | PG9    | 4~8                                    | DLX-9-MSC                                           | T3707090101-000                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG11   | 5~10                                   | DLX-11-MSC                                          | T3706110113-000                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG13.5 | 6~12                                   | DLX-13-MSC                                          | T3707130101-000                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG16   | 10~14                                  | DLX-16-MSC                                          | T3707160101-000                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG21   | 13~18                                  | DLX-21-MSC                                          | T3707210101-000                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG29   | 18~25                                  | DLX-29-MSC                                          | T3707290101-000                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG36   | 22~32                                  | DLX-36-MSC                                          | T3707360101-000                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG42   | 32~38                                  | DLX-42-MSC                                          | T3707420101-000                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 | PG48   | 37~44                                  | DLX-48-MSC                                          | T3707480101-000                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 2~6<br>4~8                             | DLX-16-MTC<br>DLX-16-MC                             | T3707160113-000<br>T3609160103-000                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 5~9<br>6~12                            | DLX-20-MTC<br>DLX-20-MC                             | T3707200113-Z00<br>T3706200103-000                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 9~16<br>13~18                          | DLX-25-MTC<br>DLX-25-MC                             | T3707250113-000<br>T3609250103-000                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 13~20<br>18~25                         | DLX-32-MTC<br>DLX-32-MC                             | T3707320113-000<br>T3609320103-000                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 20~26<br>22~32                         | DLX-40-MTC<br>DLX-40-MC                             | T3707400113-000<br>T3706400103-000                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 25~31<br>32~38                         | DLX-50-MTC<br>DLX-50-MC                             | T3707500113-000<br>T3707500103-000                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |        | 29~35<br>37~44                         | DLX-63-MTC<br>DLX-63-MC                             | T3707630113-000<br>T3707630103-000                                       |

## Cable fittings and accessories

|                                                                                                                                                                                                                                           | Metr. | PG     | Clamp range (mm) | Type      | Part Number     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------|------------------|-----------|-----------------|
| Metal glands with multiple seal                                                                                                                                                                                                           |       |        |                  |           |                 |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Seal material:</b> NBR<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP65</p>   |       | PG9    | 5-10             | DSM-9     | T3201090101-000 |
|                                                                                                                                                                                                                                           |       | PG11   | 7-12             | DSM-11    | T3201110101-000 |
|                                                                                                                                                                                                                                           |       | PG13.5 | 7-12             | DSM-13    | T3201130101-000 |
|                                                                                                                                                                                                                                           |       | PG16   | 7-15             | DSM-16    | T3201160101-000 |
|                                                                                                                                                                                                                                           |       | PG21   | 10-19            | DSM-21    | T3201210101-000 |
|                                                                                                                                                                                                                                           |       | PG29   | 18-27            | DSM-29    | T3201290101-000 |
|                                                                                                                                                                                                                                           |       | PG36   | 24-32            | DSM-36    | T3201360101-000 |
|                                                                                                                                                                                                                                           |       | PG42   | 30-39            | DSM-42    | T3201420101-000 |
|                                                                                                                                                                                                                                           |       | PG48   | 36-45            | DSM-48    | T3201480101-000 |
|                                                                                                                                                                                                                                           | M12   |        | 5-10             | DSM-12-M  | T3201120102-000 |
|                                                                                                                                                                                                                                           | M16   |        | 6.5-10           | DSM-16-M  | T3201160102-000 |
|                                                                                                                                                                                                                                           | M20   |        | 8.5-13.5         | DSM-20-M  | T3201200102-000 |
|                                                                                                                                                                                                                                           | M25   |        | 13-20            | DSM-25-M  | T3201250102-000 |
|                                                                                                                                                                                                                                           | M32   |        | 19-28            | DSM-32-M  | T3201320102-000 |
|                                                                                                                                                                                                                                           | M40   |        | 24-34            | DSM-40-M  | T3201400102-000 |
|                                                                                                                                                                                                                                           | M50   |        | 34-40            | DSM-50-M  | T3201500102-000 |
|                                                                                                                                                                                                                                           | M63   |        | 39-46            | DSM-63-M  | T3201630102-000 |
| Metal glands with multiple seal                                                                                                                                                                                                           |       |        |                  |           |                 |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Seal material:</b> NBR<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP54</p> |       | PG9    | 8-10             | DSM-9-S   | T3211090101-000 |
|                                                                                                                                                                                                                                           |       | PG11   | 10-12            | DSM-11-S  | T3211110101-000 |
|                                                                                                                                                                                                                                           |       | PG13.5 | 12-14            | DSM-13-S  | T3211130101-000 |
|                                                                                                                                                                                                                                           |       | PG16   | 14-16            | DSM-16-S  | T3211160101-000 |
|                                                                                                                                                                                                                                           |       | PG21   | 17-19            | DSM-21-S  | T3211210101-000 |
|                                                                                                                                                                                                                                           |       | PG29   | 23-25            | DSM-29-S  | T3211290101-000 |
|                                                                                                                                                                                                                                           |       | PG36   | 33-35            | DSM-36-S  | T3211360101-000 |
|                                                                                                                                                                                                                                           |       | PG42   | 39-41            | DSM-42-S  | T3211420101-000 |
|                                                                                                                                                                                                                                           |       | PG48   | 45-47            | DSM-48-S  | T3211480101-000 |
|                                                                                                                                                                                                                                           | M12   |        | 5-7              | DSM-12-SM | T3211120102-000 |
|                                                                                                                                                                                                                                           | M16   |        | 8-10             | DSM-16-SM | T3211160102-000 |
|                                                                                                                                                                                                                                           | M20   |        | 10-12            | DSM-20-SM | T3211200102-000 |
|                                                                                                                                                                                                                                           | M25   |        | 15-17            | DSM-25-SM | T3211250102-000 |
|                                                                                                                                                                                                                                           | M32   |        | 24-26            | DSM-32-SM | T3211320102-000 |
|                                                                                                                                                                                                                                           | M40   |        | 28-30            | DSM-40-SM | T3211400102-000 |
|                                                                                                                                                                                                                                           | M50   |        | 39-41            | DSM-50-SM | T3211500102-000 |
|                                                                                                                                                                                                                                           | M63   |        | 45-47            | DSM-63-SM | T3211630102-000 |

## Cable fittings and accessories

|                                                                                                                                                                                                                                                     | Metr. | PG     | Clamp range (mm) | Type       | Part Number     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------|------------------|------------|-----------------|
| Metal glands with multiple seal                                                                                                                                                                                                                     |       |        |                  |            |                 |
|  <p> <b>Material:</b> Nickel plated brass<br/> <b>Seal material:</b> NBR<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP65         </p>   |       | PG9    | 5-10             | DCSM-9     | T3101090101-000 |
|                                                                                                                                                                                                                                                     |       | PG11   | 7-12             | DCSM-11    | T3101110101-000 |
|                                                                                                                                                                                                                                                     |       | PG13.5 | 7-12             | DCSM-13    | T3101130101-000 |
|                                                                                                                                                                                                                                                     |       | PG16   | 7-15             | DCSM-16    | T3101160101-000 |
|                                                                                                                                                                                                                                                     |       | PG21   | 10-19            | DCSM-21    | T3101210101-000 |
|                                                                                                                                                                                                                                                     |       | PG29   | 18-27            | DCSM-29    | T3101290101-000 |
|                                                                                                                                                                                                                                                     |       | PG36   | 24-32            | DCSM-36    | T3101360101-000 |
|                                                                                                                                                                                                                                                     |       | PG42   | 30-39            | DCSM-42    | T3101420101-000 |
|                                                                                                                                                                                                                                                     |       | PG48   | 36-45            | DCSM-48    | T3101480101-000 |
|                                                                                                                                                                                                                                                     | M12   |        | 5-10             | DCSM-12-M  | T3101120102-000 |
|                                                                                                                                                                                                                                                     | M16   |        | 6.5-10           | DCSM-16-M  | T3101160102-000 |
|                                                                                                                                                                                                                                                     | M20   |        | 8.5-13.5         | DCSM-20-M  | T3101200102-000 |
|                                                                                                                                                                                                                                                     | M25   |        | 13-20            | DCSM-25-M  | T3101250102-000 |
|                                                                                                                                                                                                                                                     | M32   |        | 19-28            | DCSM-32-M  | T3101320102-000 |
|                                                                                                                                                                                                                                                     | M40   |        | 24-34            | DCSM-40-M  | T3101400102-000 |
|                                                                                                                                                                                                                                                     | M50   |        | 34-40            | DCSM-50-M  | T3101500102-000 |
|                                                                                                                                                                                                                                                     | M63   |        | 39-46            | DCSM-63-M  | T3101630102-000 |
| Metal glands with multiple seal                                                                                                                                                                                                                     |       |        |                  |            |                 |
|  <p> <b>Material:</b> Nickel plated brass<br/> <b>Seal material:</b> NBR<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP54         </p> |       | PG9    | 8-10             | DCSM-9-S   | T3111090101-000 |
|                                                                                                                                                                                                                                                     |       | PG11   | 10-12            | DCSM-11-S  | T3111110101-000 |
|                                                                                                                                                                                                                                                     |       | PG13.5 | 12-14            | DCSM-13-S  | T3111130101-000 |
|                                                                                                                                                                                                                                                     |       | PG16   | 14-16            | DCSM-16-S  | T3111160101-000 |
|                                                                                                                                                                                                                                                     |       | PG21   | 17-19            | DCSM-21-S  | T3111210101-000 |
|                                                                                                                                                                                                                                                     |       | PG29   | 23-25            | DCSM-29-S  | T3111290101-000 |
|                                                                                                                                                                                                                                                     |       | PG36   | 33-35            | DCSM-36-S  | T3111360101-000 |
|                                                                                                                                                                                                                                                     |       | PG42   | 39-41            | DCSM-42-S  | T3111420101-000 |
|                                                                                                                                                                                                                                                     |       | PG48   | 45-47            | DCSM-48-S  | T3111480101-000 |
|                                                                                                                                                                                                                                                     | M12   |        | 5-7              | DCSM-12-SM | T3111120102-000 |
|                                                                                                                                                                                                                                                     | M16   |        | 8-10             | DCSM-16-SM | T3111160102-000 |
|                                                                                                                                                                                                                                                     | M20   |        | 10-12            | DCSM-20-SM | T3111200102-000 |
|                                                                                                                                                                                                                                                     | M25   |        | 15-17            | DCSM-25-SM | T3111250102-000 |
|                                                                                                                                                                                                                                                     | M32   |        | 24-26            | DCSM-32-SM | T3111320102-000 |
|                                                                                                                                                                                                                                                     | M40   |        | 28-30            | DCSM-40-SM | T3111400102-000 |
|                                                                                                                                                                                                                                                     | M50   |        | 39-41            | DCSM-50-SM | T3111500102-000 |
|                                                                                                                                                                                                                                                     | M63   |        | 45-47            | DCSM-63-SM | T3111630102-000 |

## Cable fittings and accessories

|                                                                                                                                                                                               | Metr. | PG     | Clamp range (mm) | Type     | Part Number     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------|------------------|----------|-----------------|
| Multiple seal                                                                                                                                                                                 |       |        |                  |          |                 |
|  <p><b>Seal material:</b> NBR<br/><b>Temperature range:</b> -40°C ~ +100°C<br/><b>Protection:</b> IP65</p>   |       | PG9    | 5-10             | MSL-9    | T3100090001-000 |
|                                                                                                                                                                                               |       | PG11   | 7-12             | MSL-11   | T3100110101-000 |
|                                                                                                                                                                                               |       | PG13.5 | 7-12             | MSL-13   | T3100130001-000 |
|                                                                                                                                                                                               |       | PG16   | 7-15             | MSL-16   | T3100160001-000 |
|                                                                                                                                                                                               |       | PG21   | 10-19            | MSL-21   | T3100210001-000 |
|                                                                                                                                                                                               |       | PG29   | 18-27            | MSL-29   | T3100290001-000 |
|                                                                                                                                                                                               |       | PG36   | 24-32            | MSL-36   | T3100360001-000 |
|                                                                                                                                                                                               |       | PG42   | 30-39            | MSL-42   | T3100420001-000 |
|                                                                                                                                                                                               |       | PG48   | 36-45            | MSL-48   | T3100480001-000 |
|                                                                                                                                                                                               | M12   |        | 5-10             | MSL-12-M | T3100120002-000 |
|                                                                                                                                                                                               | M16   |        | 6.5-10           | MSL-16-M | T3100160002-000 |
|                                                                                                                                                                                               | M20   |        | 8.5-13.5         | MSL-20-M | T3100200002-000 |
|                                                                                                                                                                                               | M25   |        | 13-20            | MSL-25-M | T3100250002-000 |
|                                                                                                                                                                                               | M32   |        | 19-28            | MSL-32-M | T3100320002-000 |
|                                                                                                                                                                                               | M40   |        | 24-34            | MSL-40-M | T3100400002-000 |
|                                                                                                                                                                                               | M50   |        | 34-40            | MSL-50-M | T3100500002-000 |
|                                                                                                                                                                                               | M63   |        | 39-46            | MSL-63-M | T3100630002-000 |
| Normal seal                                                                                                                                                                                   |       |        |                  |          |                 |
|  <p><b>Seal material:</b> NBR<br/><b>Temperature range:</b> -40°C ~ +100°C<br/><b>Protection:</b> IP54</p> |       | PG9    | 8-10             | SGL-9    | T0910004109-000 |
|                                                                                                                                                                                               |       | PG11   | 10-12            | SGL-11   | T0910004111-000 |
|                                                                                                                                                                                               |       | PG13.5 | 12-14            | SGL-13   | T0910004113-000 |
|                                                                                                                                                                                               |       | PG16   | 14-16            | SGL-16   | T0910004116-000 |
|                                                                                                                                                                                               |       | PG21   | 17-19            | SGL-21   | T0910004121-000 |
|                                                                                                                                                                                               |       | PG29   | 23-25            | SGL-29   | T0910004129-000 |
|                                                                                                                                                                                               |       | PG36   | 33-35            | SGL-36   | T0910004136-000 |
|                                                                                                                                                                                               |       | PG42   | 39-41            | SGL-42   | T0910004142-000 |
|                                                                                                                                                                                               |       | PG48   | 45-47            | SGL-48   | T0910004148-000 |
|                                                                                                                                                                                               | M12   |        | 5-7              | SGL-12-M | T3300120002-000 |
|                                                                                                                                                                                               | M16   |        | 8-10             | SGL-16-M | T3300160002-000 |
|                                                                                                                                                                                               | M20   |        | 10-12            | SGL-20-M | T3300200002-000 |
|                                                                                                                                                                                               | M25   |        | 15-17            | SGL-25-M | T3300250002-000 |
|                                                                                                                                                                                               | M32   |        | 24-26            | SGL-32-M | T3300320102-000 |
|                                                                                                                                                                                               | M40   |        | 28-30            | SGL-40-M | T3300400002-000 |
|                                                                                                                                                                                               | M50   |        | 39-41            | SGL-50-M | T3300500002-000 |
|                                                                                                                                                                                               | M63   |        | 45-47            | SGL-63-M | T3300630002-000 |

## Cable fittings and accessories

|                                                                                                                                                                                                                                          | Metr. | PG     | Clamp range (mm) | Type      | Part Number     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------|------------------|-----------|-----------------|
| Metal clamp glands with multiple seal                                                                                                                                                                                                    |       |        |                  |           |                 |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Seal material:</b> NBR<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP65</p>  |       | PG9    | 6.5-10           | ZSM-9     | T3135090101-000 |
|                                                                                                                                                                                                                                          |       | PG11   | 7.5-12           | ZSM-11    | T3135110101-000 |
|                                                                                                                                                                                                                                          |       | PG13.5 | 8.5-13.5         | ZSM-13    | T3135130101-000 |
|                                                                                                                                                                                                                                          |       | PG16   | 10.5-16          | ZSM-16    | T3135160101-000 |
|                                                                                                                                                                                                                                          |       | PG21   | 13-20            | ZSM-21    | T3135210101-000 |
|                                                                                                                                                                                                                                          |       | PG29   | 19-28            | ZSM-29    | T3135290101-000 |
|                                                                                                                                                                                                                                          |       | PG36   | 24-34            | ZSM-36    | T3135360101-000 |
|                                                                                                                                                                                                                                          |       | PG42   | 34-40            | ZSM-42    | T3135420101-000 |
|                                                                                                                                                                                                                                          |       | PG48   | 39-46            | ZSM-48    | T3135480101-000 |
|                                                                                                                                                                                                                                          | M16   |        | 6.5-10           | ZSM-16-M  | T3135160121-000 |
|                                                                                                                                                                                                                                          | M20   |        | 7.5-12           | ZSM-20-M  | T3135200121-000 |
|                                                                                                                                                                                                                                          | M25   |        | 13-20            | ZSM-25-M  | T3135250121-000 |
|                                                                                                                                                                                                                                          | M32   |        | 19-28            | ZSM-32-M  | T3135320121-000 |
|                                                                                                                                                                                                                                          | M40   |        | 24-34            | ZSM-40-M  | T3135400121-000 |
|                                                                                                                                                                                                                                          | M50   |        | 34-40            | ZSM-50-M  | T3135500121-000 |
|                                                                                                                                                                                                                                          | M63   |        | 39-46            | ZSM-63-M  | T3135630121-000 |
| Metal clamp glands with normal seal                                                                                                                                                                                                      |       |        |                  |           |                 |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Seal material:</b> NBR<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP54</p> |       | PG7    | 6-8              | ZSM-7-S   | T3115070101-000 |
|                                                                                                                                                                                                                                          |       | PG9    | 8-10             | ZSM-9-S   | T3115090101-000 |
|                                                                                                                                                                                                                                          |       | PG11   | 10-12            | ZSM-11-S  | T3115110101-000 |
|                                                                                                                                                                                                                                          |       | PG13.5 | 12-14            | ZSM-13-S  | T3115130101-000 |
|                                                                                                                                                                                                                                          |       | PG16   | 14-16            | ZSM-16-S  | T3115160101-000 |
|                                                                                                                                                                                                                                          |       | PG21   | 17-19            | ZSM-21-S  | T3115210101-000 |
|                                                                                                                                                                                                                                          |       | PG29   | 26-28            | ZSM-29-S  | T3115290101-000 |
|                                                                                                                                                                                                                                          |       | PG36   | 33-35            | ZSM-36-S  | T3115360101-000 |
|                                                                                                                                                                                                                                          |       | PG42   | 39-41            | ZSM-42-S  | T3115420101-000 |
|                                                                                                                                                                                                                                          |       | PG48   | 43-45            | ZSM-48-S  | T3115480101-000 |
|                                                                                                                                                                                                                                          | M12   |        | 6-8              | ZSM-12-SM | T3115120121-000 |
|                                                                                                                                                                                                                                          | M16   |        | 8-12             | ZSM-16-SM | T3115160121-000 |
|                                                                                                                                                                                                                                          | M20   |        | 10-12            | ZSM-20-SM | T3115200121-000 |
|                                                                                                                                                                                                                                          | M25   |        | 12-14            | ZSM-25-SM | T3115250121-000 |
|                                                                                                                                                                                                                                          | M32   |        | 17-19            | ZSM-32-SM | T3115320121-000 |
|                                                                                                                                                                                                                                          | M40   |        | 25-27            | ZSM-40-SM | T3115400121-000 |
|                                                                                                                                                                                                                                          | M50   |        | 39-41            | ZSM-50-SM | T3115500121-000 |
|                                                                                                                                                                                                                                          | M63   |        | 43-45            | ZSM-63-SM | T3115630121-000 |

## Cable fittings and accessories

|                                                                                                                                                                                                                                   | Metr.     | PG     | Clamp range (mm) | Type       | Part Number     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|------------------|------------|-----------------|
| Metal clamp glands                                                                                                                                                                                                                |           |        |                  |            |                 |
|  <p><b>Material:</b> Nickel plated brass<br/><b>Temperature range:</b> -40°C ~ +100°C</p>                                                        |           | PG7    | 5.5-8            | KSM-7-MS   | T3105070101-000 |
|                                                                                                                                                                                                                                   |           | PG9    | 6.5-10           | KSM-9-MS   | T3105090101-000 |
|                                                                                                                                                                                                                                   |           | PG11   | 7.5-12           | KSM-11-MS  | T3105110101-000 |
|                                                                                                                                                                                                                                   |           | PG13.5 | 8.5-14           | KSM-13-MS  | T3105130101-000 |
|                                                                                                                                                                                                                                   |           | PG16   | 9.5-16           | KSM-16-MS  | T3105160101-000 |
|                                                                                                                                                                                                                                   |           | PG21   | 12-21            | KSM-21-MS  | T3105210101-000 |
|                                                                                                                                                                                                                                   |           | PG29   | 19-30            | KSM-29-MS  | T3105290101-000 |
|                                                                                                                                                                                                                                   |           | PG36   | 25-37            | KSM-36-MS  | T3105360101-000 |
|                                                                                                                                                                                                                                   |           | PG42   | 31-43            | KSM-42-MS  | T3105420101-000 |
|                                                                                                                                                                                                                                   |           | PG48   | 35-48            | KSM-48-MS  | T3105480101-000 |
|                                                                                                                                                                                                                                   | M12       |        | 5-7.5            | KSM-12-M   | T3105120121-000 |
|                                                                                                                                                                                                                                   | M16       |        | 7-10             | KSM-16-M   | T3105160121-000 |
|                                                                                                                                                                                                                                   | M20       |        | 10-14            | KSM-20-M   | T3105200121-000 |
|                                                                                                                                                                                                                                   | M25       |        | 12-21.5          | KSM-25-M   | T3105250121-000 |
|                                                                                                                                                                                                                                   | M32       |        | 16-27            | KSM-32-M   | T3105320121-000 |
|                                                                                                                                                                                                                                   | M40       |        | 23-33            | KSM-40-M   | T3105400121-000 |
|                                                                                                                                                                                                                                   | M50       |        | 25-38.5          | KSM-50-M   | T3105500121-000 |
|                                                                                                                                                                                                                                   | M63       |        | 39-46            | KSM-63-M   | T3105630121-000 |
| Metal flexible tube fittings                                                                                                                                                                                                      |           |        |                  |            |                 |
|  <p><b>Material:</b> Zinc alloy<br/><b>Seal material:</b> PA<br/><b>Temperature range:</b> -40°C ~ +100°C<br/><b>Protection:</b> IP40-IP65</p> |           | PG11   | Ø6               | NTC-11-MS  | T3510111201-000 |
|                                                                                                                                                                                                                                   |           | PG13.5 | Ø8               | NTC-13-MTS | T3510130124-000 |
|                                                                                                                                                                                                                                   |           | PG13.5 | Ø10              | NTC-13-MS  | T3510130114-000 |
|                                                                                                                                                                                                                                   |           | PG13.5 | Ø12              | NTC-13-MES | T3510130134-000 |
|                                                                                                                                                                                                                                   |           | PG16   | Ø10              | NTC-16-MTS | T3510160124-000 |
|                                                                                                                                                                                                                                   |           | PG16   | Ø12              | NTC-16-MS  | T3510160114-000 |
|                                                                                                                                                                                                                                   |           | PG16   | Ø16              | NTC-16-MES | T3510161501-000 |
|                                                                                                                                                                                                                                   |           | PG21   | Ø16              | NTC-21-MTS | T3510210124-000 |
|                                                                                                                                                                                                                                   |           | PG21   | Ø20              | NTC-21-MS  | T3510212001-000 |
|                                                                                                                                                                                                                                   |           | PG29   | Ø20              | NTC-29-MTS | T3510290124-000 |
|                                                                                                                                                                                                                                   |           | PG29   | Ø25              | NTC-29-MS  | T3510292501-000 |
|                                                                                                                                                                                                                                   |           | PG36   | Ø32              | NTC-36-MS  | T3510363201-000 |
|                                                                                                                                                                                                                                   |           | PG42   | Ø38              | NTC-42-MS  | T3510420114-000 |
|                                                                                                                                                                                                                                   |           | PG48   | Ø51              | NTC-48-MS  | T3510480114-000 |
|                                                                                                                                                                                                                                   | M12 X 1.5 |        | Ø6               | NTC-12-M   | T3510120124-000 |
|                                                                                                                                                                                                                                   | M16 X 1.5 |        | Ø8               | NTC-16-MT  | T3510161002-000 |
|                                                                                                                                                                                                                                   | M16 X 1.5 |        | Ø10              | NTC-16-M   | T3510160102-000 |
|                                                                                                                                                                                                                                   | M16 X 1.5 |        | Ø12              | NTC-16-ME  | T3510160122-000 |
|                                                                                                                                                                                                                                   | M20 X 1.5 |        | Ø10              | NTC-20-MT  | T3510201602-000 |
|                                                                                                                                                                                                                                   | M20 X 1.5 |        | Ø12              | NTC-20-M   | T3510201202-000 |
|                                                                                                                                                                                                                                   | M20 X 1.5 |        | Ø16              | NTC-20-MT  | T3510201502-000 |
|                                                                                                                                                                                                                                   | M25 X 1.5 |        | Ø16              | NTC-25-MT  | T3510251502-000 |
|                                                                                                                                                                                                                                   | M25 X 1.5 |        | Ø20              | NTC-25-M   | T3510252002-000 |
|                                                                                                                                                                                                                                   | M32 X 1.5 |        | Ø20              | NTG-32-MT  | T3510320112-000 |
|                                                                                                                                                                                                                                   | M32 X 1.5 |        | Ø25              | NTC-32-M   | T3510322002-000 |
|                                                                                                                                                                                                                                   | M40 X 1.5 |        | Ø32              | NTC-40-M   | T3510403202-000 |
|                                                                                                                                                                                                                                   | M50 X 1.5 |        | Ø38              | NTC-50-M   | T3510500102-000 |
|                                                                                                                                                                                                                                   | M63 X 1.5 |        | Ø51              | NTC-63-M   | T3510635102-000 |

## Cable fittings and accessories

|                                                                                                                                                                                        | Metr.     | PG     | Clamp range (mm) | Type        | Part Number     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|------------------|-------------|-----------------|
| Nylon flexible tube fittings                                                                                                                                                           |           |        |                  |             |                 |
|  <p><b>Material:</b> PA<br/><b>Temperature range:</b> -40°C ~ +100°C<br/><b>Protection:</b> IP65</p>  |           | PG7    | AD 10.0          | NTC-7-PMS   | T3511070701-000 |
|                                                                                                                                                                                        |           | PG9    | AD 13.0          | NTC-9-PMS   | T3511091001-000 |
|                                                                                                                                                                                        |           | PG11   | AD 15.8          | NTC-11-PMS  | T3511111201-000 |
|                                                                                                                                                                                        |           | PG13.5 | AD 18.5          | NTC-13-PMES | T3511131401-000 |
|                                                                                                                                                                                        |           | PG13.5 | AD 21.2          | NTC-13-PMZS | T3511131401-001 |
|                                                                                                                                                                                        |           | PG16   | AD 21.2          | NTC-16-PMS  | T3511161701-000 |
|                                                                                                                                                                                        |           | PG21   | AD 28.5          | NTC-21-PMS  | T3511212301-000 |
|                                                                                                                                                                                        |           | PG29   | AD 34.5          | NTC-29-PMS  | T3511292901-000 |
|                                                                                                                                                                                        |           | PG36   | AD 42.5          | NTC-36-PMS  | T3511363601-000 |
|                                                                                                                                                                                        |           | PG42   | AD 54.5          | NTC-42-PMS  | T3511424301-000 |
|                                                                                                                                                                                        |           | PG48   | AD 54.5          | NTC-48-PMS  | T3511484801-000 |
|                                                                                                                                                                                        | M10 X 1.5 |        | AD 10.0          | NTC-10-PM   | T3511100602-000 |
|                                                                                                                                                                                        | M12 X 1.5 |        | AD 10.0          | NTC-12-PMT  | T3511120702-000 |
|                                                                                                                                                                                        | M12 X 1.5 |        | AD 13.0          | NTC-12-PM   | T3511120702-001 |
|                                                                                                                                                                                        | M16 X 1.5 |        | AD 13.0          | NTC-16-PMT  | T3511161002-000 |
|                                                                                                                                                                                        | M16 X 1.5 |        | AD 15.8          | NTC-16-PM   | T3511161202-000 |
|                                                                                                                                                                                        | M20 X 1.5 |        | AD 18.5          | NTC-20-PMT  | T3511201402-000 |
|                                                                                                                                                                                        | M20 X 1.5 |        | AD 21.2          | NTC-20-PM   | T3511201702-000 |
|                                                                                                                                                                                        | M25 X 1.5 |        | AD 21.2          | NTC-25-PMT  | T3511251702-000 |
|                                                                                                                                                                                        | M25 X 1.5 |        | AD 25.8          | NTC-25-PM   | T3511252002-000 |
|                                                                                                                                                                                        | M25 X 1.5 |        | AD 28.5          | NTC-25-PME  | T3511252302-000 |
|                                                                                                                                                                                        | M32 X 1.5 |        | AD 28.5          | NTC-32-PMT  | T3511322302-000 |
|                                                                                                                                                                                        | M32 X 1.5 |        | AD 31.5          | NTC-32-PM   | T3511322602-000 |
|                                                                                                                                                                                        | M32 X 1.5 |        | AD 34.5          | NTC-32-PME  | T3511322902-000 |
|                                                                                                                                                                                        | M40 X 1.5 |        | AD 34.5          | NTC-40-PMT  | T3511402802-000 |
|                                                                                                                                                                                        | M40 X 1.5 |        | AD 42.5          | NTC-40-PM   | T3511403602-000 |
|                                                                                                                                                                                        | M50 X 1.5 |        | AD 42.5          | NTC-50-PMT  | T3511503502-000 |
|                                                                                                                                                                                        | M50 X 1.5 |        | AD 54.5          | NTC-50-PM   | T3511504802-000 |
|                                                                                                                                                                                        | M63 X 1.5 |        | AD 54.5          | NTC-63-PM   | T3511634802-000 |
| Nylon blind plugs                                                                                                                                                                      |           |        |                  |             |                 |
|  <p><b>Material:</b> PA<br/><b>Temperature range:</b> -20°C ~ +70°C<br/><b>Protection:</b> IP65</p> |           | PG9    |                  | DN-9-P      | T3169090101-000 |
|                                                                                                                                                                                        |           | PG11   |                  | DN-11-P     | T3169110101-000 |
|                                                                                                                                                                                        |           | PG13.5 |                  | DN-13-P     | T3169130101-000 |
|                                                                                                                                                                                        |           | PG16   |                  | DN-16-P     | T3169160101-000 |
|                                                                                                                                                                                        |           | PG21   |                  | DN-21-P     | T3169210101-000 |
|                                                                                                                                                                                        |           | PG29   |                  | DN-29-P     | T3169290101-000 |
|                                                                                                                                                                                        |           | PG36   |                  | DN-36-P     | T3169360101-000 |
|                                                                                                                                                                                        |           | PG42   |                  | DN-42-P     | T3169420101-000 |
|                                                                                                                                                                                        |           | PG48   |                  | DN-48-P     | T3169480101-000 |
|                                                                                                                                                                                        | M12       |        | 5-7.5            | DN-12-PM    | T3169120121-000 |
|                                                                                                                                                                                        | M16       |        | 7-10             | DN-16-PM    | T3169160111-000 |
|                                                                                                                                                                                        | M20       |        | 10-14            | DN-20-PM    | T3169200111-000 |
|                                                                                                                                                                                        | M25       |        | 12-21.5          | DN-25-PM    | T3169250111-000 |
|                                                                                                                                                                                        | M32       |        | 16-27            | DN-32-PM    | T3169320111-000 |
|                                                                                                                                                                                        | M40       |        | 23-33            | DN-40-PM    | T3169400111-000 |
|                                                                                                                                                                                        | M50       |        | 25-38.5          | DN-50-PM    | T3169500111-000 |
|                                                                                                                                                                                        | M63       |        | 39-46            | DN-63-PM    | T3169630111-000 |

## Cable fittings and accessories

|                                                                                                                                                                                                          | Metr.     | PG     | Type        | Part Number     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|-------------|-----------------|
| Metal blind plugs                                                                                                                                                                                        |           |        |             |                 |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP65</p> |           | PG7    | BLIND-7-MS  | T3165070101-000 |
|                                                                                                                                                                                                          |           | PG9    | BLIND-9-MS  | T3165090101-000 |
|                                                                                                                                                                                                          |           | PG11   | BLIND-11-MS | T3165110101-000 |
|                                                                                                                                                                                                          |           | PG13.5 | BLIND-13-MS | T3165130101-000 |
|                                                                                                                                                                                                          |           | PG16   | BLIND-16-MS | T3165160101-000 |
|                                                                                                                                                                                                          |           | PG21   | BLIND-21-MS | T3165210101-000 |
|                                                                                                                                                                                                          |           | PG29   | BLIND-29-MS | T3165290101-000 |
|                                                                                                                                                                                                          |           | PG36   | BLIND-36-MS | T3165360101-000 |
|                                                                                                                                                                                                          |           | PG42   | BLIND-42-MS | T3165420101-000 |
|                                                                                                                                                                                                          |           | PG48   | BLIND-48-MS | T3165480101-000 |
|                                                                                                                                                                                                          | M12 X 1.5 |        | BLIND-12-M  | T3165120111-000 |
|                                                                                                                                                                                                          | M16 X 1.5 |        | BLIND-16-M  | T3165160111-000 |
|                                                                                                                                                                                                          | M20 X 1.5 |        | BLIND-20-M  | T3165200111-000 |
|                                                                                                                                                                                                          | M25 X 1.5 |        | BLIND-25-M  | T3165250111-000 |
|                                                                                                                                                                                                          | M32 X 1.5 |        | BLIND-32-M  | T3165320111-000 |
|                                                                                                                                                                                                          | M40 X 1.5 |        | BLIND-40-M  | T3165400111-000 |
|                                                                                                                                                                                                          | M50 X 1.5 |        | BLIND-50-M  | T3165500111-000 |
|                                                                                                                                                                                                          | M63 X 1.5 |        | BLIND-63-M  | T3165630111-000 |
| Nylon blind plugs                                                                                                                                                                                        |           |        |             |                 |
|  <p><b>Material:</b> PA<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP65</p>                |           | PG7    | BLIND-7-P   | T3166070101-000 |
|                                                                                                                                                                                                          |           | PG9    | BLIND-9-P   | T3166090101-000 |
|                                                                                                                                                                                                          |           | PG11   | BLIND-11-P  | T3166110101-000 |
|                                                                                                                                                                                                          |           | PG13.5 | BLIND-13-P  | T3166130101-000 |
|                                                                                                                                                                                                          |           | PG16   | BLIND-16-P  | T3166160101-000 |
|                                                                                                                                                                                                          |           | PG21   | BLIND-21-P  | T3166210101-000 |
|                                                                                                                                                                                                          |           | PG29   | BLIND-29-P  | T3166290101-000 |
|                                                                                                                                                                                                          |           | PG36   | BLIND-36-P  | T3166360101-000 |
|                                                                                                                                                                                                          |           | PG42   | BLIND-42-P  | T3166420101-000 |
|                                                                                                                                                                                                          |           | PG48   | BLIND-48-P  | T3166480101-000 |
|                                                                                                                                                                                                          | M12 X 1.5 |        | BLIND-12-PM | T3166120111-000 |
|                                                                                                                                                                                                          | M16 X 1.5 |        | BLIND-16-PM | T3166160111-000 |
|                                                                                                                                                                                                          | M20 X 1.5 |        | BLIND-20-PM | T3166200111-000 |
|                                                                                                                                                                                                          | M25 X 1.5 |        | BLIND-25-PM | T3166250111-000 |
|                                                                                                                                                                                                          | M32 X 1.5 |        | BLIND-32-PM | T3166320111-000 |
|                                                                                                                                                                                                          | M40 X 1.5 |        | BLIND-40-PM | T3166400111-000 |
|                                                                                                                                                                                                          | M50 X 1.5 |        | BLIND-50-PM | T3166500111-000 |
|                                                                                                                                                                                                          | M63 X 1.5 |        | BLIND-63-PM | T3166630111-000 |



## Cable fittings and accessories

|                                                                                                                                                                                                          | Metr.     | PG     | Type         | Part Number     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|--------------|-----------------|
| Metal blind plugs                                                                                                                                                                                        |           |        |              |                 |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP65</p> |           | PG7    | BLIND-7-HMS  | T3165070201-000 |
|                                                                                                                                                                                                          |           | PG9    | BLIND-9-HMS  | T3165090201-000 |
|                                                                                                                                                                                                          |           | PG11   | BLIND-11-HMS | T3165110201-000 |
|                                                                                                                                                                                                          |           | PG13.5 | BLIND-13-HMS | T3165130201-000 |
|                                                                                                                                                                                                          |           | PG16   | BLIND-16-HMS | T3165160201-000 |
|                                                                                                                                                                                                          |           | PG21   | BLIND-21-HMS | T3165210201-000 |
|                                                                                                                                                                                                          |           | PG29   | BLIND-29-HMS | T3165290201-000 |
|                                                                                                                                                                                                          |           | PG36   | BLIND-36-HMS | T3165360201-000 |
|                                                                                                                                                                                                          |           | PG42   | BLIND-42-HMS | T3165420201-000 |
|                                                                                                                                                                                                          |           | PG48   | BLIND-48-HMS | T3165480201-000 |
|                                                                                                                                                                                                          | M12 X 1.5 |        | BLIND-12-HM  | T3165120211-000 |
|                                                                                                                                                                                                          | M16 X 1.5 |        | BLIND-16-HM  | T3165160211-000 |
|                                                                                                                                                                                                          | M20 X 1.5 |        | BLIND-20-HM  | T3165200211-000 |
|                                                                                                                                                                                                          | M25 X 1.5 |        | BLIND-25-HM  | T3165250211-000 |
|                                                                                                                                                                                                          | M32 X 1.5 |        | BLIND-32-HM  | T3165320211-000 |
|                                                                                                                                                                                                          | M40 X 1.5 |        | BLIND-40-HM  | T3165400211-000 |
|                                                                                                                                                                                                          | M50 X 1.5 |        | BLIND-50-HM  | T3165500211-000 |
|                                                                                                                                                                                                          | M63 X 1.5 |        | BLIND-63-HM  | T3165630211-000 |

## Cable fittings and accessories

|                                                                                                                                                                            | Metr.     | PG     | Type     | Part Number     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|----------|-----------------|
| Metal lock units                                                                                                                                                           |           |        |          |                 |
|  <p><b>Material:</b> Nickel plated brass<br/><b>Temperature range:</b> -40°C ~ +100°C</p> |           | PG7    | LN-7-MS  | T3161070001-000 |
|                                                                                                                                                                            |           | PG9    | LN-9-MS  | T3161090001-000 |
|                                                                                                                                                                            |           | PG11   | LN-11-MS | T3161110001-000 |
|                                                                                                                                                                            |           | PG13.5 | LN-13-MS | T3161130001-000 |
|                                                                                                                                                                            |           | PG16   | LN-16-MS | T3161160001-000 |
|                                                                                                                                                                            |           | PG21   | LN-21-MS | T3161210001-000 |
|                                                                                                                                                                            |           | PG29   | LN-29-MS | T3161290001-000 |
|                                                                                                                                                                            |           | PG36   | LN-36-MS | T3161360001-000 |
|                                                                                                                                                                            |           | PG42   | LN-42-MS | T3161420001-000 |
|                                                                                                                                                                            |           | PG48   | LN-48-MS | T3161480001-000 |
|                                                                                                                                                                            | M12 X 1.5 |        | LN-12-M  | T3161120050-000 |
|                                                                                                                                                                            | M16 X 1.5 |        | LN-16-M  | T3161160050-000 |
|                                                                                                                                                                            | M20 X 1.5 |        | LN-20-M  | T3161200050-000 |
|                                                                                                                                                                            | M25 X 1.5 |        | LN-25-M  | T3161250050-000 |
|                                                                                                                                                                            | M32 X 1.5 |        | LN-32-M  | T3161320050-000 |
|                                                                                                                                                                            | M40 X 1.5 |        | LN-40-M  | T3161400050-000 |
|                                                                                                                                                                            | M50 X 1.5 |        | LN-50-M  | T3161500050-000 |
|                                                                                                                                                                            | M63 X 1.5 |        | LN-63-M  | T3161630050-000 |
| Nylon lock units                                                                                                                                                           |           |        |          |                 |
|  <p><b>Material:</b> PA<br/><b>Temperature range:</b> -40°C ~ +100°C</p>                |           | PG7    | LN-7-P   | T3262070001-000 |
|                                                                                                                                                                            |           | PG9    | LN-9-P   | T3262090001-000 |
|                                                                                                                                                                            |           | PG11   | LN-11-P  | T3262110001-000 |
|                                                                                                                                                                            |           | PG13.5 | LN-13-P  | T3262130001-000 |
|                                                                                                                                                                            |           | PG16   | LN-16-P  | T3262160001-000 |
|                                                                                                                                                                            |           | PG21   | LN-21-P  | T3262210001-000 |
|                                                                                                                                                                            |           | PG29   | LN-29-P  | T3262290001-000 |
|                                                                                                                                                                            |           | PG36   | LN-36-P  | T3262360001-000 |
|                                                                                                                                                                            |           | PG42   | LN-42-P  | T3262420001-000 |
|                                                                                                                                                                            |           | PG48   | LN-48-P  | T3262480001-000 |
|                                                                                                                                                                            | M12 X 1.5 |        | LN-12-PM | T3262120050-000 |
|                                                                                                                                                                            | M16 X 1.5 |        | LN-16-PM | T3262160050-000 |
|                                                                                                                                                                            | M20 X 1.5 |        | LN-20-PM | T3262200050-000 |
|                                                                                                                                                                            | M25 X 1.5 |        | LN-25-PM | T3262250050-000 |
|                                                                                                                                                                            | M32 X 1.5 |        | LN-32-PM | T3262320050-000 |
|                                                                                                                                                                            | M40 X 1.5 |        | LN-40-PM | T3262400050-000 |
|                                                                                                                                                                            | M50 X 1.5 |        | LN-50-PM | T3262500050-000 |
|                                                                                                                                                                            | M63 X 1.5 |        | LN-63-PM | T3262630050-000 |

## Cable fittings and accessories

|                                                                                                                                                                              | Metr.                                                                                                                            | PG          | Type          | Part Number     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------|---------------|-----------------|
| Metal increasers                                                                                                                                                             |                                                                                                                                  |             |               |                 |
|  <p><b>Material:</b> Nickel plated brass<br/><b>Temperature range:</b> -40°C ~ +100°C</p>   | M16-M20<br>M20-M25<br>M25-M32<br>M32-M40<br>M40-M50<br>M50-M63                                                                   | PG7-PG9     | INCR-7/9-PG   | T3033070901-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG9-PG11    | INCR-9/11-PG  | T3033091101-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG11-PG13.5 | INCR-11/13-PG | T3033111301-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG11-PG16   | INCR-11/16-PG | T3033111601-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG13.5-PG16 | INCR-13/16-PG | T3033131601-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG13.5-PG21 | INCR-13/21-PG | T3033132101-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG16-PG21   | INCR-16/21-PG | T3033162101-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG21-PG29   | INCR-21/29-PG | T3033212901-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG29-PG36   | INCR-29/36-PG | T3033293601-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG36-PG42   | INCR-36/42-PG | T3033364201-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | INCR-16/20-M  | T3033162050-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | INCR-20/25-M  | T3033202550-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | INCR-25/32-M  | T3033253250-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | INCR-32/40-M  | T3033324050-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | INCR-40/50-M  | T3033405050-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | INCR-50/63-M  | T3033506350-000 |
| Metal reducers                                                                                                                                                               |                                                                                                                                  |             |               |                 |
|  <p><b>Material:</b> Nickel plated brass<br/><b>Temperature range:</b> -40°C ~ +100°C</p> | M16-M12<br>M20-M12<br>M20-M16<br>M25-M20<br>M32-M20<br>M32-M25<br>M40-M25<br>M40-M32<br>M50-M32<br>M50-M40<br>M63-M40<br>M63-M50 | PG9-PG7     | REDU-9/7-PG   | T3071090701-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG11-PG7    | REDU-11/7-PG  | T3071110701-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG13.5-PG9  | REDU-13/9-PG  | T3071130901-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG13.5-PG11 | REDU-13/11-PG | T3071131101-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG16-PG9    | REDU-16/9-PG  | T3071160901-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG16-PG11   | REDU-16/11-PG | T3071161101-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG16-PG13.5 | REDU-16/13-PG | T3071161301-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG21-PG11   | REDU-21/11-PG | T3071211101-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG21-PG13.5 | REDU-21/13-PG | T3071211301-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG21-PG16   | REDU-21/16-PG | T3071211601-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG29-PG16   | REDU-29/16-PG | T3071291601-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG29-PG21   | REDU-29/21-PG | T3071292101-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG36-PG21   | REDU-36/21-PG | T3071362101-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG36-PG29   | REDU-36/29-PG | T3071362901-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG42-PG29   | REDU-42/29-PG | T3071422901-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG42-PG36   | REDU-42/36-PG | T3071423601-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG48-PG36   | REDU-48/36-PG | T3071483601-000 |
|                                                                                                                                                                              |                                                                                                                                  | PG48-PG42   | REDU-48/42-PG | T3071484201-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-16/12-M  | T3071161250-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-20/12-M  | T3071201250-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-20/16-M  | T3071201650-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-25/20-M  | T3071252050-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-32/20-M  | T3071322050-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-32/25-M  | T3071322550-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-40/25-M  | T3071402550-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-40/32-M  | T3071403250-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-50/32-M  | T3071503250-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-50/40-M  | T3071504050-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-63/40-M  | T3071634050-000 |
|                                                                                                                                                                              |                                                                                                                                  |             | REDU-63/50-M  | T3071635050-000 |

## Cable fittings and accessories

|                                                                                                                                             |                    |                     | Type  | Dimension | Part Number     |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------|-------|-----------|-----------------|
| Cable clamper                                                                                                                               |                    |                     |       |           |                 |
|  <p><b>Material:</b> Metal<br/><b>Protection:</b> IP65</p> |                    |                     | BK 14 | 12-14     | T1918121400-000 |
|                                                                                                                                             |                    |                     | BK 18 | 14-18     | T1918121800-000 |
|                                                                                                                                             |                    |                     | BK 22 | 18-22     | T1922182200-000 |
|                                                                                                                                             |                    |                     | BK 26 | 22-26     | T1926222600-000 |
|                                                                                                                                             |                    |                     | BK 32 | 26-32     | T1932263200-000 |
|                                                                                                                                             |                    |                     | BK 34 | 30-34     | T1934303400-000 |
|                                                                                                                                             |                    |                     | BK 38 | 34-38     | T1912063800-000 |
|                                                                                                                                             |                    |                     | BK 42 | 38-42     | T1942384200-000 |
|                                                                                                                                             |                    |                     | BK 48 | 42-48     | T1912064800-000 |
|                                                                                                                                             |                    |                     | BK 52 | 48-52     | T1912065200-000 |
|                                                                                                                                             |                    |                     | BK 56 | 52-56     | T1912065600-000 |
|                                                                                                                                             |                    |                     | BK 60 | 56-60     | T1912066000-000 |
|                                                                                                                                             |                    |                     | BK 64 | 60-64     | T1964566400-000 |
|                                                                                                                                             |                    |                     | BK 70 | 64-70     | T1970667000-000 |
| C-Type rail                                                                                                                                 | T 19 0000 0000-000 | rail adaptor system |       |           |                 |

| Cable clamper             |                                                                                     |             |         |                 |
|---------------------------|-------------------------------------------------------------------------------------|-------------|---------|-----------------|
| Direct installation yokes |   | SKT3-8SC    | 3-8     | T3920030801-000 |
|                           |                                                                                     | SKT4-13SC   | 4-13.5  | T3920041301-000 |
|                           |                                                                                     | SKT10-20SC  | 10-20   | T3920102001-000 |
|                           |                                                                                     | SKT15-32SC  | 15-32   | T3920153201-000 |
| Direct rail mounting      |  | SKTP3-8SC   | 3-8     | T3930030801-000 |
|                           |                                                                                     | SKTP4-13SC  | 4-13.5  | T3930041301-000 |
|                           |                                                                                     | SKTP10-20SC | 10-20   | T3930102001-000 |
|                           |                                                                                     | SKTP15-32SC | 15-32   | T3930153201-000 |
| Mounting rails            |  | SKT2-6      | 2-6     | T3910020601-000 |
|                           |                                                                                     | SKT3-8      | 3-8     | T3910030801-000 |
|                           |                                                                                     | SKT4-13.5   | 4-13.5  | T3910041301-000 |
|                           |                                                                                     | SKT10-20    | 10-20   | T3910102001-000 |
| Quick installation yokes  |  | SKT15-32    | 15-32   | T3910153201-000 |
|                           |                                                                                     | QSKT 1-6    | 1.5-6.5 | T3930010600-000 |
|                           |                                                                                     | QSKT 5-11   | 5-11    | T3930051100-000 |
|                           |                                                                                     | QSKT 10-17  | 10-17   | T3930101700-000 |

|                                                                                                                                                                          |  | Type   | Dimension | Type    | Part Number     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------|-----------|---------|-----------------|
| Clips                                                                                                                                                                    |  |        |           |         |                 |
|  <p><b>Material:</b> Stainless steel<br/><b>Temperature range:</b> -40°C ~ +105°C</p> |  | AD10   | 10        | Clip-06 | T3310010000-000 |
|                                                                                                                                                                          |  | AD13   | 13        | Clip-09 | T3310013000-000 |
|                                                                                                                                                                          |  | AD15.8 | 15        | Clip-11 | T3310015000-000 |
|                                                                                                                                                                          |  | AD21.2 | 22        | Clip-16 | T3310022000-000 |
|                                                                                                                                                                          |  | AD28.5 | 28        | Clip-21 | T3310028000-000 |
|                                                                                                                                                                          |  | AD34.5 | 34        | Clip-29 | T3310034000-000 |
|                                                                                                                                                                          |  | AD42.5 | 40        | Clip-36 | T3310040000-000 |
|                                                                                                                                                                          |  | AD54.5 | 54        | Clip-48 | T3310054000-000 |
|                                                                                                                                                                          |  | AD80   | 79        | Clip-70 | T3310079000-000 |
|                                                                                                                                                                          |  | AD106  | 105       | Clip-95 | T3310105000-000 |

## Cable fittings and accessories

|                                                                                                                                                                                                                                                                             | Metr.     | PG     | Clamp range    | Type                      | Part Number                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|----------------|---------------------------|------------------------------------|
| Metal cable gland                                                                                                                                                                                                                                                           |           |        |                |                           |                                    |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Press seal material:</b> PA<br/> <b>Seal material:</b> NBR<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP68</p> |           | PG7    | 2-5<br>3-6.5   | DLX-7-NMTS<br>DLX-7-NMS   | T3629070111-000<br>T3629070101-000 |
|                                                                                                                                                                                                                                                                             |           | PG9    | 2-6<br>4-8     | DLX-9-NMTS<br>DLX-9-NMS   | T3629090111-000<br>T3629090101-000 |
|                                                                                                                                                                                                                                                                             |           | PG11   | 3-7<br>5-10    | DLX-11-NMTS<br>DLX-11-NMS | T3629110111-000<br>T3629110101-000 |
|                                                                                                                                                                                                                                                                             |           | PG13.5 | 5-9<br>6-12    | DLX-13-NMTS<br>DLX-13-NMS | T3629130111-000<br>T3629130101-000 |
|                                                                                                                                                                                                                                                                             |           | PG16   | 7-12<br>10-14  | DLX-16-NMTS<br>DLX-16-NMS | T3629160111-000<br>T3629160101-000 |
|                                                                                                                                                                                                                                                                             |           | PG21   | 9-16<br>13-18  | DLX-21-NMTS<br>DLX-21-NMS | T3629210111-000<br>T3629210101-000 |
|                                                                                                                                                                                                                                                                             |           | PG29   | 13-20<br>18-25 | DLX-29-NMTS<br>DLX-29-NMS | T3629290111-000<br>T3629290101-000 |
|                                                                                                                                                                                                                                                                             |           | PG36   | 20-26<br>22-32 | DLX-36-NMTS<br>DLX-36-NMS | T3629360111-000<br>T3629360101-000 |
|                                                                                                                                                                                                                                                                             |           | PG42   | 25-31<br>32-38 | DLX-42-NMTS<br>DLX-42-NMS | T3629420111-000<br>T3629420101-000 |
|                                                                                                                                                                                                                                                                             |           | PG48   | 29-35<br>37-44 | DLX-48-NMTS<br>DLX-48-NMS | T3629480111-000<br>T3629480101-000 |
|                                                                                                                                                                                                                                                                             | M12 X 1.5 |        | 2-5<br>3-6.5   | DLX-12-NMT<br>DLX-12-NM   | T3629120112-000<br>T3629120102-000 |
|                                                                                                                                                                                                                                                                             | M16 X 1.5 |        | 2-6<br>4-8     | DLX-16-NMT<br>DLX-16-NM   | T3629160112-000<br>T3629160102-000 |
|                                                                                                                                                                                                                                                                             | M20 X 1.5 |        | 5-9<br>6-12    | DLX-20-NMT<br>DLX-20-NM   | T3629200112-000<br>T3629200102-000 |
|                                                                                                                                                                                                                                                                             | M25 X 1.5 |        | 9-16<br>13-18  | DLX-25-NMT<br>DLX-25-NM   | T3629250112-000<br>T3629250102-000 |
|                                                                                                                                                                                                                                                                             | M32 X 1.5 |        | 13-20<br>18-25 | DLX-32-NMT<br>DLX-32-NM   | T3629320112-000<br>T3629320102-000 |
|                                                                                                                                                                                                                                                                             | M40 X 1.5 |        | 20-26<br>22-32 | DLX-40-NMT<br>DLX-40-NM   | T3629400112-000<br>T3629400102-000 |
|                                                                                                                                                                                                                                                                             | M50 X 1.5 |        | 25-31<br>32-38 | DLX-50-NMT<br>DLX-50-NM   | T3629500112-000<br>T3629500102-000 |
|                                                                                                                                                                                                                                                                             | M63 X 1.5 |        | 29-35<br>37-44 | DLX-63-NMT<br>DLX-63-NM   | T3629630112-000<br>T3629630102-000 |
| Angled metal cable glands                                                                                                                                                                                                                                                   |           |        |                |                           |                                    |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Temperature range:</b> -40°C ~ +100°C<br/> <b>Protection:</b> IP68</p>                                                                  |           | PG11   | Ø11            | STUD-9-MS                 | T3265090901-000                    |
|                                                                                                                                                                                                                                                                             |           | PG13.5 | Ø14            | STUD-11-MS                | T3265111101-000                    |
|                                                                                                                                                                                                                                                                             |           | PG16   | Ø16            | STUD-13-MS                | T3265131301-000                    |
|                                                                                                                                                                                                                                                                             |           | PG21   | Ø18            | STUD-16-MS                | T3265160101-000                    |
|                                                                                                                                                                                                                                                                             |           | PG29   | Ø21            | STUD-21-MS                | T3265212101-000                    |
|                                                                                                                                                                                                                                                                             |           | PG36   | Ø31            | STUD-29-MS                | T3265292901-000                    |
|                                                                                                                                                                                                                                                                             | M16 X 1.5 |        | Ø12            | STUD-16-M                 | T3265161611-000                    |
|                                                                                                                                                                                                                                                                             | M20 X 1.5 |        | Ø15.5          | STUD-20-M                 | T3265202011-000                    |
|                                                                                                                                                                                                                                                                             | M25 X 1.5 |        | Ø20.5          | STUD-25-M                 | T3265252511-000                    |
|                                                                                                                                                                                                                                                                             | M32 X 1.5 |        | Ø27.5          | STUD-32-M                 | T3265252511-000                    |
|                                                                                                                                                                                                                                                                             | M40 X 1.5 |        | Ø34.5          | STUD-40-M                 | T3265404011-000                    |
|                                                                                                                                                                                                                                                                             |           |        |                |                           |                                    |
|                                                                                                                                                                                                                                                                             |           |        |                |                           |                                    |
|                                                                                                                                                                                                                                                                             |           |        |                |                           |                                    |
|                                                                                                                                                                                                                                                                             |           |        |                |                           |                                    |

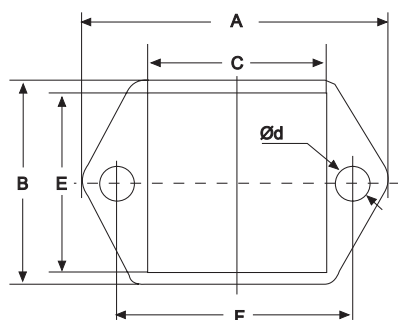
## Cable fittings and accessories

|                                                                                                                                                                                                                                         | Metr.     | PG     | Clamp range | Type        | Part Number     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|-------------|-------------|-----------------|
| Metal cable gland                                                                                                                                                                                                                       |           |        |             |             |                 |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Seal material:</b> NBR<br/> <b>Temperature range:</b> -30°C ~ +100°C<br/> <b>Protection:</b> IP55</p> |           | PG7    | 6-8         | VSM-7-MS    | T3105070101-000 |
|                                                                                                                                                                                                                                         |           | PG9    | 5-10        | VSM-9-MS    | T3105090101-000 |
|                                                                                                                                                                                                                                         |           | PG11   | 7-12        | VSM-11-MS   | T3105110101-000 |
|                                                                                                                                                                                                                                         |           | PG13.5 | 7-12        | VSM-13-MS   | T3105130101-000 |
|                                                                                                                                                                                                                                         |           | PG16   | 7-15        | VSM-16-MS   | T3105160101-000 |
|                                                                                                                                                                                                                                         |           | PG21   | 10-19       | VSM-21-MS   | T3105210101-000 |
|                                                                                                                                                                                                                                         |           | PG29   | 18-27       | VSM-29-MS   | T3105290101-000 |
|                                                                                                                                                                                                                                         |           | PG36   | 24-32       | VSM-36-MS   | T3105360101-000 |
|                                                                                                                                                                                                                                         |           | PG42   | 30-39       | VSM-42-MS   | T3105420101-000 |
|                                                                                                                                                                                                                                         |           | PG48   | 36-45       | VSM-48-MS   | T3105480101-000 |
|                                                                                                                                                                                                                                         | M12 X 1.5 |        | 4.5-7       | VSM-12-M    | T3105120021-000 |
|                                                                                                                                                                                                                                         | M16 X 1.5 |        | 6.5-9       | VSM-16-M    | T3105160021-000 |
|                                                                                                                                                                                                                                         | M20 X 1.5 |        | 6.5-9       | VSM-20-M    | T3105200021-000 |
|                                                                                                                                                                                                                                         | M20 X 1.5 |        | 6-11.5      | VSM-20T-M   | T3105200121-000 |
|                                                                                                                                                                                                                                         | M25 X 1.5 |        | 8-13        | VSM-25-M    | T3105250021-000 |
|                                                                                                                                                                                                                                         | M25 X 1.5 |        | 12.5-18     | VSM-25T-M   | T3105250121-000 |
|                                                                                                                                                                                                                                         | M32 X 1.5 |        | 17-26       | VSM-32-M    | T3105320021-000 |
|                                                                                                                                                                                                                                         | M40 X 1.5 |        | 17-26       | VSM-40-M    | T3105400021-000 |
|                                                                                                                                                                                                                                         | M50 X 1.5 |        | 27-32       | VSM-50-M    | T3105500021-000 |
|                                                                                                                                                                                                                                         | M50 X 1.5 |        | 35-38.5     | VSM-50T-M   | T3105500121-000 |
|                                                                                                                                                                                                                                         | M63 X 1.5 |        | 38-44       | VSM-63-M    | T3105630021-000 |
| Extender                                                                                                                                                                                                                                |           |        |             |             |                 |
|  <p><b>Material:</b> Nickel plated brass<br/> <b>Temperature range:</b> -40°C ~ +100°C</p>                                                           |           | PG11   |             | STUD-PG11   | T333311112-000  |
|                                                                                                                                                                                                                                         |           | PG13.5 |             | STUD-PG13.5 | T333313132-000  |
|                                                                                                                                                                                                                                         |           | PG16   |             | STUD-PG16   | T333316162-000  |
|                                                                                                                                                                                                                                         |           | PG21   |             | STUD-PG21   | T333321212-000  |
|                                                                                                                                                                                                                                         |           | PG29   |             | STUD-PG29   | T333329292-000  |
|                                                                                                                                                                                                                                         |           | PG36   |             | STUD-PG36   | T333336362-000  |
|                                                                                                                                                                                                                                         | M12 X 1.5 |        |             | STUD-M12    | T333312121-000  |
|                                                                                                                                                                                                                                         | M16 X 1.5 |        |             | STUD-M16    | T333316161-000  |
|                                                                                                                                                                                                                                         | M20 X 1.5 |        |             | STUD-M20    | T333320201-000  |
|                                                                                                                                                                                                                                         | M25 X 1.5 |        |             | STUD-M25    | T333325251-000  |
|                                                                                                                                                                                                                                         | M32 X 1.5 |        |             | STUD-M32    | T333332321-000  |
|                                                                                                                                                                                                                                         | M40 X 1.5 |        |             | STUD-M40    | T333340401-000  |
|                                                                                                                                                                                                                                         | M50 X 1.5 |        |             | STUD-M50    | T333350501-000  |
|                                                                                                                                                                                                                                         | M63 X 1.5 |        |             | STUD-M63    | T333363631-000  |

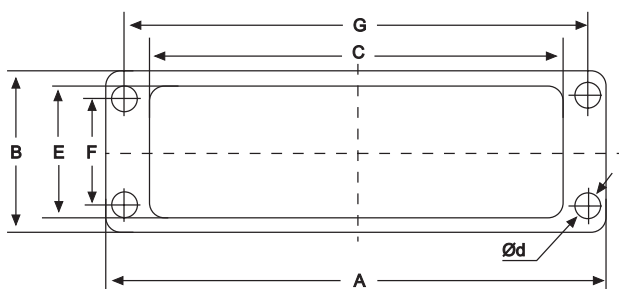
## Cable fittings and accessories

|                                                                                                                                                                                                                   | Metr.                                                                                                | PG                                             | Type                                                                                                                                                                             | Part Number                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inside and outside thread adapter                                                                                                                                                                                 |                                                                                                      |                                                |                                                                                                                                                                                  |                                                                                                                                                                                                                                                                            |
| <div><p><b>Material:</b> Nickel plated brass<br/><b>Temperature range:</b> -40°C ~ +100°C</p></div>                              | M12 X 1.5<br>M16 X 1.5<br>M20 X 1.5<br>M25 X 1.5<br>M32 X 1.5<br>M40 X 1.5<br>M50 X 1.5<br>M63 X 1.5 | PG11<br>PG13.5<br>PG16<br>PG21<br>PG29<br>PG36 | STUD-PG11<br>STUD-PG13.5<br>STUD-PG16<br>STUD-PG21<br>STUD-PG29<br>STUD-PG36<br><br>STUD-M12<br>STUD-M16<br>STUD-M20<br>STUD-M25<br>STUD-M32<br>STUD-M40<br>STUD-M50<br>STUD-M63 | T3333111102-000<br>T3333131302-000<br>T3333161602-000<br>T3333212102-000<br>T3333292902-000<br>T3333363602-000<br><br>T3333121201-000<br>T3333161601-000<br>T3333202001-000<br>T3333252501-000<br>T3333323201-000<br>T3333404001-000<br>T3333505001-000<br>T3333636301-000 |
| Cable gland clamps                                                                                                                                                                                                |                                                                                                      |                                                |                                                                                                                                                                                  |                                                                                                                                                                                                                                                                            |
| <div><p><b>Material:</b> Nickel plated brass<br/><b>Temperature range:</b> -30°C ~ +100°C<br/><b>Protection:</b> IP65</p></div> |                                                                                                      |                                                | WSM-16-MS<br><br>WSM-21-MS<br><br>WSM-32-M                                                                                                                                       | T3125160111-000<br><br>T3125210111-000<br><br>T3125320001-000                                                                                                                                                                                                              |

## Housings mounting dimensions



H3A housing



H10A, H16A, H32A/HA series housings  
H6B, H10B, H16B, H24B, H32B,  
H48B/HB series housings

| Shell type | Mounted type | Dimensions (mm) |      |       |      |      |     |     |
|------------|--------------|-----------------|------|-------|------|------|-----|-----|
|            |              | A               | B    | C     | E    | F    | G   | Ød  |
| H3A        | Bulkhead     | 40              | 28   | 21    | 21   | 30   | -   | 3.2 |
|            | Surface      | 40              | 28   | -     | -    | 30   | -   | 3.2 |
| H10A       | Bulkhead     | 81              | 29.5 | 57.5  | 24   | 17.5 | 70  | 3.4 |
|            | Surface      | 80              | 50   | -     | -    | 40   | 48  | 4.5 |
| H16A       | Bulkhead     | 96              | 29.5 | 73.7  | 24   | 17.5 | 86  | 3.4 |
|            | Surface      | 96              | 50   | -     | -    | 40   | 64  | 4.5 |
| H32A       | Bulkhead     | 102             | 56   | 74.2  | 48.4 | 42   | 92  | 4.4 |
|            | Surface      | 106             | 57   | -     | -    | 46   | 94  | 5.5 |
| H6B        | Bulkhead     | 80              | 43   | 52.2  | 35   | 32   | 70  | 4.4 |
|            | Surface      | 82              | 52   | -     | -    | 40   | 70  | 5.5 |
| H10B       | Bulkhead     | 93              | 43   | 65.2  | 35   | 32   | 83  | 4.3 |
|            | Surface      | 94              | 52   | -     | -    | 40   | 82  | 5.5 |
| H16B       | Bulkhead     | 113             | 43   | 85.5  | 35   | 32   | 103 | 4.3 |
|            | Surface      | 117             | 57   | -     | -    | 45   | 105 | 5.5 |
| H24B       | Bulkhead     | 140             | 43   | 112.2 | 35   | 32   | 130 | 4.3 |
|            | Surface      | 144             | 57   | -     | -    | 45   | 132 | 5.5 |
| H32B       | Bulkhead     | 124             | 79   | 85.5  | 71   | 65   | 110 | 5.4 |
|            | Surface      | 124.5           | 81   | -     | -    | 67   | 112 | 5.4 |
| H48B       | Bulkhead     | 165             | 90   | 124   | 82   | 70   | 148 | 6.4 |
|            | Surface      | 132             | 120  | -     | -    | 106  | 111 | 6.5 |



| Part Number | Page | Part Number | Page | Part Number | Page |
|-------------|------|-------------|------|-------------|------|
| O-0163083-7 | 111  | O-1102839-2 | 268  | O-1103091-1 | 189  |
| O-0164160-4 | 111  | O-1102839-2 | 273  | O-1103092-1 | 195  |
| O-0164161-4 | 111  | O-1102839-2 | 295  | O-1103092-2 | 195  |
| O-0164161-9 | 111  | O-1102839-3 | 100  | O-1103092-3 | 195  |
| O-0166824-2 | 111  | O-1102839-3 | 153  | O-1103092-4 | 195  |
| O-1102192-1 | 100  | O-1102839-3 | 268  | O-1103092-5 | 195  |
| O-1102192-1 | 153  | O-1102839-3 | 273  | O-1103092-8 | 195  |
| O-1102192-1 | 268  | O-1102839-3 | 295  | O-1103092-9 | 195  |
| O-1102192-1 | 273  | O-1102839-4 | 100  | O-1106258-3 | 296  |
| O-1102192-1 | 295  | O-1102839-4 | 153  | O-1106258-4 | 296  |
| O-1102192-2 | 100  | O-1102839-4 | 268  | O-1106259-3 | 296  |
| O-1102192-2 | 153  | O-1102839-4 | 295  | O-1106259-4 | 296  |
| O-1102192-2 | 268  | O-1102839-4 | 273  | O-1106401-2 | 36   |
| O-1102192-2 | 273  | O-1102839-5 | 273  | O-1106401-2 | 59   |
| O-1102192-2 | 295  | O-1102839-6 | 273  | O-1106401-2 | 188  |
| O-1102792-1 | 99   | O-1102840-1 | 100  | O-1106401-3 | 36   |
| O-1102792-1 | 152  | O-1102840-1 | 153  | O-1106401-3 | 59   |
| O-1102792-1 | 266  | O-1102840-1 | 268  | O-1106401-3 | 188  |
| O-1102792-1 | 293  | O-1102840-1 | 273  | O-1106401-4 | 36   |
| O-1102836-1 | 100  | O-1102840-1 | 295  | O-1106401-4 | 59   |
| O-1102836-1 | 153  | O-1102840-2 | 100  | O-1106401-4 | 188  |
| O-1102836-1 | 268  | O-1102840-2 | 153  | O-1106402-2 | 35   |
| O-1102836-1 | 273  | O-1102840-2 | 268  | O-1106402-2 | 58   |
| O-1102836-1 | 295  | O-1102840-2 | 273  | O-1106402-2 | 187  |
| O-1102836-2 | 100  | O-1102840-2 | 295  | O-1106402-3 | 35   |
| O-1102836-2 | 153  | O-1102840-3 | 100  | O-1106402-3 | 58   |
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| T1310320136-000 | 180  | T1319320140-000 | 42   | T1320320129-000 | 105  |
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| T1310320140-000 | 159  | T1320060116-000 | 71   | T1320320129-000 | 180  |
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| T1310480136-000 | 109  | T1320060125-000 | 71   | T1320320136-000 | 180  |
| T1310480136-000 | 164  | T1320060125-000 | 120  | T1320320140-000 | 105  |
| T1310480140-000 | 109  | T1320100116-000 | 78   | T1320320140-000 | 159  |
| T1310480140-000 | 164  | T1320100116-000 | 129  | T1320320140-000 | 180  |
| T1310480142-000 | 109  | T1320100116-000 | 240  | T1320320142-000 | 105  |
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| T1490240225-000 | 148  | T1510482000-000 | 109  | T1610163116-000 | 255  |
| T1490240225-000 | 263  | T1510482000-000 | 164  | T1610163120-000 | 88   |
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| T1490240229-000 | 148  | T1519101000-000 | 38   | T1610163120-000 | 175  |
| T1490240229-000 | 263  | T1519101000-000 | 62   | T1610163120-000 | 255  |
| T1490240232-000 | 95   | T1519101000-000 | 62   | T1610163121-000 | 88   |
| T1490240232-000 | 148  | T1519161000-000 | 40   | T1610163121-000 | 140  |
| T1490240232-000 | 263  | T1519161000-000 | 65   | T1610163121-000 | 175  |
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| T1500103000-000 | 79   | T1549030000-000 | 33   | T1610163125-000 | 140  |
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| T1500103000-000 | 241  | T1549030000-000 | 185  | T1610163125-000 | 255  |
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| T1500163000-000 | 255  | T1610062120-000 | 121  | T1610163216-000 | 255  |
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| T1500322000-000 | 159  | T1610062216-000 | 72   | T1610163221-000 | 88   |
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| T1509030000-000 | 185  | T1610062225-000 | 72   | T1610163225-000 | 175  |
| T1509031100-000 | 34   | T1610062225-000 | 121  | T1610163225-000 | 255  |
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| T1509031100-000 | 186  | T1610103116-000 | 130  | T1610243116-000 | 150  |
| T1509031111-000 | 34   | T1610103116-000 | 241  | T1610243116-000 | 265  |
| T1509031111-000 | 57   | T1610103120-000 | 79   | T1610243120-000 | 97   |
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| T1510062100-000 | 72   | T1610103125-000 | 79   | T1610243125-000 | 97   |

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| T1610243125-000 | 265  | T1619030111-000 | 56   | T1620062125-000 | 121  |
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| T1610322129-000 | 159  | T1619031111-000 | 57   | T1620103120-000 | 241  |
| T1610322129-000 | 180  | T1619031116-000 | 57   | T1620103121-000 | 79   |
| T1610322132-000 | 105  | T1619031120-000 | 186  | T1620103121-000 | 130  |
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| T1610482129-000 | 109  | T1619101225-000 | 38   | T1620103225-000 | 130  |
| T1610482129-000 | 164  | T1619101225-000 | 62   | T1620103225-000 | 241  |
| T1610482132-000 | 109  | T1619161116-000 | 40   | T1620163116-000 | 88   |
| T1610482132-000 | 164  | T1619161116-000 | 65   | T1620163116-000 | 140  |
| T1610482136-000 | 109  | T1619161120-000 | 40   | T1620163116-000 | 175  |
| T1610482136-000 | 164  | T1619161120-000 | 65   | T1620163116-000 | 255  |
| T1610482140-000 | 109  | T1619161121-000 | 40   | T1620163120-000 | 88   |
| T1610482140-000 | 164  | T1619161121-000 | 65   | T1620163120-000 | 140  |
| T1610482142-000 | 109  | T1619161125-000 | 40   | T1620163120-000 | 175  |
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| T1610482150-000 | 109  | T1619161216-000 | 40   | T1620163121-000 | 88   |
| T1610482150-000 | 164  | T1619161216-000 | 65   | T1620163121-000 | 140  |
| T1610482229-000 | 109  | T1619161220-000 | 40   | T1620163121-000 | 175  |
| T1610482229-000 | 164  | T1619161220-000 | 65   | T1620163121-000 | 255  |
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| T1610482232-000 | 164  | T1619161221-000 | 65   | T1620163125-000 | 140  |
| T1610482236-000 | 109  | T1619161225-000 | 40   | T1620163125-000 | 175  |
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| T1620243225-000 | 97   | T1629101220-000 | 62   | T1650103229-000 | 130  |
| T1620243225-000 | 150  | T1629101221-000 | 38   | T1650103229-000 | 241  |
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| T1660103125-000 | 79   | T1660243125-000 | 97   | T1710322132-000 | 179  |



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