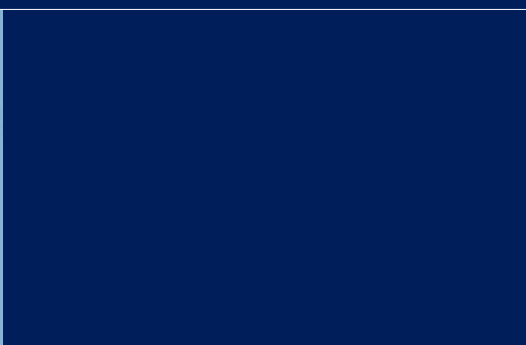
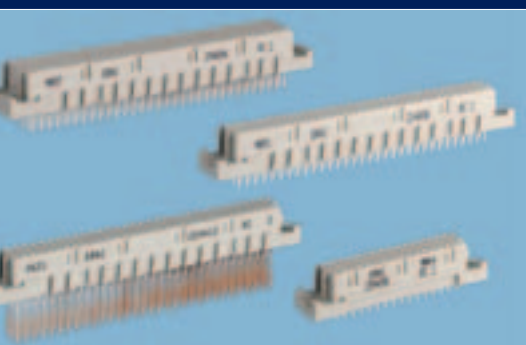




# DIN 41612 / 60603-2 Connectors and completions





|                                                                                           |     |
|-------------------------------------------------------------------------------------------|-----|
| DIN 41612 / IEC 60603-2 Connectors General information                                    | 3   |
| Main features                                                                             | 3   |
| Early mate/late break                                                                     | 3   |
| Pre-centering                                                                             | 4   |
| Codings                                                                                   | 4   |
| Retentive clip                                                                            | 4   |
| Wiring accessories                                                                        | 5   |
| Termination Technique                                                                     | 5   |
| Basic dimensions for all sizes of the connector family according to DIN 41612/IEC 60603-2 | 6   |
| Important dimensions                                                                      | 6   |
| Mounting dimensions of the connectors                                                     | 7   |
| Clearance and creepage distances                                                          | 8   |
| Minimum clearance and creepage distances according to IEC 60664                           | 8   |
| DIN 41612 / 60603-2 Pressfit Connectors ERNIPRESS™                                        | 9   |
| Required specifications of the PCB                                                        | 9   |
| Insertion and retention forces                                                            | 9   |
| Hole design                                                                               | 10  |
| Press-in tools                                                                            | 10  |
| Vertical Pressfit Connectors                                                              | 10  |
| Right Angle Pressfit Connectors                                                           | 11  |
| Ordering Information Pressfit Connectors                                                  | 11  |
| Electrical and Mechanical Characteristics                                                 | 13  |
| Type B Male                                                                               | 21  |
| Type B/2 Male                                                                             | 25  |
| Type B/3 Male                                                                             | 29  |
| Type B Female                                                                             | 33  |
| Type B/2 Female                                                                           | 36  |
| Type B/3 Female                                                                           | 39  |
| Type Q Male                                                                               | 42  |
| Type Q/2 Male                                                                             | 45  |
| Type Q/3 Male                                                                             | 45  |
| Type Q Female                                                                             | 46  |
| Type Q/2 Female                                                                           | 49  |
| Type Q/3 Female                                                                           | 49  |
| Type C Male                                                                               | 50  |
| Type C/2 Male                                                                             | 56  |
| Type C/3 Male                                                                             | 60  |
| Type C Female                                                                             | 63  |
| Type C/2 Female                                                                           | 74  |
| Type C/3 Female                                                                           | 78  |
| Type R Male                                                                               | 81  |
| Type R/2 Male                                                                             | 86  |
| Type R/3 Male                                                                             | 89  |
| Type R Female                                                                             | 92  |
| Type R/2 Female                                                                           | 96  |
| Type R/3 Female                                                                           | 99  |
| Type CD Male                                                                              | 102 |
| Type CD Female                                                                            | 105 |
| Type RD Male                                                                              | 108 |
| Type RD Female                                                                            | 111 |
| Type E 160 / E 80 Male                                                                    | 114 |
| Type E 160 Female                                                                         | 117 |
| Type TE Male                                                                              | 120 |



|                                             |     |
|---------------------------------------------|-----|
| Type TE Female                              | 123 |
| Eurocard Center Connector                   | 126 |
| Type D Male                                 | 129 |
| Type D Female                               | 132 |
| Type E Male                                 | 136 |
| Type E Female                               | 139 |
| Type F Male                                 | 143 |
| Type F Female                               | 145 |
| Type M Male                                 | 151 |
| Type M Female                               | 154 |
| Special Contacts for Type M Male and Female | 161 |
| Type H11                                    | 165 |
| Type H11 Male                               | 168 |
| Type H11 Female                             | 169 |
| Type H15                                    | 170 |
| Type H15 Male                               | 173 |
| Type H15 Female                             | 175 |
| Type H7/F24                                 | 176 |
| Type H7/F24 Male                            | 179 |
| Type H7/F24 Female                          | 180 |
| Insulation Displacement Connector (IDC)     | 181 |
| Application example for DIN-IDC connectors  | 183 |
| Crimp snap-in Connectors (CST)              | 185 |
| Guide Elements and Shrouds                  | 190 |
| Coding Systems                              | 192 |
| Applications                                | 198 |
| Part Number Index                           | 199 |



## General information

The DIN 41612/IEC 60603-2 connector family consists of 13 basic sizes and many complementary versions. It was developed for use in 19" rack systems in accordance with **DIN 41494 / IEC 60297**. The large number of different sizes and the efficient connection techniques have made it possible to install these connectors for in extremely wide range of applications.

Typical areas of application:

- Connection between plug-in card and back-panel wiring
- Connection between two PCB's arranged one above the other
- Connection to peripheral equipment with connector housings as accessories
- As periphery connectors for external interfaces from the wiring side

## Main features

- Separable printed circuit board connectors
- International approvals, such as UL or CSA
- 13 connector sizes with the same plug-in and mounting conditions
- Additional connector sizes complementing the DIN 41612/IEC 60603-2 such as half or tripled sizes
- Different coding systems available
- Up to 160 contacts per connector
- Two to five row connectors possible
- Various termination types available
- 2.54 mm (0.1") basic pitch
- Early mate/late break contacts available on request
- Wide range of accessories
- Complete interface system available
- All female connectors mentioned in this data sheet have **dual sided female contact spring**.

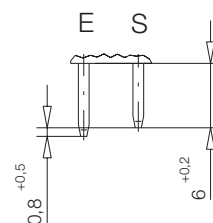
This contact principle offers a max. security in contacting and remaining contact resistance in extreme situations.

## Early mate/late break

For the connectors size B, C, Q, R, D, E and F 0.8 mm early mate/late break male contacts can be loaded in any position in rows a, b, c, d, e and z.

The early mate/late break of the high current connector sizes H11 and H15 have a length of 3.5 mm (1,5 mm on request). Other lengths of early mate/late break contacts on request.

Mating length



E = early mate, late break

S = standard

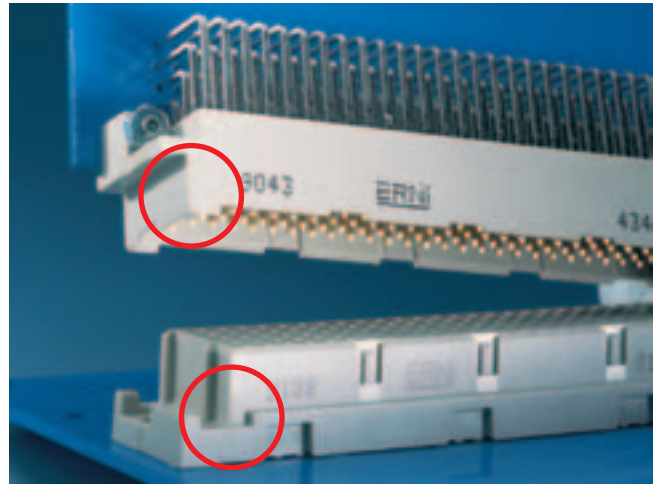
## Pre-centering

For applications with early mate/late break contacts the male connector insulators with pre-centering ensure even more reliable mating.

The insulators of the female connectors have a recess at the appropriate point. The dimensions of these versions do not conform to the specifications of DIN 41612/IEC 60603-2.

The ordering details are not listed in this data sheet but they can be supplied on request.

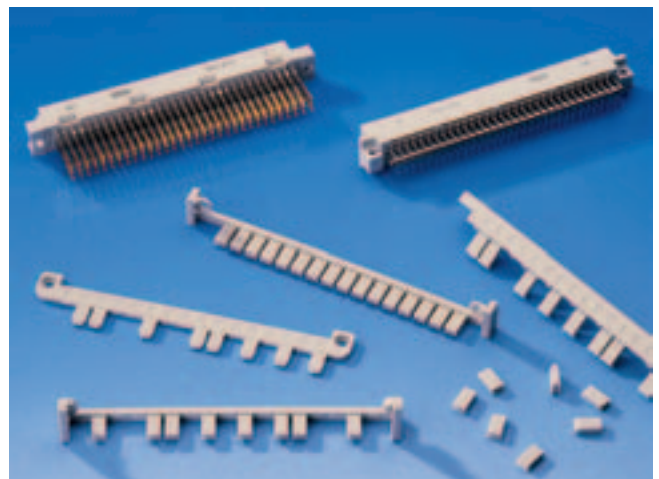
**Male connectors with pre-centering do not mate with female connectors without a pre-centering recess.**



## Codings

Various coding systems are available for the connectors contained in this data sheet.

- **Coding with coding strips.** These coding strips are mounted together with the connector. For ERNI coding strips no extra modular space is required in the 19" rack system.
- **Integrated coding with coding wedges.** In this case coding wedges are fitted into the female connectors and the male connectors are provided with corresponding recesses.
- **Integrated coding with coding pins.** In this case coding pins are inserted into the female connectors and holes are drilled in the male connectors in the coding positions.



## Retentive clip

For efficient mounting of the right angle connectors ERNI offers a retentive clip.

These clips are pre-mounted by ERNI. The connectors are attached to the pc board with this clip, which locks into the drillholes on the pc board, max. thickness of pcb = 1.6 mm. Since the clips can also be soldered, plated-through holes are recommended in such applications.



## Wiring accessories

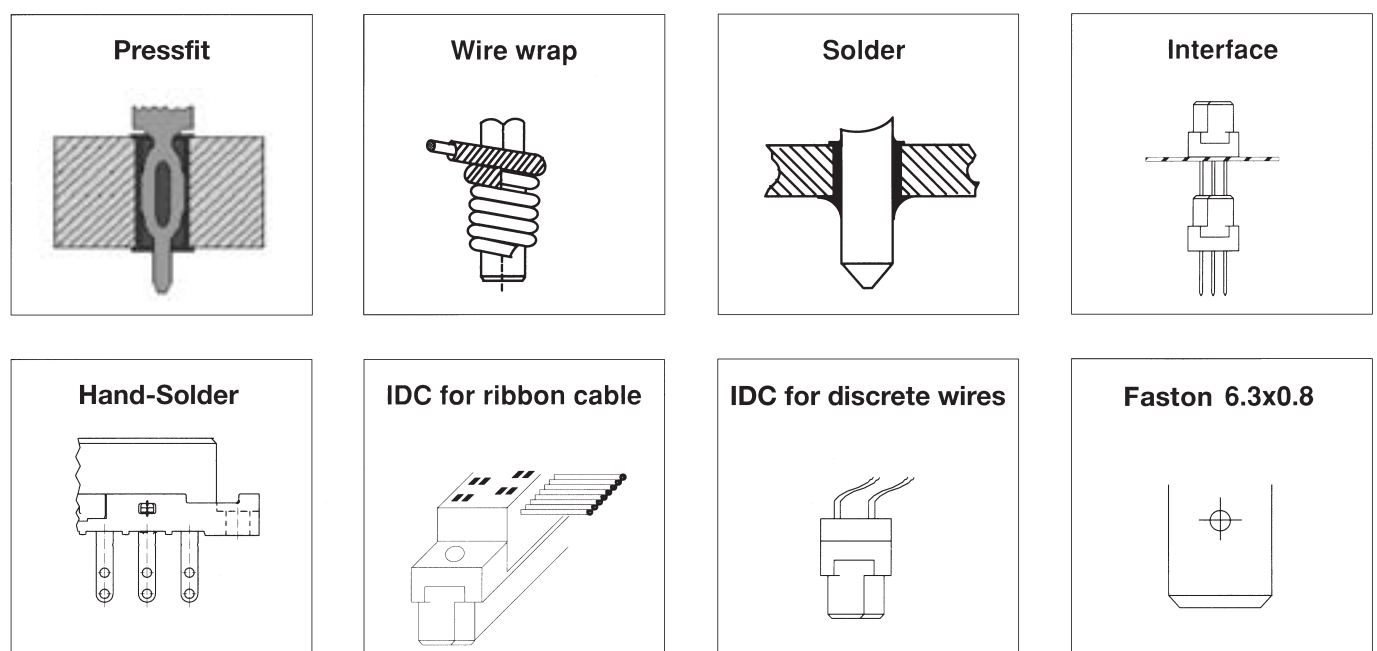
The ERNI connector housing range together with the ERNI interface connector system offers optimum protection for all plug-in interfaces for DIN 41612/IEC 60603-2 connectors. The range is dimensioned for the 19" rack system. Suitable variations are available for nearly every type of connector. Whether you intend to use a short type B/2 connector or a 64-pin insulation displacement connector, the ERNI range offers you the ideal housing.

- **KSG 173** Size: B, C, D, E, M, H11, H15, Q, R, E160, TE160, RD128
- **KSG 193** Size: B/2, C/2, Q/2, R/2
- **KSG 203** Size: F, Fi
- **KSG 253** Size: C (IDC)
- **KSG 204** Size: F, Fi

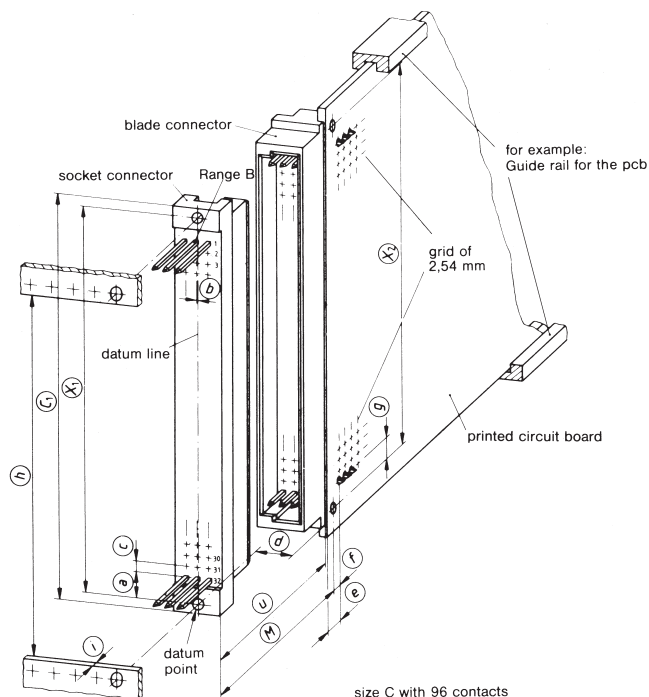
The connector housings are prepared for a maximum of 3 cable outlets and are offered with strain-relief clamps. A metal-plated version for shielding purposes is also available. For plug-in interfaces on the front or back panel of the rack ERNI has developed guide elements and shrouds in collaboration with well-known customers. These elements permit exact guidance for correct mating and provide robust screw locking. In addition you can fit a coding device.



## Termination Technique



## Basic dimensions for all sizes of the connector family according to DIN 41612/IEC 60603-2



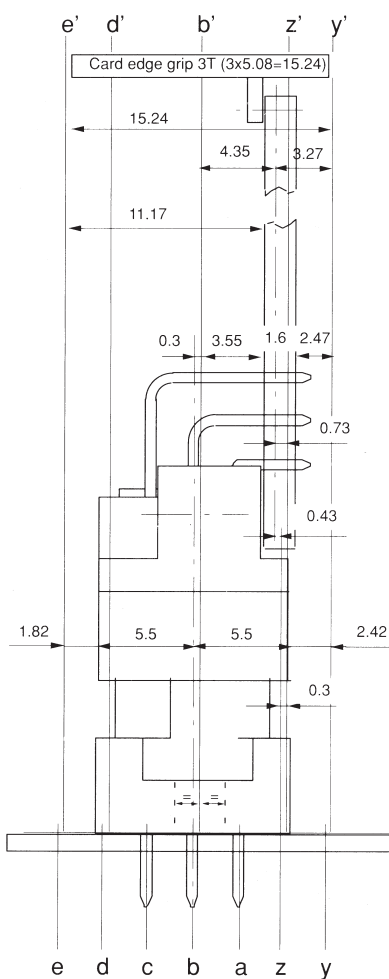
### Important dimensions

| Letter of dimension | Dimensions mm | Explanation                                                                                                                        |
|---------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------|
| (C)                 | 95            | Maximum length of the connector assigned to the back panel                                                                         |
| (M)                 | 15.5 to 17.3  | Mating zone for reliable contact making                                                                                            |
| (X <sub>1</sub> )   | 90            | Distance between the mounting holes of the connector assigned to the back panel                                                    |
| (X <sub>2</sub> )   | 88.9          | Distance between the mounting holes of the connector assigned to the assembly                                                      |
| (a)                 | 5.63          | Distance between the reference point and centerline through contact no. 32 with regard to the connector assigned to the back panel |
| (b)                 | 0.3           | Distance between the reference line (line through the fixing holes) and centerline of row b (also called offset)                   |
| (c)                 | nx2.54        | Pitch of the terminals of the connector assigned to the back panel)                                                                |
| (d)                 | 3.55          | Distance between the reference line and the component side of the PCB                                                              |
| (e)                 | 5.3           | Distance between the edge of the PCB and the first row of holes for terminals of the connector mounted on the assembly             |
| (f)                 | 2.54          | Distance between the mounting holes and the first row of holes for terminals of the connector mounted on the assembly              |
| (g)                 | 5.08          | Distance between the mounting holes and the holes for contacts no. 1 and no. 32 of the connector assigned to the assembly          |
| (h)                 | 85            | Minimum length of the panel cutout or minimum distance between the mounting rails for the connector assigned to the back panel     |
| (i)                 | 2.5           | Maximum thickness of mounting plate or mounting rails                                                                              |
| (u)                 | 12.4 to 14.2  | Mating zone for reliable contact making                                                                                            |

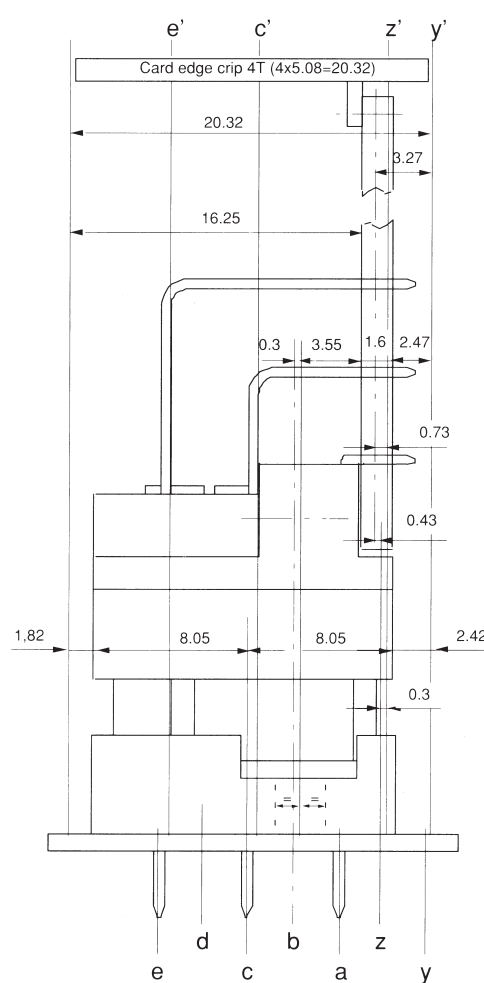
## Mounting dimensions of the connectors

in the modular arrangement of the 19" rack system

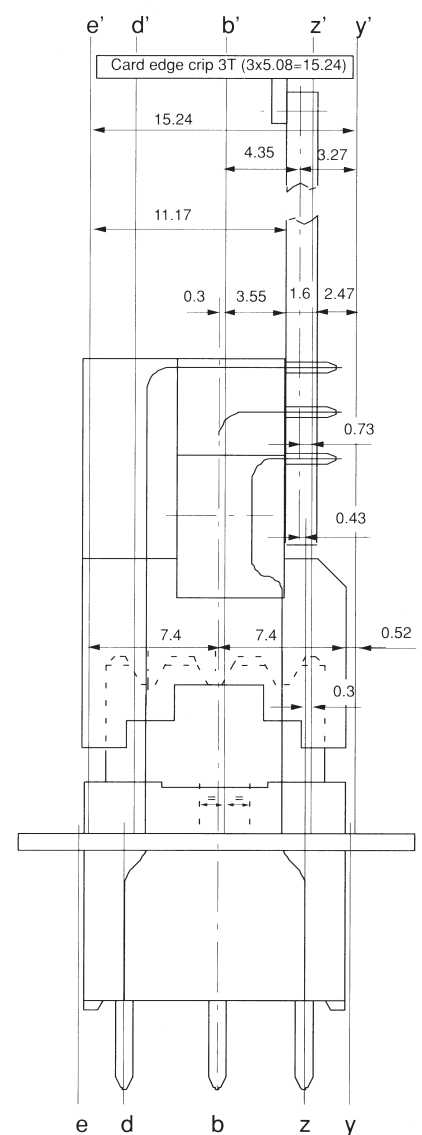
Exact position of connectors **size C**



Exact position of connectors **size E**



Exact position of connectors **size F**



These drawings contain important dimensions for the use of DIN 41612/IEC 60603-2 connectors in 19" rack systems.

The mounting dimensions shown for size F connectors illustrate how the width of 3 x 5.08 mm is maintained by means of a pitch offset between mating side and soldering side. These size F connectors can be used with 3U wide daughter cards in a 3U (3x5.08) 19" slot.

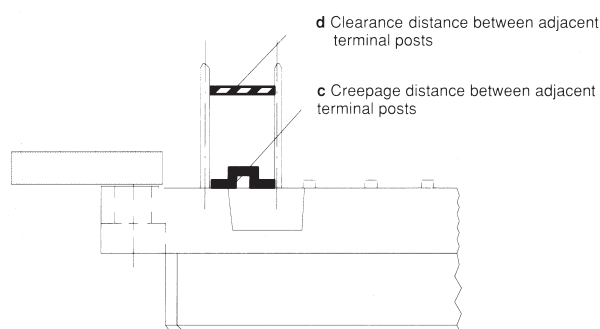
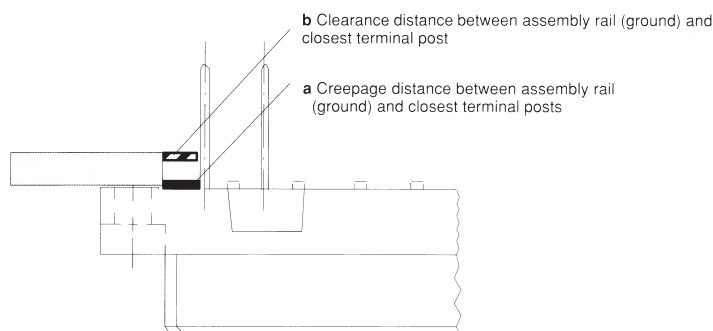
## Clearance and creepage distances

for DIN 41612/IEC 60603-2 male and female connectors

Two different clearance and creepage distances are always distinguished for connectors:

1. The distances a and b are the shortest clearance and creepage distance between assembly rail (chassis) and the closest terminal post.
2. The distances c and d are the shortest clearance and creepage distance between 2 adjacent terminal posts in unwrapped state.

All the values apply to the connectors prior to their termination to the printed circuit board. The influence of the wiring on the clearance creepage distance must be taken into account.



## Minimum clearance and creepage distances according to IEC 60664

When calculating the minimum clearance and creepage distance for your application, the guidelines contained in IEC 60664 Parts 1 and 2, January 1989 issue are applicable. This standard contains the relevant values in tabular form.

Calculation of minimum **clearance** distances:

The minimum clearance primarily depends on the following factors:

- Rated impulse voltage for clearance distances (depending on overvoltage category).
- Pollution degree

Calculation of minimum **creepage** distance:

The minimum creepage distance is primarily dependent on the following factors:

- Operating voltage
- Pollution degree
- CTI values (comparative tracking index) of the insulation material
- Contents of insulation body

## DIN 41612 / 60603-2 Pressfit Connectors ERNIPRESS™

In electronic and electrical equipment the solderless pressfit technique has become more and more widespread in times of packaging miniaturization and higher packing densities.

ERNI's compliant pressfit zone is a reliable connection between the PC Board and the connector.

ERNI offers a comprehensive pressfit range for all connector types. Also included in the ERNI pressfit range are the right angled pressfit connectors used for daughter card connectors. The pressfit zone is designed that the contact fit in the copper layer of the plated-through hole of a PCB. The tin plating of the hole is penetrated. The result is a reliable gas tight and therefore corrosion-free contact with low electrical resistance.

Solderless pressfit connectors are an integral part of today's modern electronic packaging bus systems. The main function of a bus system is to connect assemblies with one another and their power supply. Since plug-in modules are becoming more and more powerful, the demands placed on the bus systems are continually increasing. Higher system speeds and the overall shrinking of the connection structure are making the bus system a more crucial part of the control system.

With newer assembly processes for PC Boards, like the pressfit termination, the mechanism is now available to utilize more powerful electro mechanical components.

ERNIPRESS™ solderless pressfit connectors are a perfect fit for such applications. Furthermore, there are many applications where the delicate structure of the PC Board cannot withstand the harshness of automated soldering processes.

For DIN connectors ERNI has two pressfit zones in use. Both zones require exactly the same hole specifications of the PCB.

1. EE-zone contour like a boat



2. EN-zone eye of the needle



## Required specifications of the PCB

In manufacturing the PC Board for the pressfit technique it is essential that the recommended DIN PC Board specifications are met. The dimensions of the plated through drillholes and their hole design are described in IEC 60352-5.

The quality and long-term performance of a pressfit connector are influenced by the following factors:

- a) Base material of the PCB.  
To meet UL requirements, epoxy glass fabric type Hgw 2372.1 to DIN 7735, FR 4, should be used.
- b.) Adherence to drillhole tolerances.  
For optimum and uniform plating of the PCB, a selective rack technique, flexible anode arrangement and continuous plating bath monitoring are suggested.
- c.) Drillhole diameter, positioning and diameter tolerances.  
Maintaining the correct roughness of the drillhole wall and restricting drill bit travel are critical production processes.
- d.) PCB hole and layout requirements.  
A minimal residual ring width of 0.1 mm, finished hole diameter tolerances, layer thicknesses, and a high quality consistent conductive pattern are all critical.
- e.) Insertion and retention forces.  
Measurement of these forces should be checked.

## Insertion and retention forces

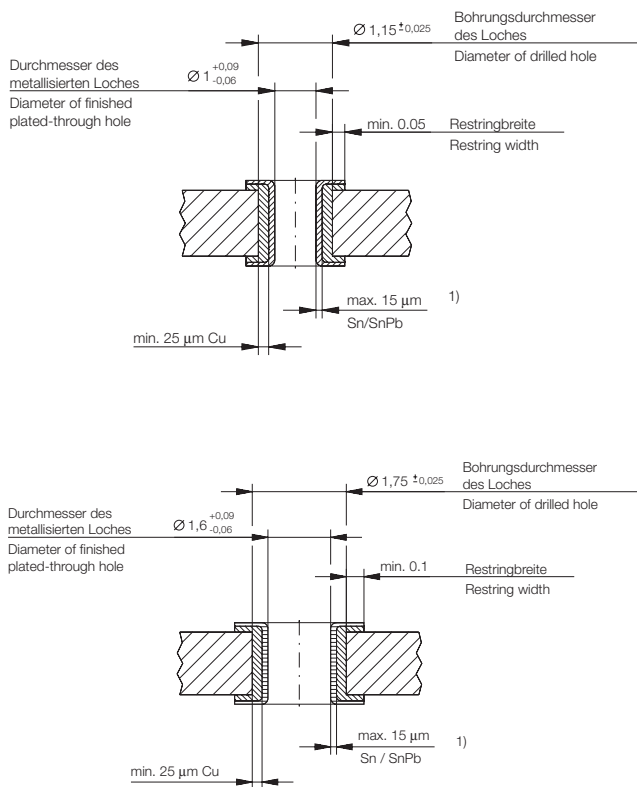
The design of the pressfit zone of the ERNIPRESS™ connectors performs a dual function. On the one hand this design has high elasticity and therefore can accommodate large hole tolerances. On the other hand, the pressfit zone's design ensures high edge loading at the copper layer of the PCB hole resulting in a gas-tight, corrosion-free and mechanically secure connection.

Due to the special shape of the pressfit zone, insertion forces are not detrimental to the hole plating.

Retention forces of the contacts in the PCB hole are sufficient to withstand the torques which occur during wire wrap termination. Typical average values for retention force are between 50 – 110 N per contact depending upon PCB thicknesses.



## Hole design



## Press-in tools



## Vertical Pressfit Connectors

The male and female connectors are assembled into the PC Board in a one-step operation. No additional securing such as with screw hardware is necessary.

Pressfitting of female connector sizes B, B/2, B/3, C, C/2, C/3, M, D, E and F is performed with the aid of a press-in tool which transmits the insertion force to the individual contacts.

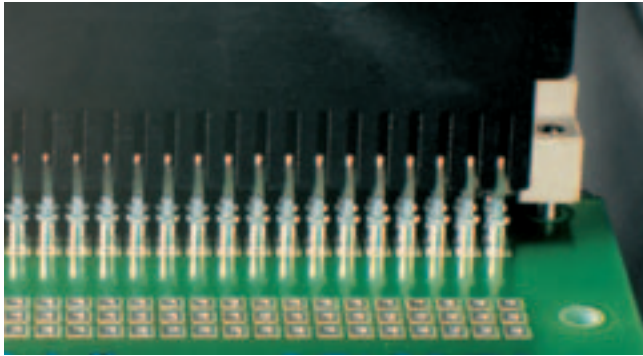
For female connector sizes B and C, an additional version is offered which can be pressfitted with just a flat press-in tool. Insertion force is absorbed by the connector housing.

Female connector sizes E 160, H 11 and H 15 are similarly pressfitted with a flat press-in tool.

When pressfitting the inverted male connectors the insertion force is directly loaded on the male contacts.



## Right Angle Pressfit Connectors



The male connectors and the inverted female connectors have right-angled pressfit terminations with a shoulder. The appropriate press-in tool with matching cavities, enables the pressfitting of the connectors into the PCB. The press-in forces are absorbed by the contact shoulder.

## Ordering Information

| Vertical Female Connectors Type | Contact Supporting Upper Tool Tool Part Number | Flat Upper Tool Part Number | Lower Tool Part Number | Pin Cross Section |
|---------------------------------|------------------------------------------------|-----------------------------|------------------------|-------------------|
| B                               |                                                | 471787                      | 220108                 |                   |
| B/2                             |                                                | 220368                      | 220051                 |                   |
| B/3                             |                                                | 220369                      | 220527                 |                   |
| C                               |                                                | 471684                      | 471855                 |                   |
| C/2                             |                                                | 471791                      | 220051                 |                   |
| C/3                             |                                                | 220139                      | 220527                 |                   |
| CD                              |                                                | 471837                      | 473447                 |                   |
| E160                            |                                                | 471584                      | 473447                 |                   |
| E80                             |                                                | 471920                      | 471677                 |                   |
| Eurocard Center Connectors      | 473449                                         |                             | 471943                 |                   |
| D                               | 471590                                         | 471684                      | 471855                 | 0.6x0.6           |
|                                 |                                                |                             | 471694                 | 1x1               |
| E                               | 471591                                         | 471584                      | 473447                 | 0.6x0.6           |
|                                 |                                                |                             | 471694                 | 1x1               |
| F flat                          |                                                |                             | 473447                 |                   |
| F                               | 471592                                         | 220153                      | 471694                 |                   |
| M 6-10                          | 220894                                         |                             | 471867                 |                   |
| M 24-8                          | 220892                                         |                             | 471867                 |                   |
| M 42-6                          | 220891                                         |                             | 471867                 |                   |
| M 60-4                          | 220890                                         |                             | 471867                 |                   |
| M 78-2                          | 220889                                         |                             | 471867                 |                   |
| H 11                            |                                                | 471684                      | 473161                 |                   |
| H15                             |                                                | 471836                      | 471839                 |                   |

## Ordering Information

| Vertical Male Connectors<br>Type | Contact Supporting Upper Tool<br>Tool Part Number | Lower Tool<br>Part Number |
|----------------------------------|---------------------------------------------------|---------------------------|
| Q                                | 220370                                            | 220108                    |
| R                                | 220991                                            | 471855                    |
| R/2                              | 471597                                            | 220051                    |
| R/3                              | 220364                                            | 220527                    |
| RD                               | 471606                                            | 473447                    |
| TE                               | 471608                                            | 473447                    |

| Right Angle Male Connectors<br>Type | Contact Supporting Upper Tool<br>Tool Part Number | Flat Upper Tool<br>Part Number | Lower Tool<br>Part Number |
|-------------------------------------|---------------------------------------------------|--------------------------------|---------------------------|
| B                                   | 471630                                            |                                | 471729                    |
| B/2                                 | 471632                                            |                                | 471729                    |
| B/3                                 | 471634                                            |                                | 471729                    |
| C                                   | 471629                                            | 220316                         | 471556                    |
| C/2                                 | 471631                                            |                                | 471556                    |
| C/3                                 | 471633                                            |                                | 471556                    |
| CD                                  | 471922                                            |                                | 471793                    |
| E160                                | 471628                                            |                                | 471710                    |

| Right Angle Female Connectors<br>Type | Contact Supporting Upper Tool<br>Tool Part Number | Flat Upper Tool<br>Part Number | Lower Tool<br>Part Number |
|---------------------------------------|---------------------------------------------------|--------------------------------|---------------------------|
| Q                                     | 471640                                            |                                | 471729                    |
| R                                     |                                                   | on request                     | 471556                    |
| R/2                                   |                                                   | 220411                         | 220681                    |
| R/3                                   |                                                   | 230032                         | 471556                    |
| RD                                    | 471638                                            |                                | 471793                    |
| TE                                    | 471637                                            |                                | 471710                    |

## Presses

In addition ERNI offers modern hand lever presses with different options. At least insertion forces can be measured and monitored by a IPC supported hand lever press.

|                                             | Standard              | B, B/2, B/3, C, C/2, C/3, Q, Q/2, Q/3, R, R/2, R/3, CD, RD, TE, E80, E160, ECC                                                                                                           | M                                                                                                                                                     |
|---------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Pins                              |                       | 20, 30, 32, 48, 64, 80, 96, 128, 160                                                                                                                                                     | 6, 24, 42, 60, 78                                                                                                                                     |
| <b>Technical data</b>                       |                       |                                                                                                                                                                                          |                                                                                                                                                       |
| Climate Category                            | DIN EN 60068-1 test b | 55/125/56                                                                                                                                                                                | 55/125/56                                                                                                                                             |
| Temperature range                           |                       | -55/125 °C                                                                                                                                                                               | -55/125 °C                                                                                                                                            |
| Current rating                              | IEC60512 test 5b      | Ambient temperature<br>20 °C 2.0 A<br>70 °C 1.6 A<br>100 °C 1.0 A                                                                                                                        | Ambient temperature<br>20 °C 2.0 A<br>70 °C 1.6 A<br>100 °C 1.0 A                                                                                     |
| Clearance and creepage distance             |                       | contact - contact 1.2 mm<br>contact - ground 1.8 mm<br>contact - ground 1.6 mm (clearance)                                                                                               | contact - contact 1.2 mm<br>contact - ground 3.0 mm<br>contact - ground 2.5 mm (clearance)                                                            |
| CTI value                                   | IEC 60112             | 225 (Standard and THR)<br>250 (Inverted Versions)                                                                                                                                        | 225                                                                                                                                                   |
| Voltage rating                              | IEC 60664             | Has to be determined according to customer application (degree of environmental pollution) according to IEC 60664                                                                        | Has to be determined according to customer application (degree of environmental pollution) according to IEC 60664                                     |
| Dielectric strength                         | IEC 60512             | contact - contact 1000 V <sub>rms</sub><br>contact - ground 1550 V <sub>rms</sub>                                                                                                        | contact - contact 1000 V <sub>rms</sub><br>contact - ground 1550 V <sub>rms</sub>                                                                     |
| Contact resistance                          | IEC 60512 test 2a     | < 20 mΩ                                                                                                                                                                                  | < 20 mΩ                                                                                                                                               |
| Insulation resistance                       | IEC 60512 test 3a     | > 10 <sup>6</sup> MΩ                                                                                                                                                                     | > 10 <sup>6</sup> MΩ                                                                                                                                  |
| Vibration sine                              | IEC 60512 test 6d     | 10 – 2000 Hz<br>20 g                                                                                                                                                                     | 10 – 2000 Hz<br>20 g                                                                                                                                  |
| Contact interruption (while vibration test) | IEC 60512 test 2e     | < 1 μs                                                                                                                                                                                   | < 1 μs                                                                                                                                                |
| Shock halfsine                              | IEC 60512 test 6c     | 50 g<br>11 ms                                                                                                                                                                            | 50 g<br>11 ms                                                                                                                                         |
| Contact interruption (while shock test)     | IEC 60512 test 2e     | < 1 μs                                                                                                                                                                                   | < 1 μs                                                                                                                                                |
| Mechanical operation (mating cycles)        | IEC 60512 test 9a     | Class 1: 500 mating cycles<br>Class 2: 400 mating cycles                                                                                                                                 | Class 1: 500 mating cycles<br>Class 2: 400 mating cycles                                                                                              |
| Insertion and withdrawal force              | IEC 60512 test 13b    | 20 cont.: 18 N max.<br>30 cont.: 28 N max.<br>32 cont.: 30 N max.<br>48 cont.: 45 N max.<br>64 cont.: 60 N max.<br>96 cont.: 90 N max.<br>128 cont.: 100 N max.<br>160 cont.: 110 N max. | 6 cont.: 5 N max.<br>24 cont.: 22 N max.<br>42 cont.: 40 N max.<br>60 cont.: 57 N max.<br>78 cont.: 74 N max.<br><br>With special contacts max. 100 N |
| Gauge retention force per contact           | IEC 60512 test 16e    | > 0.15 N                                                                                                                                                                                 | > 0.15 N                                                                                                                                              |



|                                              | Standard    | B, B/2, B/3, C, C/2, C/3, Q, Q/2, Q/3, R, R/2, R/3, CD, RD, TE, E80, E160, ECC | M                                                 |
|----------------------------------------------|-------------|--------------------------------------------------------------------------------|---------------------------------------------------|
| Number of Pins                               |             | 20, 30, 32, 48, 64, 80, 96, 128, 160                                           | 6, 24, 42, 60, 78                                 |
| Process-conditions                           |             |                                                                                |                                                   |
| Solder temperature max.                      | IEC 68-2-20 |                                                                                |                                                   |
| Hand soldering temperature max.              |             | 3.5 s at 350 °C                                                                | 3.5 s at 350 °C                                   |
| Dip soldering temperature max.               |             | 10 s at 260 °C                                                                 | 10 s at 260 °C                                    |
| Reflow soldering temperature max.            |             | 10 s at 260 °C (THR versions)                                                  |                                                   |
| Warning                                      |             | Soldering of pressfit connectors not recommended.                              | Soldering of pressfit connectors not recommended. |
| Materials                                    |             |                                                                                |                                                   |
| Housing:<br>Plastic material (symbol)        |             | PBT GF30 (Standard)<br>PA 10T30GF (THR)                                        | PBT GF30 (Standard)                               |
| CTI value                                    | IEC 60112   | 250 (Standard)<br>600 (THR)                                                    | 225                                               |
| UL flame rating                              |             | UL 94 V-0                                                                      | UL 94 V-0                                         |
| UL file                                      |             | E171666                                                                        | E171666                                           |
| Contact and mating area                      |             |                                                                                |                                                   |
| Base material                                |             | Cu alloy                                                                       | Cu alloy                                          |
| Plating                                      |             | Gold plated                                                                    | Gold plated                                       |
| Termination area                             |             |                                                                                |                                                   |
| Base material                                |             | Cu alloy                                                                       | Cu alloy                                          |
| Solder, pressfit and THR                     |             | Sn                                                                             | Sn                                                |
| Environment compatibility                    |             |                                                                                |                                                   |
| Recycling                                    |             | no flame-retardent additives, no toxic additives, allows easy recycling        |                                                   |
| Product-approval and customer specific tests |             |                                                                                |                                                   |
| cUL                                          |             | E84703                                                                         | E84703                                            |

## DIN 41612 / IEC 60603-2 Connectors

### Electrical and Mechanical Characteristics



|                                             | Standard              | D, E                                                                                                                               | F                                                                                                                                  |
|---------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Number of Pins                              |                       | 32, 48                                                                                                                             | 32, 48                                                                                                                             |
| <b>Technical data</b>                       |                       |                                                                                                                                    |                                                                                                                                    |
| Climate Category                            | DIN EN 60068-1 test b | 55/125/56                                                                                                                          | 55/125/56                                                                                                                          |
| Temperature range                           |                       | -55/125 °C                                                                                                                         | -55/125 °C                                                                                                                         |
| Current rating                              | IEC60512 test 5b      | Ambient temperature<br>20 °C 5.5 A<br>70 °C 4.0 A<br>100 °C 2.5 A                                                                  | Ambient temperature<br>20 °C 5.5 A<br>70 °C 4.0 A<br>100 °C 2.5 A                                                                  |
| Clearance and creepage distance             |                       | contact - contact 3.0 mm (clearance)<br>contact - ground 1.6 mm (clearance)<br>contact - contact 3.0 mm<br>contact - ground 1.8 mm | contact - contact 1.6 mm (clearance)<br>contact - ground 3.5 mm (clearance)<br>contact - contact 3.0 mm<br>contact - ground 6.0 mm |
| CTI value                                   | IEC 60112             | 225                                                                                                                                | 175 (Type F)<br>250 (Type F flat)                                                                                                  |
| Voltage rating                              | IEC 60664             | Has to be determined according to customer application (degree of environmental pollution) according to IEC 60664                  | Has to be determined according to customer application (degree of environmental pollution) according to IEC 60664                  |
| Dielectric strength                         | IEC 60512             | contact - contact 1550 V <sub>rms</sub><br>contact - ground 1550 V <sub>rms</sub>                                                  | contact - contact 1550 V <sub>rms</sub><br>contact - ground 2500 V <sub>rms</sub>                                                  |
| Contact resistance                          | IEC 60512 test 2a     | < 15 mΩ                                                                                                                            | < 15 mΩ                                                                                                                            |
| Insulation resistance                       | IEC 60512 test 3a     | > 10 <sup>6</sup> MΩ                                                                                                               | > 10 <sup>6</sup> MΩ                                                                                                               |
| Vibration sine                              | IEC 60512 test 6d     | 10 – 2000 Hz<br>20 g                                                                                                               | 10 – 2000 Hz<br>20 g                                                                                                               |
| Contact interruption (while vibration test) | IEC 60512 test 2e     | < 1 μs                                                                                                                             | < 1 μs                                                                                                                             |
| Shock halfsine                              | IEC 60512 test 6c     | 50 g<br>11 ms                                                                                                                      | 50 g<br>11 ms                                                                                                                      |
| Contact interruption (while shock test)     | IEC 60512 test 2e     | < 1 μs                                                                                                                             | < 1 μs                                                                                                                             |
| Mechanical operation (mating cycles)        | IEC 60512 test 9a     | Class 1: 500 mating cycles<br>Class 2: 400 mating cycles                                                                           | Class 1: 500 mating cycles<br>Class 2: 400 mating cycles                                                                           |
| Insertion and withdrawal force              | IEC 60512 test 13b    | D: 40 N max.<br>E: 60 N max.                                                                                                       | 32 cont.: 50 N max.<br>48 cont.: 75 N max.                                                                                         |
| Gauge retention force per contact           | IEC 60512 test 16e    | > 0.15 N                                                                                                                           | > 0.2 N                                                                                                                            |

## DIN 41612 / IEC 60603-2 Connectors

### Electrical and Mechanical Characteristics



|                                                     | Standard    | D, E                                                                    | F                                                 |
|-----------------------------------------------------|-------------|-------------------------------------------------------------------------|---------------------------------------------------|
| Number of Pins                                      |             | 32, 48                                                                  | 32, 48                                            |
| <b>Process-conditions</b>                           |             |                                                                         |                                                   |
| Solder temperature max.                             | IEC 68-2-20 |                                                                         |                                                   |
| Hand soldering temperature max.                     |             | 3.5 s at 350 °C                                                         | 3.5 s at 350 °C                                   |
| Dip soldering temperature max.                      |             | 10 s at 260 °C                                                          | 10 s at 260 °C                                    |
| Warning                                             |             | Soldering of pressfit connectors not recommended.                       | Soldering of pressfit connectors not recommended. |
| <b>Materials</b>                                    |             |                                                                         |                                                   |
| Housing:<br>Plastic material (symbol)               |             | PBT GF                                                                  | PC GF (Type F)<br>PBT GF (Type F flat)            |
| CTI value                                           | IEC 60112   | 225                                                                     | 175 (Type F)<br>250 (Type F flat)                 |
| UL flame rating                                     |             | UL 94 V-0                                                               | UL 94 V-1(Type F)<br>UL 94 V-0 (Type F flat)      |
| UL file                                             |             | E47960                                                                  | E41613 (Type F)<br>E41938 (Type F flat)           |
| <b>Contact and mating area</b>                      |             |                                                                         |                                                   |
| Base material                                       |             | Cu alloy                                                                | Cu alloy                                          |
| Plating                                             |             | Gold plated                                                             | Gold plated                                       |
| <b>Termination area</b>                             |             |                                                                         |                                                   |
| Base material                                       |             | Cu alloy                                                                | Cu alloy                                          |
| Solder, pressfit and THR                            |             | Sn                                                                      | Sn                                                |
| <b>Environment compatibility</b>                    |             |                                                                         |                                                   |
| Recycling                                           |             | no flame-retardent additives, no toxic additives, allows easy recycling |                                                   |
| <b>Product-approval and customer specific tests</b> |             |                                                                         |                                                   |
| cUL                                                 |             | E84703                                                                  | E84703                                            |

## DIN 41612 / IEC 60603-2 Connectors

### Electrical and Mechanical Characteristics



|                                                | Standard                 | H11                                                                                                                            | H15, H-F<br>(data only for Contacts)                                                                                           |
|------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Number of Pins                                 |                          | 11                                                                                                                             | 15, 7/24 (7 Power/24 Signal)                                                                                                   |
| <b>Technical data</b>                          |                          |                                                                                                                                |                                                                                                                                |
| Climate Category                               | DIN EN 60068-1<br>test b | 55/125/56                                                                                                                      | 55/125/56                                                                                                                      |
| Temperature range                              |                          | -55/125 °C                                                                                                                     | -55/125 °C                                                                                                                     |
| Current rating                                 | IEC60512<br>test 5b      | Ambient temperature<br>20 °C 15 A<br>70 °C 11 A<br>100 °C 7.5 A                                                                | Ambient temperature<br>20 °C 15 A<br>70 °C 11 A<br>100 °C 7.5 A                                                                |
| Clearance and creepage<br>distance             |                          | contact - contact 4.5 mm (clearance)<br>contact - ground 4.5 mm (clearance)<br>contact - contact 8 mm<br>contact - ground 8 mm | contact - contact 4.5 mm (clearance)<br>contact - ground 4.5 mm (clearance)<br>contact - contact 8 mm<br>contact - ground 8 mm |
| CTI value                                      | IEC 60112                | 175                                                                                                                            | 175<br>225 (H11 solder, pressfit)                                                                                              |
| Voltage rating                                 | IEC 60664                | Has to be determined according<br>to customer application (degree of<br>environmental pollution) according<br>to IEC 60664     | Has to be determined according<br>to customer application (degree of<br>environmental pollution) according<br>to IEC 60664     |
| Dielectric strength                            | IEC 60512                | contact - contact 3100 V <sub>rms</sub><br>contact - ground 3100 V <sub>rms</sub>                                              | contact - contact 3100 V <sub>rms</sub><br>contact - ground 3100 V <sub>rms</sub>                                              |
| Contact resistance                             | IEC 60512<br>test 2a     | < 8 mΩ                                                                                                                         | < 8 mΩ                                                                                                                         |
| Insulation resistance                          | IEC 60512<br>test 3a     | > 10 <sup>6</sup> MΩ                                                                                                           | > 10 <sup>6</sup> MΩ                                                                                                           |
| Vibration sine                                 | IEC 60512<br>test 6d     | 10 – 2000 Hz<br>20 g                                                                                                           | 10 – 2000 Hz<br>20 g                                                                                                           |
| Contact interruption (while<br>vibration test) | IEC 60512<br>test 2e     | < 1 μs                                                                                                                         | < 1 μs                                                                                                                         |
| Shock halfsine                                 | IEC 60512<br>test 6c     | 50 g<br>11 ms                                                                                                                  | 50 g<br>11 ms                                                                                                                  |
| Contact interruption (while<br>shock test)     | IEC 60512<br>test 2e     | < 1 μs                                                                                                                         | < 1 μs                                                                                                                         |
| Mechanical operation<br>(mating cycles)        | IEC 60512<br>test 9a     | Class 1: 500 mating cycles                                                                                                     | Class 1: 500 mating cycles                                                                                                     |
| Insertion and withdrawal<br>force              | IEC 60512<br>test 13b    | max. 80 N                                                                                                                      | max. 90 N                                                                                                                      |
| Gauge retention force<br>per contact           | IEC 60512<br>test 16e    | > 0.2 N                                                                                                                        | > 0.2 N                                                                                                                        |



|                                              | Standard    | H11                                                                     | H15, H-F<br>(data only for Contacts)              |
|----------------------------------------------|-------------|-------------------------------------------------------------------------|---------------------------------------------------|
| Number of Pins                               |             | 11                                                                      | 15, 7/24 (7 Power/24 Signal)                      |
| Process-conditions                           |             |                                                                         |                                                   |
| Solder temperature max.                      | IEC 68-2-20 |                                                                         |                                                   |
| Hand soldering temperature max.              |             | 3.5 s at 350 °C                                                         | 3.5 s at 350 °C                                   |
| Dip soldering temperature max.               |             | 10 s at 260 °C                                                          | 10 s at 260 °C                                    |
| Warning                                      |             | Soldering of pressfit connectors not recommended.                       | Soldering of pressfit connectors not recommended. |
| Materials                                    |             |                                                                         |                                                   |
| Housing:                                     |             | PC GF                                                                   | PC GF                                             |
| Plastic material (symbol)                    |             | LCP GF (Female Pressfit)                                                | PBT GF (H11 solder, pressfit)                     |
| CTI value                                    | IEC 60112   | 175                                                                     | 175<br>225 (H11 solder, pressfit)                 |
| UL flame rating                              |             | UL 94 V-1<br>UL 94 V-0 (Female Pressfit)                                | UL 94 V-1<br>UL 94 V-0 (H11 solder, pressfit)     |
| UL file                                      |             | E41613<br>E83005                                                        | E41613<br>E47960 (H11 solder, pressfit)           |
| Contact and mating area                      |             |                                                                         |                                                   |
| Base material                                |             | Cu alloy                                                                | Cu alloy                                          |
| Plating                                      |             | Silver plated                                                           | Silver plated                                     |
| Termination area                             |             |                                                                         |                                                   |
| Base material                                |             | Cu alloy                                                                | Cu alloy                                          |
| Plating                                      |             | Sn                                                                      | Sn                                                |
| Environment compatibility                    |             |                                                                         |                                                   |
| Recycling                                    |             | no flame-retardent additives, no toxic additives, allows easy recycling |                                                   |
| Product-approval and customer specific tests |             |                                                                         |                                                   |
| cUL                                          |             | E84703                                                                  | E84703                                            |



|                                             | Standard              | IDC                                                                                                               | Crimp                                                                                                             |
|---------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Number of Pins                              |                       | 64, 96                                                                                                            | 48, 96, 160                                                                                                       |
| <b>Technical data</b>                       |                       |                                                                                                                   |                                                                                                                   |
| Climate Category                            | DIN EN 60068-1 test b | 55/125/56                                                                                                         | 55/125/56                                                                                                         |
| Temperature range                           |                       | -55/125 °C                                                                                                        | -55/125 °C                                                                                                        |
| Current rating                              | IEC60512 test 5b      | Ambient temperature<br>20 °C 2.0 A<br>70 °C 1.6 A<br>100 °C 1.0 A                                                 | Ambient temperature<br>20 °C 2.0 A<br>70 °C 1.6 A<br>100 °C 1.0 A                                                 |
| Clearance and creepage distance             |                       | contact - contact 1.2 mm<br>contact - ground 1.8 mm<br>contact - ground 1.6 mm (clearance)                        | contact - contact 1.2 mm<br>contact - ground 1.8 mm<br>contact - ground 1.6 mm (clearance)                        |
| CTI value                                   | IEC 60112             | 175 (Type C 96)<br>225                                                                                            | 225 (Type C/2)<br>250                                                                                             |
| Voltage rating                              | IEC 60664             | Has to be determined according to customer application (degree of environmental pollution) according to IEC 60664 | Has to be determined according to customer application (degree of environmental pollution) according to IEC 60664 |
| Dielectric strength                         | IEC 60512             | contact - contact 1000 V <sub>rms</sub><br>contact - ground 1550 V <sub>rms</sub>                                 | contact - contact 1000 V <sub>rms</sub><br>contact - ground 1550 V <sub>rms</sub>                                 |
| Contact resistance                          | IEC 60512 test 2a     | < 20 mΩ                                                                                                           | < 20 mΩ                                                                                                           |
| Insulation resistance                       | IEC 60512 test 3a     | > 10 <sup>6</sup> MΩ                                                                                              | > 10 <sup>6</sup> MΩ                                                                                              |
| Vibration sine                              | IEC 60512 test 6d     | 10 – 2000 Hz<br>20 g                                                                                              | 10 – 2000 Hz<br>20 g                                                                                              |
| Contact interruption (while vibration test) | IEC 60512 test 2e     | < 1 μs                                                                                                            | < 1 μs                                                                                                            |
| Shock halfsine                              | IEC 60512 test 6c     | 50 g<br>11 ms                                                                                                     | 50 g<br>11 ms                                                                                                     |
| Contact interruption (while shock test)     | IEC 60512 test 2e     | < 1 μs                                                                                                            | < 1 μs                                                                                                            |
| Mechanical operation (mating cycles)        | IEC 60512 test 9a     | Class 1: 500 mating cycles<br>Class 2: 400 mating cycles                                                          | Class 1: 500 mating cycles<br>Class 2: 400 mating cycles                                                          |
| Insertion and withdrawal force              | IEC 60512 test 13b    | 64 cont.: 60 N max.<br>96 cont.: 90 N max.                                                                        | 48 cont.: 45 N max.<br>96 cont.: 90 N max.<br>160 cont.: 110 N max.                                               |
| Gauge retention force per contact           | IEC 60512 test 16e    | > 0.15 N                                                                                                          | > 0.15 N                                                                                                          |

### Attention

The electrical and thermal variables may be influenced by whichever cable is used.

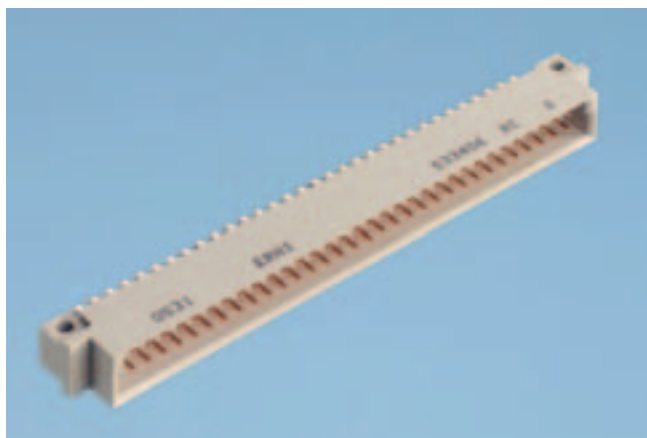
## DIN 41612 / IEC 60603-2 Connectors

### Electrical and Mechanical Characteristics

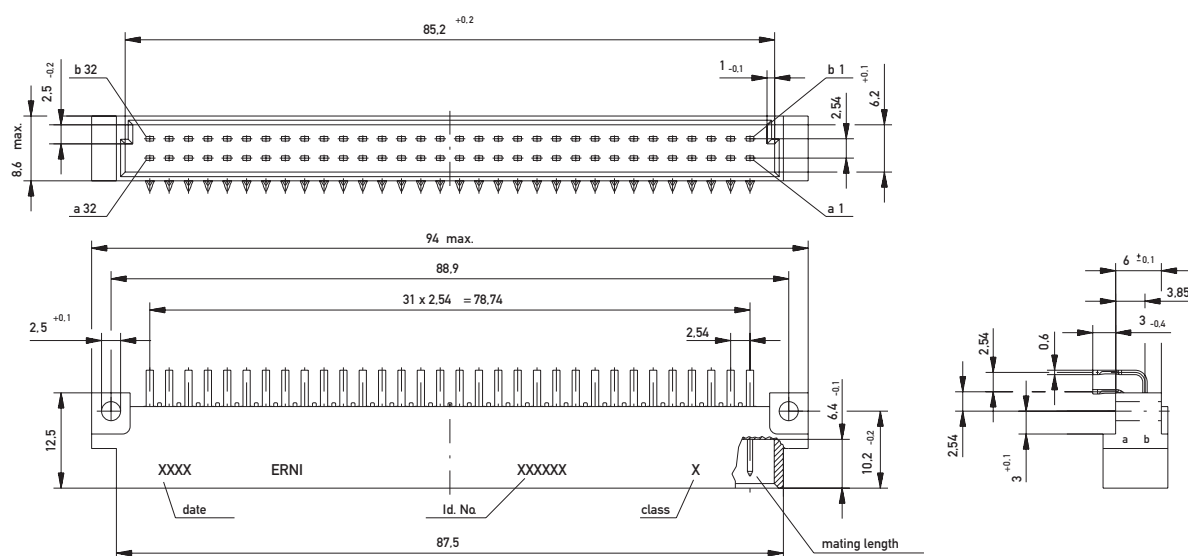


|                                                                                    | Standard  | IDC                                                                     | Crimp                       |
|------------------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------|-----------------------------|
| Number of Pins                                                                     |           | 64, 96                                                                  | 48, 96, 160                 |
| Process-conditions                                                                 |           |                                                                         |                             |
| Processing temperature                                                             |           | 0/55 °C                                                                 | 0/55 °C                     |
| Materials                                                                          |           |                                                                         |                             |
| Housing:<br>Plastic material (symbol)                                              |           | PC GF (Type C 96)<br>PBT GF                                             | PBT GF                      |
| CTI value                                                                          | IEC 60112 | 175 (Type C 96)<br>225                                                  | 225 (Type C/2)<br>250       |
| UL flame rating                                                                    |           | UL 94 V-1 (Type C 96)<br>UL 94 V-0                                      | UL 94 V-0                   |
| UL file                                                                            |           | E41613 (Type C 96)<br>E47960                                            | E47960 (Type C/2)<br>E41938 |
| Contact and mating area                                                            |           |                                                                         |                             |
| Base material                                                                      |           | Cu alloy                                                                | Cu alloy                    |
| Plating                                                                            |           | Gold plated                                                             | Gold plated                 |
| Termination area                                                                   |           |                                                                         |                             |
| Base material                                                                      |           | Cu alloy                                                                | Cu alloy                    |
| Plating                                                                            |           | Sn                                                                      | Sn                          |
| Environment compatibility                                                          |           |                                                                         |                             |
| Recycling                                                                          |           | no flame-retardent additives, no toxic additives, allows easy recycling |                             |
| Product-approval and customer specific tests                                       |           |                                                                         |                             |
| cUL                                                                                |           | E84703                                                                  |                             |
| Attention                                                                          |           |                                                                         |                             |
| The electrical and thermal variables may be influenced by whichever cable is used. |           |                                                                         |                             |

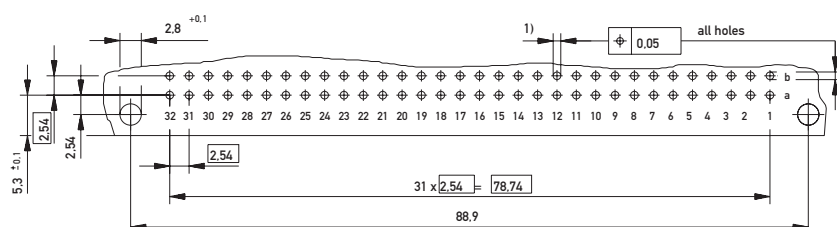
### Type B Male



## Dimensional Drawing Pressfit

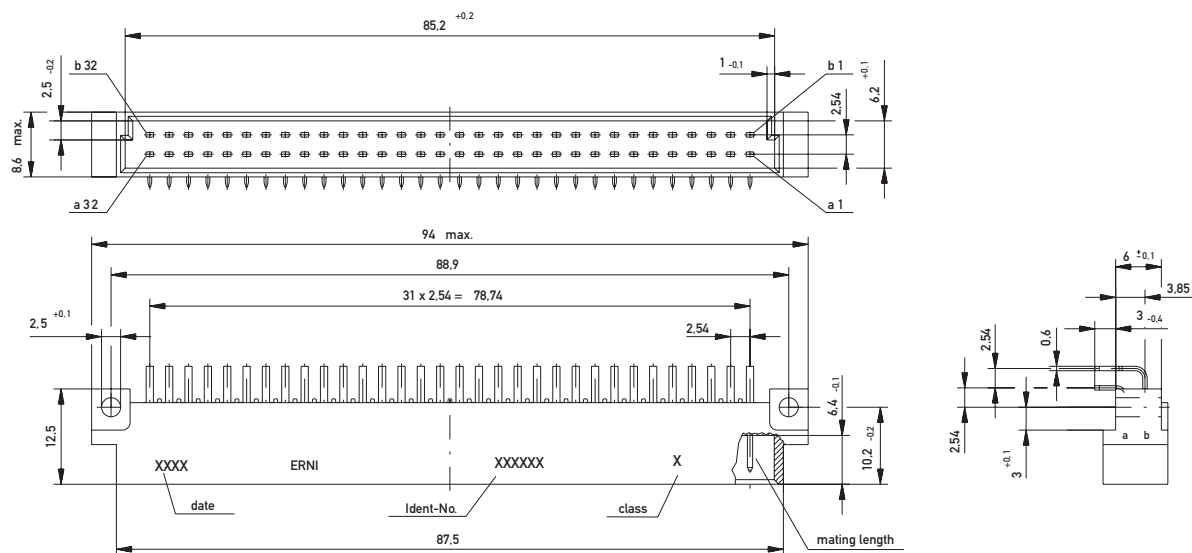


### PCB drillhole pattern

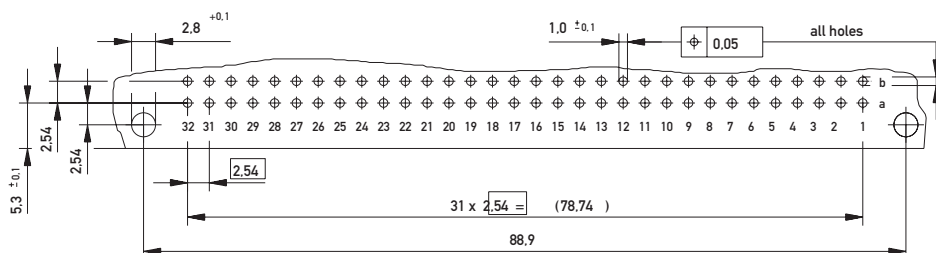


- 1)  $\varnothing 1,0 - 0,06$  Diameter of finished plated-through hole  
 $\varnothing 1,15 \pm 0,025$  Diameter of drilled hole

### Dimensional Drawing Solder



### PCB drillhole pattern

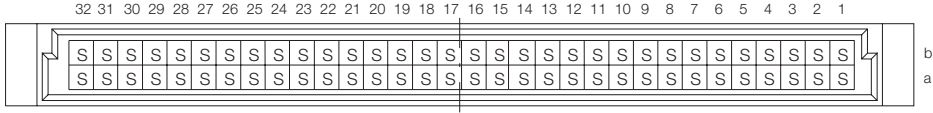
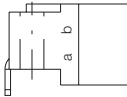
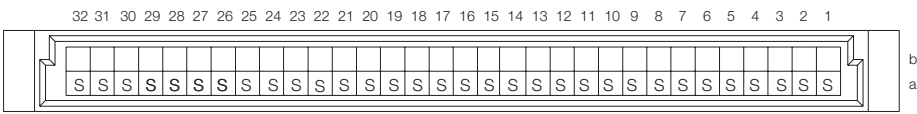
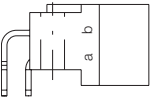
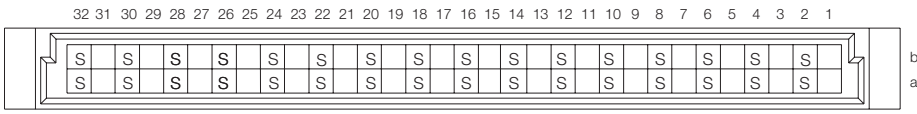
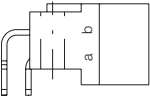
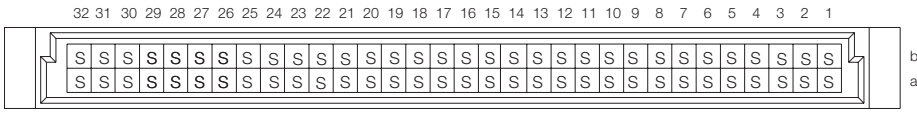


# DIN 41612 / IEC 60603-2 Connectors

## Type B Male



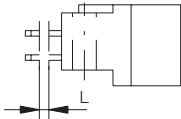
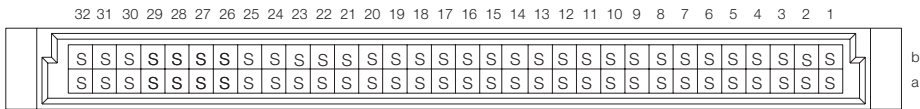
### Ordering Information

| No. of Pins                                                                         | Termination                                                                          | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------|----------------|-------|---------------|---------------|
|    |    |              |                |       |               |               |
|                                                                                     | Pressfit                                                                             | 3 mm         | 0.6 x 0.6 mm   | 2     | 1.5 mm        | <b>013130</b> |
|    |    |              |                |       |               |               |
|                                                                                     | Solder                                                                               | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>533208</b> |
|                                                                                     | Solder                                                                               | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>533408</b> |
|                                                                                     | Solder with Clip                                                                     | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>043606</b> |
|  |  |              |                |       |               |               |
|                                                                                     | Solder                                                                               | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>533207</b> |
| 32                                                                                  | Solder                                                                               | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>533407</b> |
|  |  |              |                |       |               |               |
|                                                                                     | Solder                                                                               | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>533206</b> |
|                                                                                     | Solder                                                                               | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>533406</b> |
| 64                                                                                  | Solder with Clip                                                                     | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>023545</b> |

DIN 41612 / IEC 60603-2 Connectors  
Type B Male



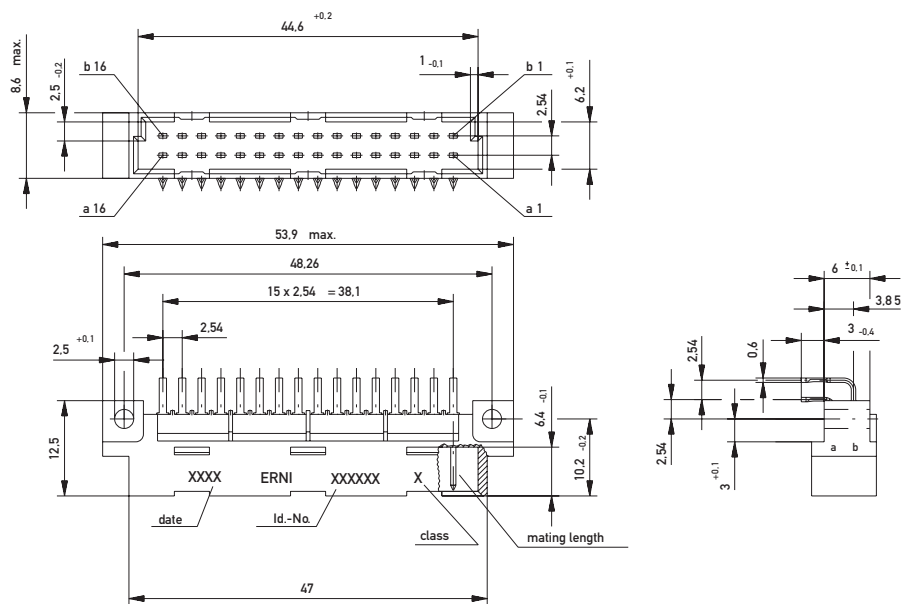
Ordering Information

| No. of Pins                                                                                                                                                                                         | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|-------------|
| <div><div></div><div></div></div> |             |              |                |       |               |             |
| 64                                                                                                                                                                                                  | Solder      | 3.8 mm       | 0.6 x 0.6 mm   | 1     | –             | 414377      |
| 64                                                                                                                                                                                                  | Solder      | 3.8 mm       | 0.6 x 0.6 mm   | 2     | –             | 414378      |
| 64                                                                                                                                                                                                  | Solder      | 12 mm        | 0.6 x 0.6 mm   | 1     | –             | 414379      |
| 64                                                                                                                                                                                                  | Solder      | 12 mm        | 0.6 x 0.6 mm   | 2     | –             | 414380      |

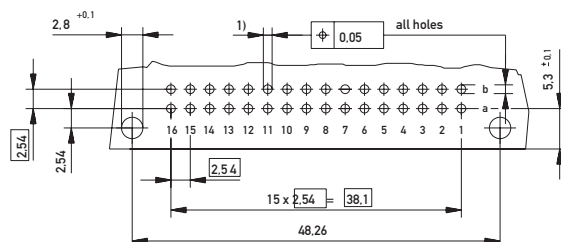
### Type B/2 Male



## Dimensional Drawing Pressfit



### PCB drillhole pattern



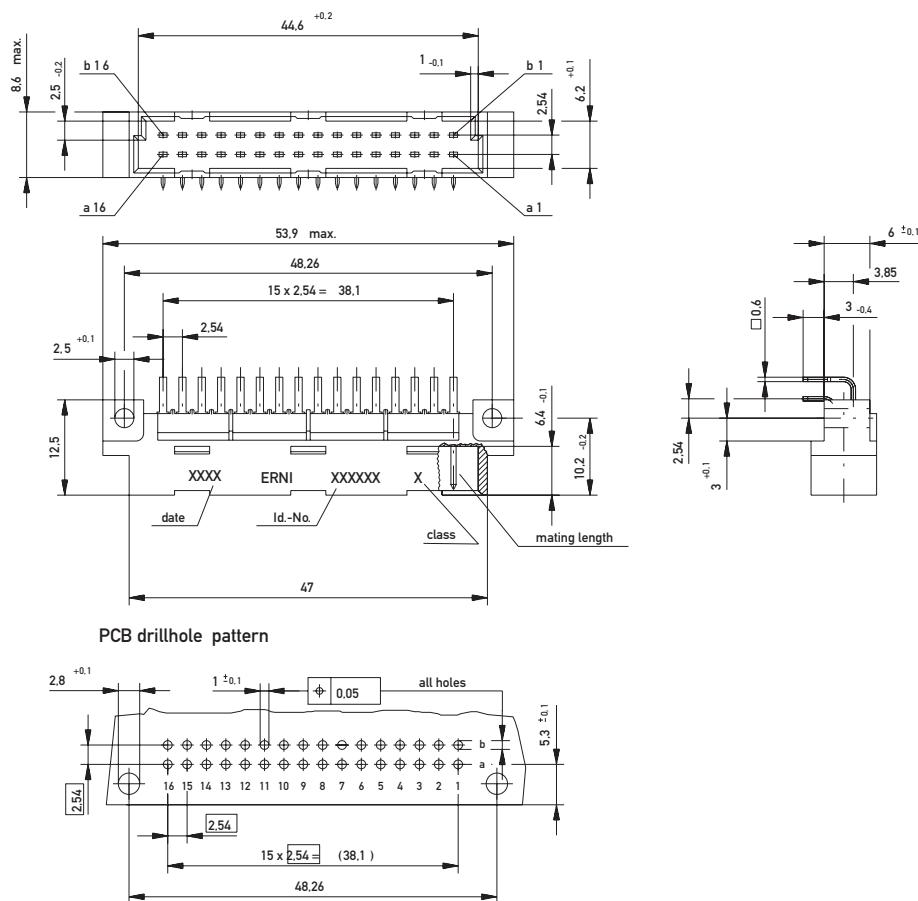
- 1)  $\varnothing 1.0 - 0.06$  Diameter of finished plated-through hole  
 $\varnothing 1.15 \pm 0.025$  Diameter of drilled hole

# DIN 41612 / IEC 60603-2 Connectors

## Type B/2 Male



### Dimensional Drawing Solder



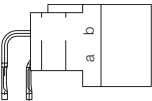
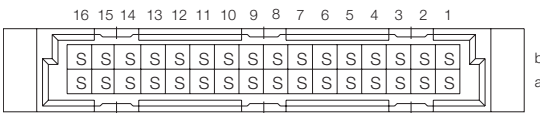
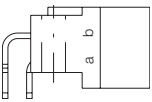
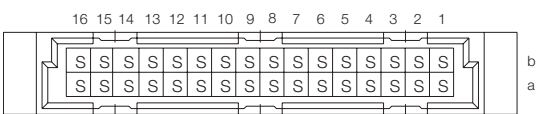
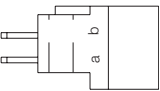
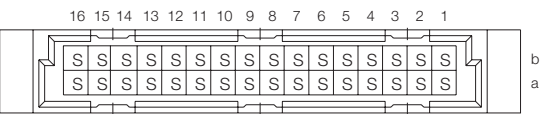


# DIN 41612 / IEC 60603-2 Connectors

## Type B/2 Male



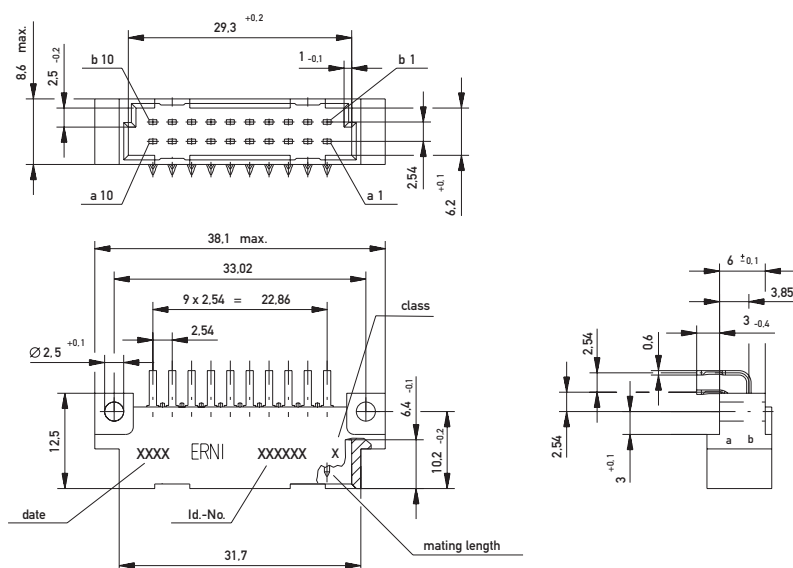
### Ordering Information

| No. of Pins                                                                         | Termination                                                                         | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|-------|---------------|---------------|
|    |    |              |                |       |               |               |
|                                                                                     | Pressfit                                                                            | 3 mm         | 0.6 x 0.6 mm   | 2     | 1.5 mm        | <b>013135</b> |
|    |    |              |                |       |               |               |
|                                                                                     | Solder                                                                              | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>413852</b> |
| 32                                                                                  | Solder                                                                              | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>413853</b> |
|  |  |              |                |       |               |               |
|                                                                                     | Solder                                                                              | 3.8 mm       | 0.6 x 0.6 mm   | 1     | —             | <b>594056</b> |
|                                                                                     | Solder                                                                              | 3.8 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>594613</b> |
| 32                                                                                  | Solder                                                                              | 12 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>594614</b> |

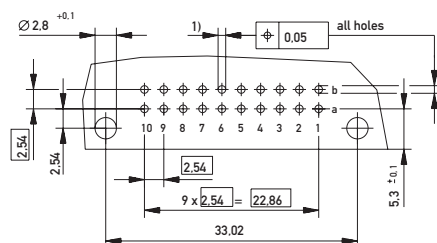
**Type B/3 Male**



## Dimensional Drawing Pressfit



### PCB drillhole pattern



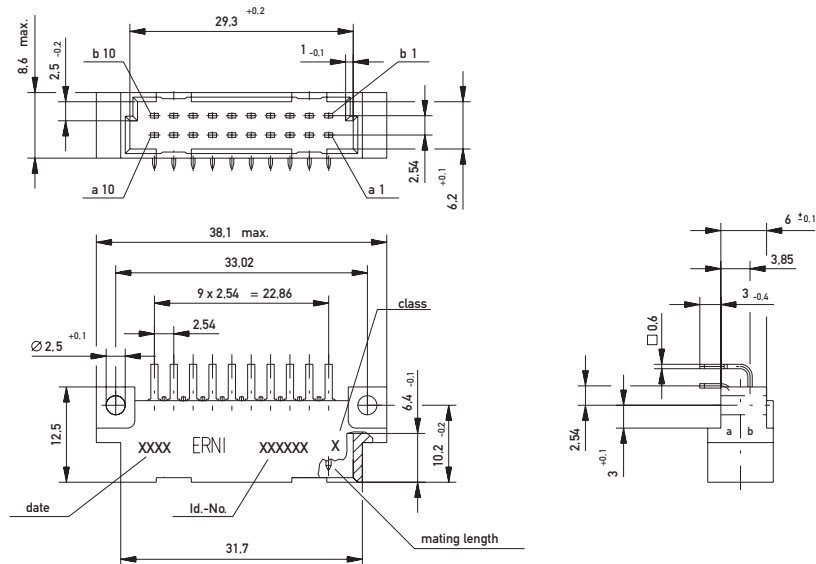
- 1)  $\varnothing 1.0^{+0.09}_{-0.06}$  Diameter of finished plated-through hole  
 $\varnothing 1.15 \pm 0.025$  Diameter of drilled hole

# DIN 41612 / IEC 60603-2 Connectors

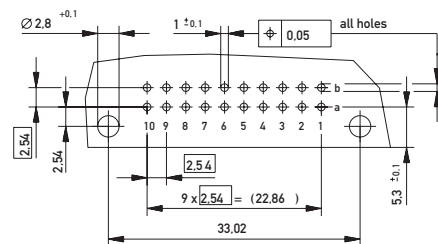
## Type B/3 Male



### Dimensional Drawing Solder



### PCB drillhole pattern

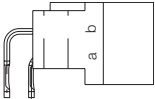
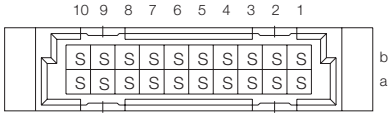
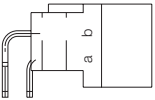
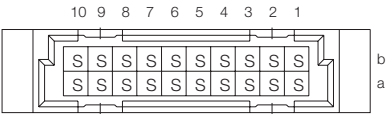


DIN 41612 / IEC 60603-2 Connectors

Type B/3 Male

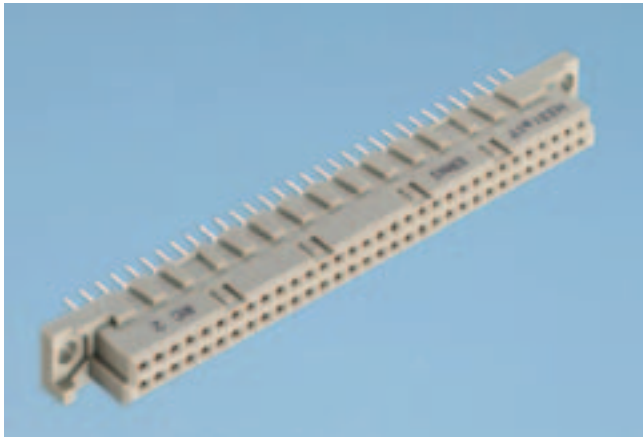


Ordering Information

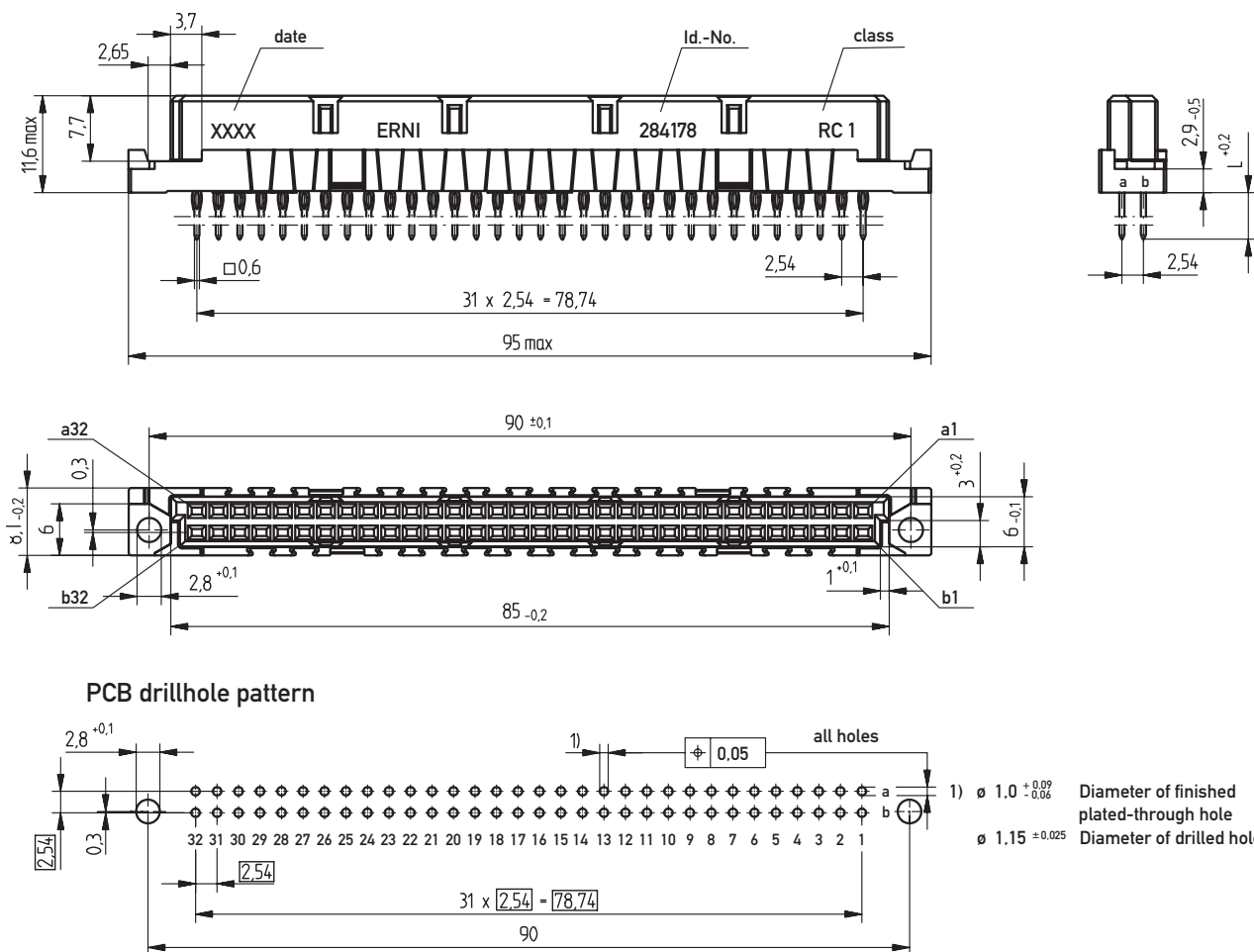
| No. of Pins                                                                       | Termination                                                                       | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------|----------------|-------|---------------|-------------|
|  |  |              |                |       |               |             |
|                                                                                   | Pressfit                                                                          | 3 mm         | 0.6 x 0.6 mm   | 2     | 1.5 mm        | 013133      |
|  |  |              |                |       |               |             |
|                                                                                   | Solder                                                                            | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 424207      |

# DIN 41612 / IEC 60603-2 Connectors

## Type B Female



### Dimensional Drawing Pressfit

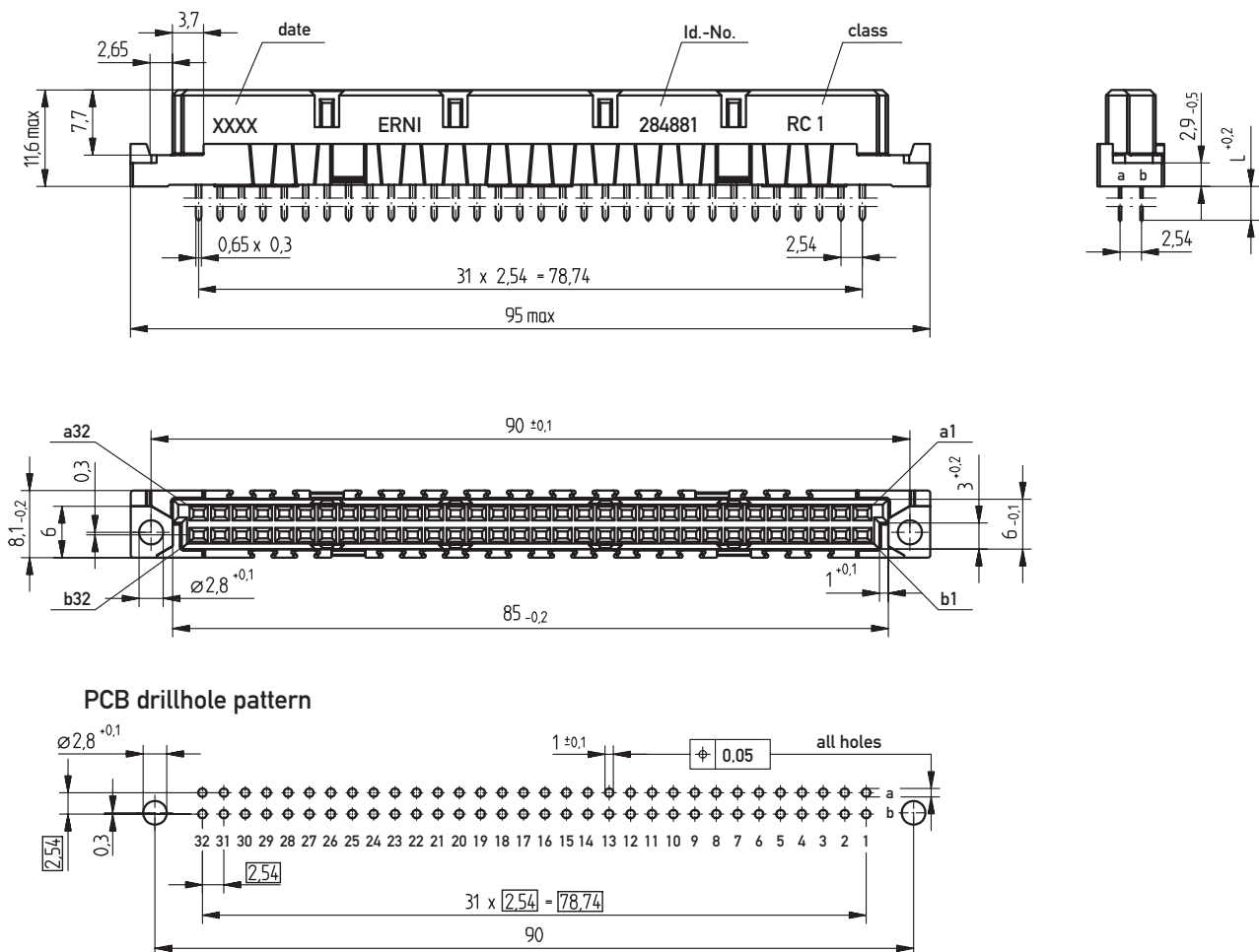


# DIN 41612 / IEC 60603-2 Connectors

## Type B Female



### Dimensional Drawing Solder

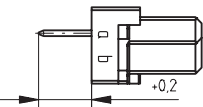
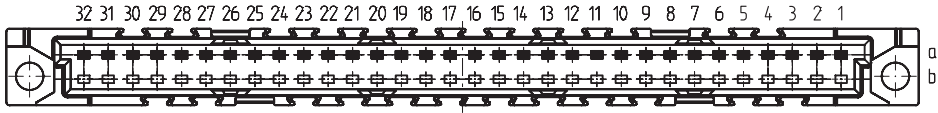
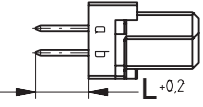
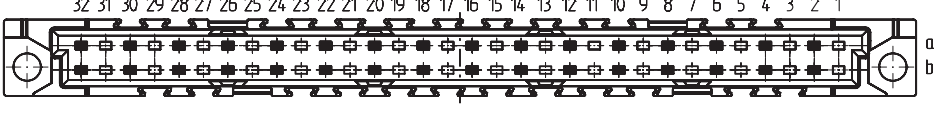
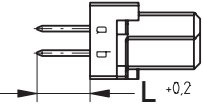
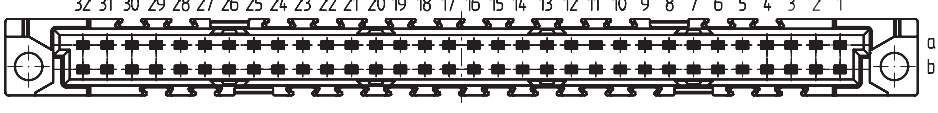


# DIN 41612 / IEC 60603-2 Connectors

## Type B Female



### Ordering Information

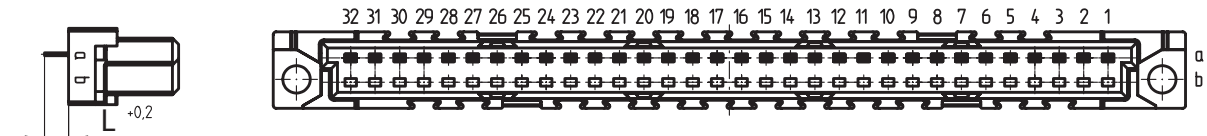
| No. of Pins                                                                         | Termination                  | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number                                                                          |
|-------------------------------------------------------------------------------------|------------------------------|--------------|----------------|-------|---------------|--------------------------------------------------------------------------------------|
|    | Pressfit                     | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 2.5 mm        |    |
|                                                                                     |                              |              |                |       |               | <b>254848</b>                                                                        |
|    | Pressfit                     | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 2.5 mm        |    |
|                                                                                     |                              |              |                |       |               | <b>254847</b>                                                                        |
|  | Pressfit                     | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 2.5 mm        |  |
|                                                                                     |                              |              |                |       |               | <b>254846</b>                                                                        |
|                                                                                     |                              |              |                |       |               | <b>284178</b>                                                                        |
|                                                                                     |                              | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>254878</b>                                                                        |
|                                                                                     |                              |              |                |       |               | <b>254976</b>                                                                        |
|                                                                                     |                              |              |                |       |               | <b>284177</b>                                                                        |
|                                                                                     | Pressfit<br>w. Transfer Zone | 17 mm        | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>284179</b>                                                                        |

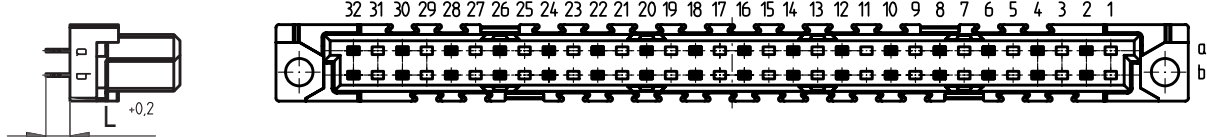
# DIN 41612 / IEC 60603-2 Connectors

## Type B Female



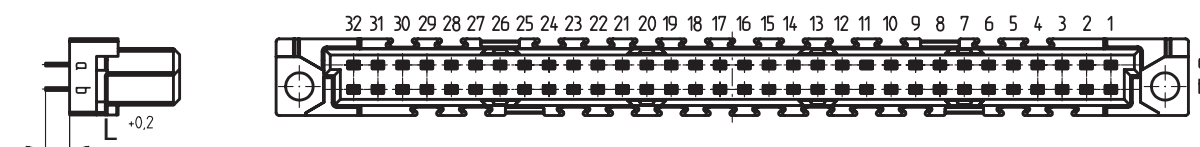
### Ordering Information

| No. of Pins                                                                        | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|------------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|-------------|
|  |             |              |                |       |               |             |
| 32                                                                                 | Solder      | 2.5 mm       | 0.65 x 0.3 mm  | 2     | —             | 284873      |
| 32                                                                                 | Solder      | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | 284874      |
| 32                                                                                 | Solder      | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 284651      |
| 32                                                                                 | Solder      | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | 284870      |
| 32                                                                                 | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 284871      |

|                                                                                     |        |        |               |   |   |        |
|-------------------------------------------------------------------------------------|--------|--------|---------------|---|---|--------|
|  |        |        |               |   |   |        |
| 32                                                                                  | Solder | 2.5 mm | 0.65 x 0.3 mm | 2 | — | 284875 |
| 32                                                                                  | Solder | 4 mm   | 0.65 x 0.3 mm | 2 | — | 284164 |
| 32                                                                                  | Solder | 13 mm  | 0.6 x 0.6 mm  | 1 | — | 294694 |

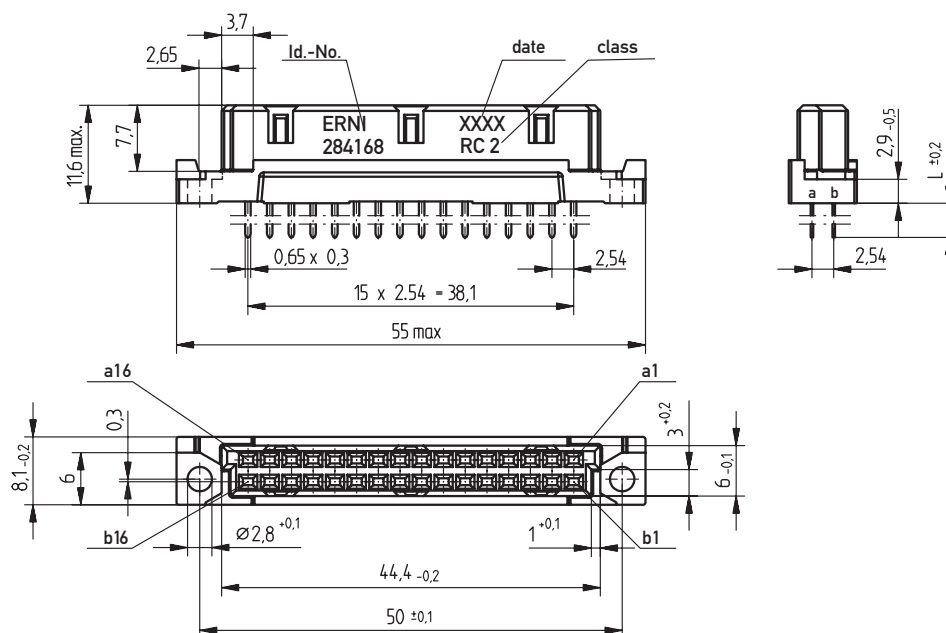


### Ordering Information

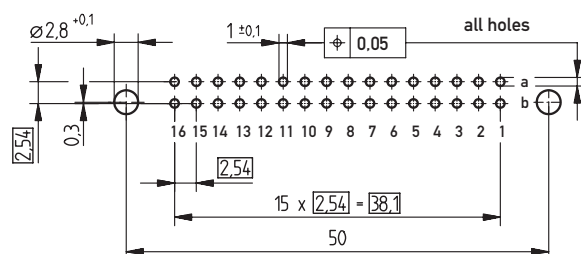
| No. of Pins                                                                        | Termination                | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|------------------------------------------------------------------------------------|----------------------------|--------------|----------------|-------|---------------|-------------|
|  |                            |              |                |       |               |             |
| 64                                                                                 | Solder                     | 2.5 mm       | 0.65 x 0.3 mm  | 1     | —             | 284883      |
| 64                                                                                 | Solder                     | 2.5 mm       | 0.65 x 0.3 mm  | 2     | —             | 284650      |
| 64                                                                                 | Solder with Clip           | 2.5 mm       | 0.65 x 0.3 mm  | 2     | —             | 284882      |
| 64                                                                                 | Solder                     | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | 284881      |
| 64                                                                                 | Solder                     | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 284166      |
| 64                                                                                 | Solder with Clip           | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 284880      |
| 64                                                                                 | Solder                     | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | 284876      |
| 64                                                                                 | Solder                     | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 284165      |
| 64                                                                                 | Solder<br>w. Transfer Zone | 17 mm        | 0.6 x 0.6 mm   | 2     | —             | 284878      |
| 64                                                                                 | Solder<br>w. Transfer Zone | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 284877      |



### Dimensional Drawing Solder



### PCB drillhole pattern



# DIN 41612 / IEC 60603-2 Connectors

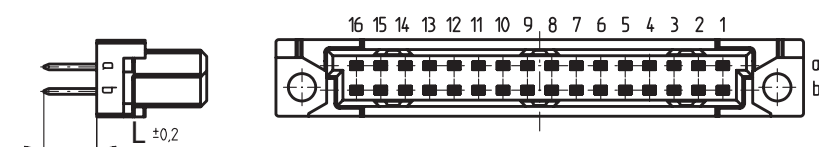
## Type B/2 Female



### Ordering Information

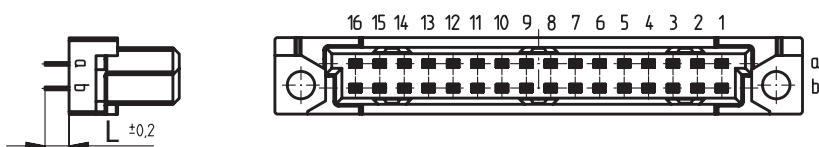
| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
|-------------|-------------|--------------|----------------|-------|---------------|-------------|



|    |                              |        |              |   |      |               |
|----|------------------------------|--------|--------------|---|------|---------------|
| 32 | Pressfit                     | 5.5 mm | 0.6 x 0.6 mm | 2 | 3 mm | <b>284891</b> |
| 32 | Pressfit<br>w. Transfer Zone | 13 mm  | 0.6 x 0.6 mm | 2 | 3 mm | <b>284319</b> |
| 32 | Pressfit<br>w. Transfer Zone | 17 mm  | 0.6 x 0.6 mm | 2 | 3 mm | <b>284895</b> |



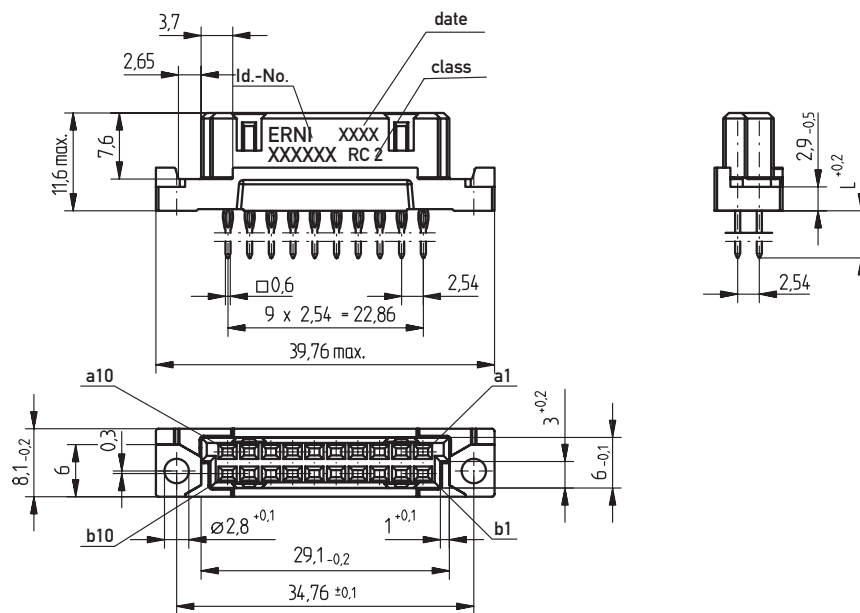
|    |        |        |               |   |   |               |
|----|--------|--------|---------------|---|---|---------------|
| 32 | Solder | 2.5 mm | 0.65 x 0.3 mm | 2 | — | <b>284886</b> |
| 32 | Solder | 4 mm   | 0.65 x 0.3 mm | 1 | — | <b>284888</b> |
| 32 | Solder | 4 mm   | 0.65 x 0.3 mm | 2 | — | <b>284168</b> |
| 32 | Solder | 13 mm  | 0.6 x 0.6 mm  | 1 | — | <b>284889</b> |
| 32 | Solder | 13 mm  | 0.6 x 0.6 mm  | 2 | — | <b>284167</b> |

# DIN 41612 / IEC 60603-2 Connectors

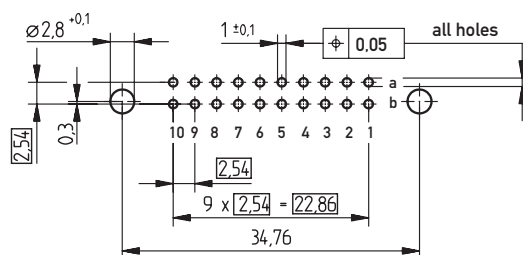
## Type B/3 Female



### Dimensional Drawing Pressfit



### PCB drillhole pattern



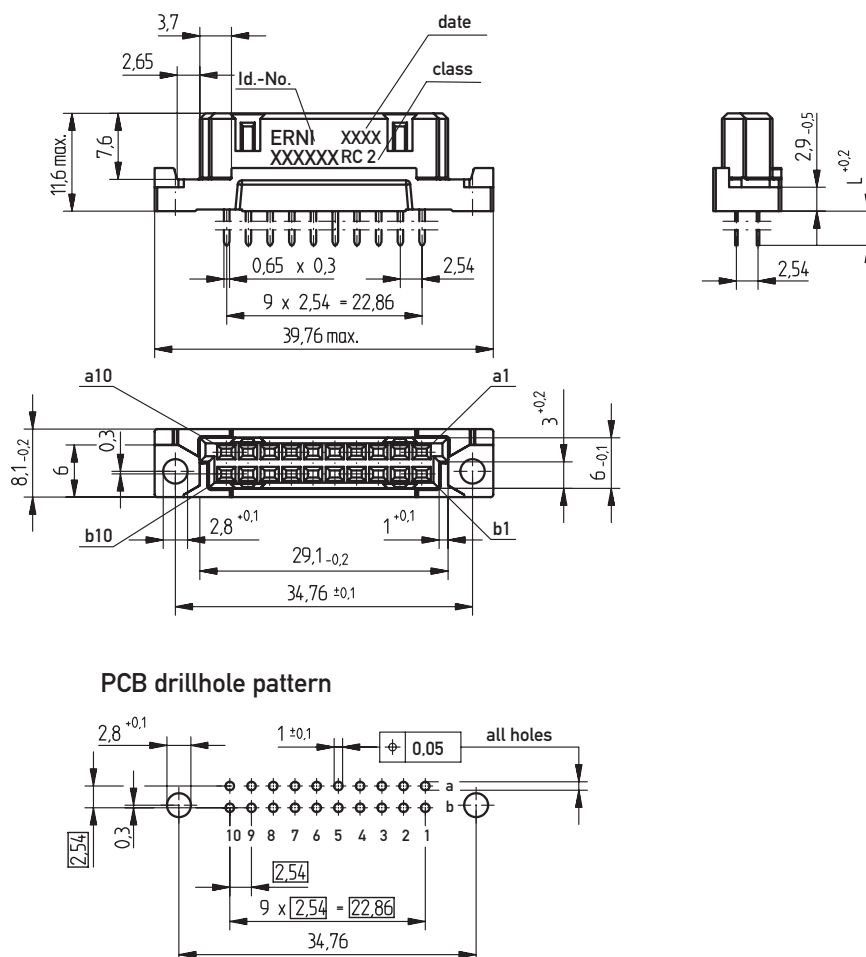
- 1)  $\varnothing 1.0 \pm 0.09$  Diameter of finished plated-through hole  
 $\varnothing 1.15 \pm 0.025$  Diameter of drilled hole

# DIN 41612 / IEC 60603-2 Connectors

## Type B/3 Female



### Dimensional Drawing Solder

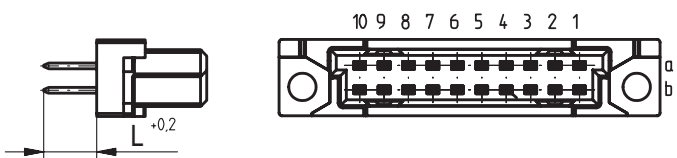
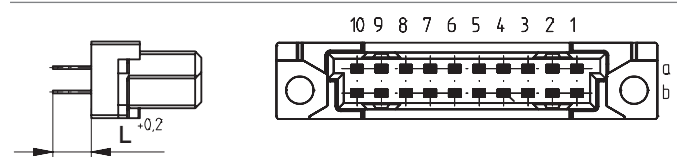


# DIN 41612 / IEC 60603-2 Connectors

## Type B/3 Female



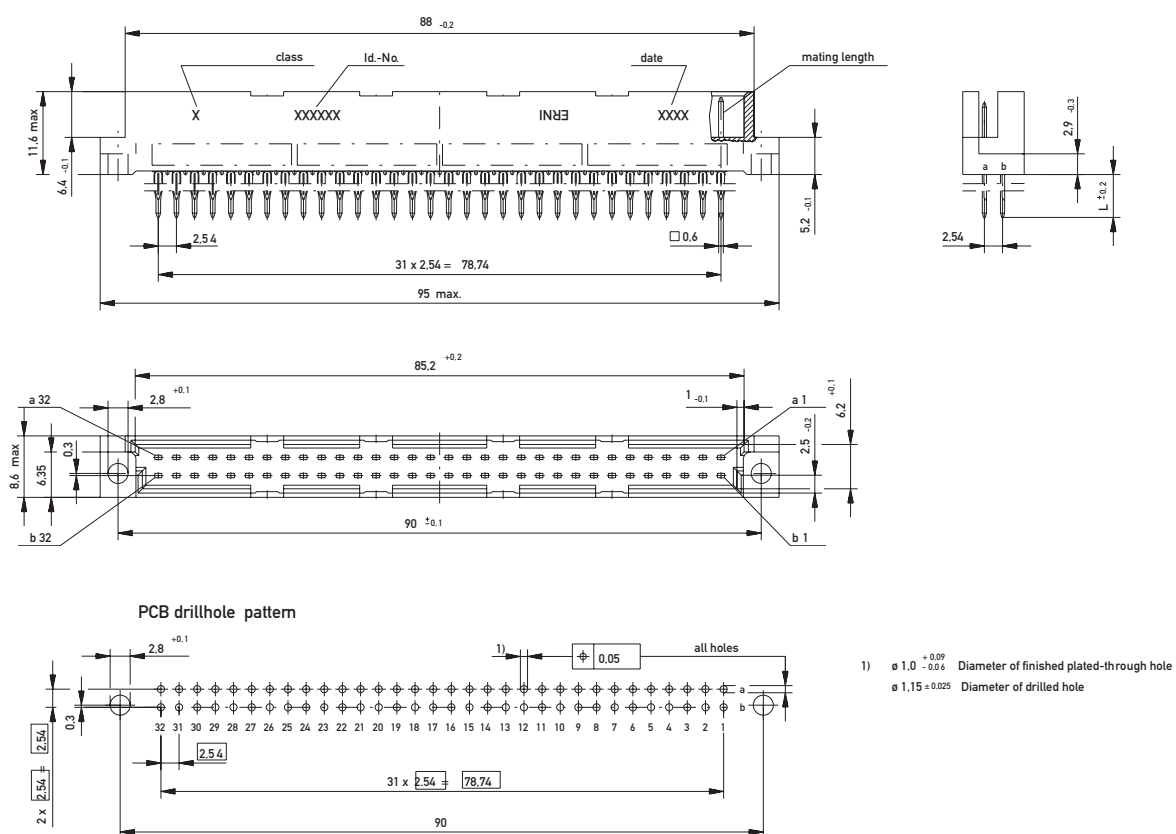
### Ordering Information

| No. of Pins                                                                       | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-----------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|---------------|
|  |             |              |                |       |               |               |
| 20                                                                                | Pressfit    | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | <b>284418</b> |
| 20                                                                                | Pressfit    | 17 mm        | 0.6 x 0.6 mm   | 2     | 3 mm          | <b>284896</b> |
|  |             |              |                |       |               |               |
| 20                                                                                | Solder      | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | <b>254370</b> |
| 20                                                                                | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>284169</b> |

### Type Q Male



### Dimensional Drawing Pressfit Type Q



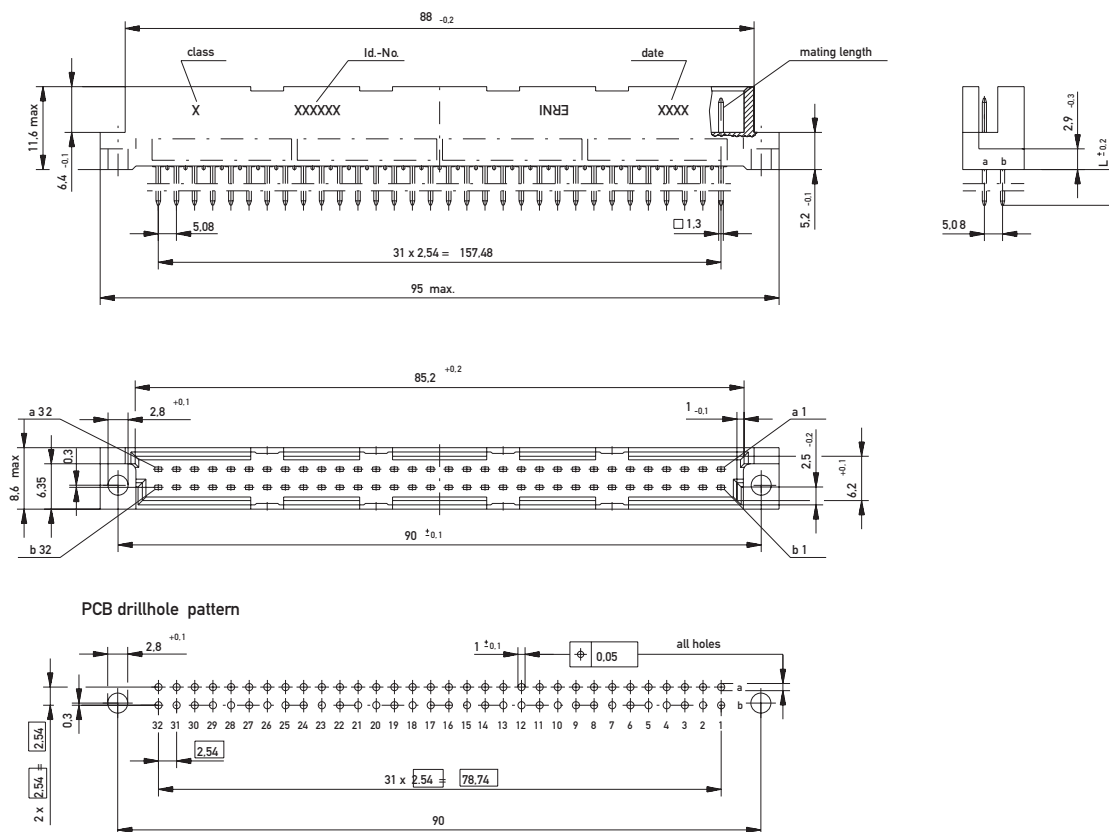


# DIN 41612 / IEC 60603-2 Connectors

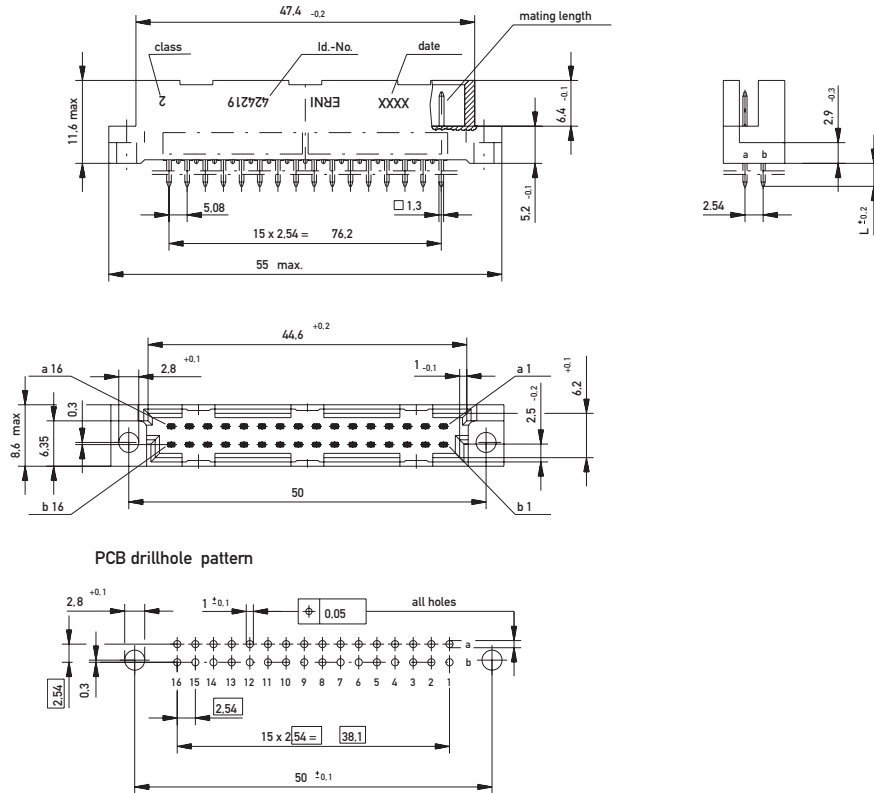
## Type Q Male



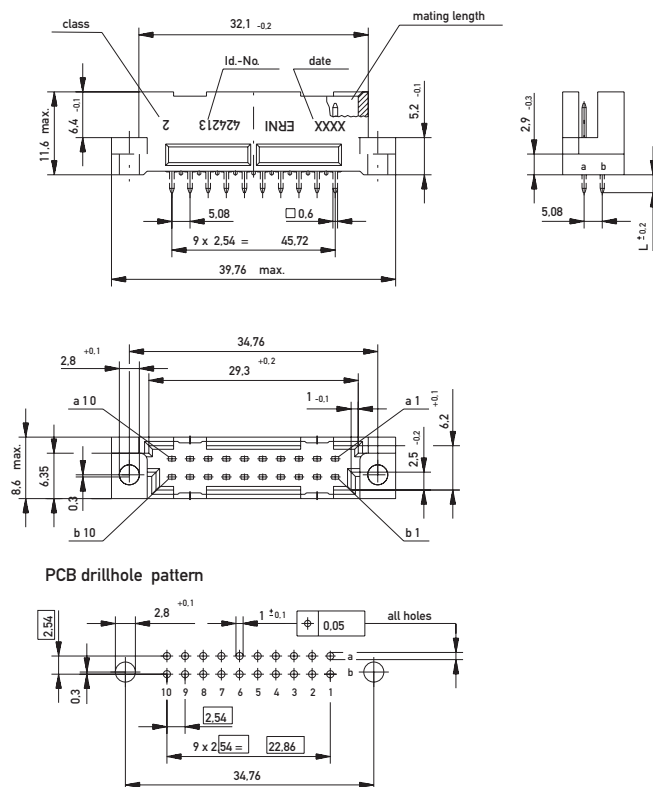
### Dimensional Drawing Solder Type Q



### Dimensional Drawing Solder Type Q/2



### Dimensional Drawing Solder Type Q/3



### Ordering Information

| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
|-------------|-------------|--------------|----------------|-------|---------------|-------------|

|    |                              |       |              |   |        |               |
|----|------------------------------|-------|--------------|---|--------|---------------|
|    |                              |       |              |   |        |               |
| 64 | Pressfit                     | 6 mm  | 0.6 x 0.6 mm | 2 | 2.5 mm | <b>593952</b> |
| 64 | Pressfit<br>w. Transfer Zone | 20 mm | 0.6 x 0.6 mm | 2 | 2.5 mm | <b>593964</b> |

|    |        |       |              |   |   |               |
|----|--------|-------|--------------|---|---|---------------|
|    |        |       |              |   |   |               |
| 64 | Solder | 4 mm  | 0.6 x 0.6 mm | 1 | — | <b>593933</b> |
| 64 | Solder | 4 mm  | 0.6 x 0.6 mm | 2 | — | <b>593934</b> |
| 64 | Solder | 13 mm | 0.6 x 0.6 mm | 1 | — | <b>593927</b> |
| 64 | Solder | 13 mm | 0.6 x 0.6 mm | 2 | — | <b>593928</b> |

### Type Q/2

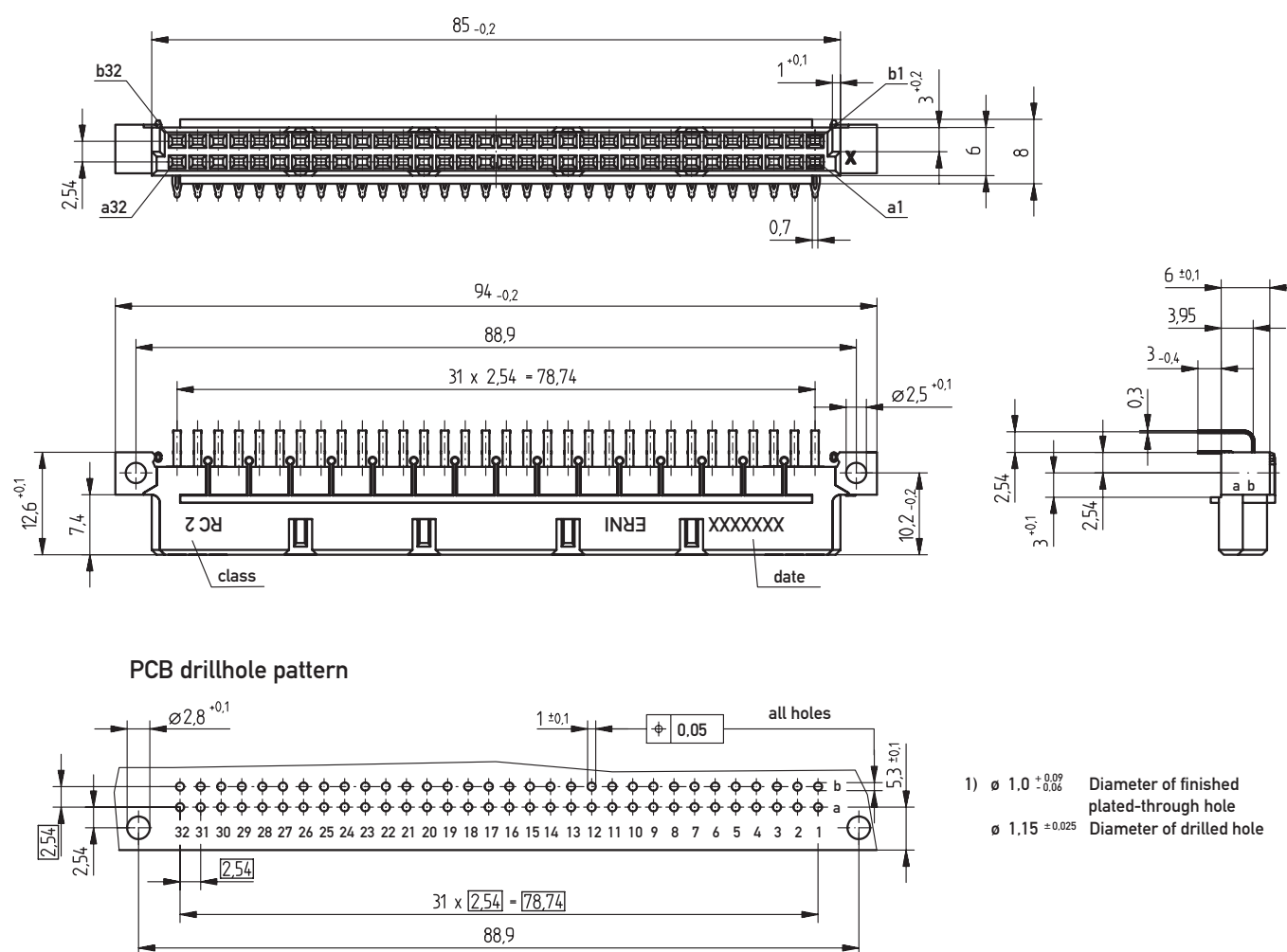
|    |        |       |              |   |   |               |
|----|--------|-------|--------------|---|---|---------------|
|    |        |       |              |   |   |               |
| 32 | Solder | 4 mm  | 0.6 x 0.6 mm | 2 | — | <b>004483</b> |
| 32 | Solder | 13 mm | 0.6 x 0.6 mm | 2 | — | <b>424219</b> |

### Type Q/3

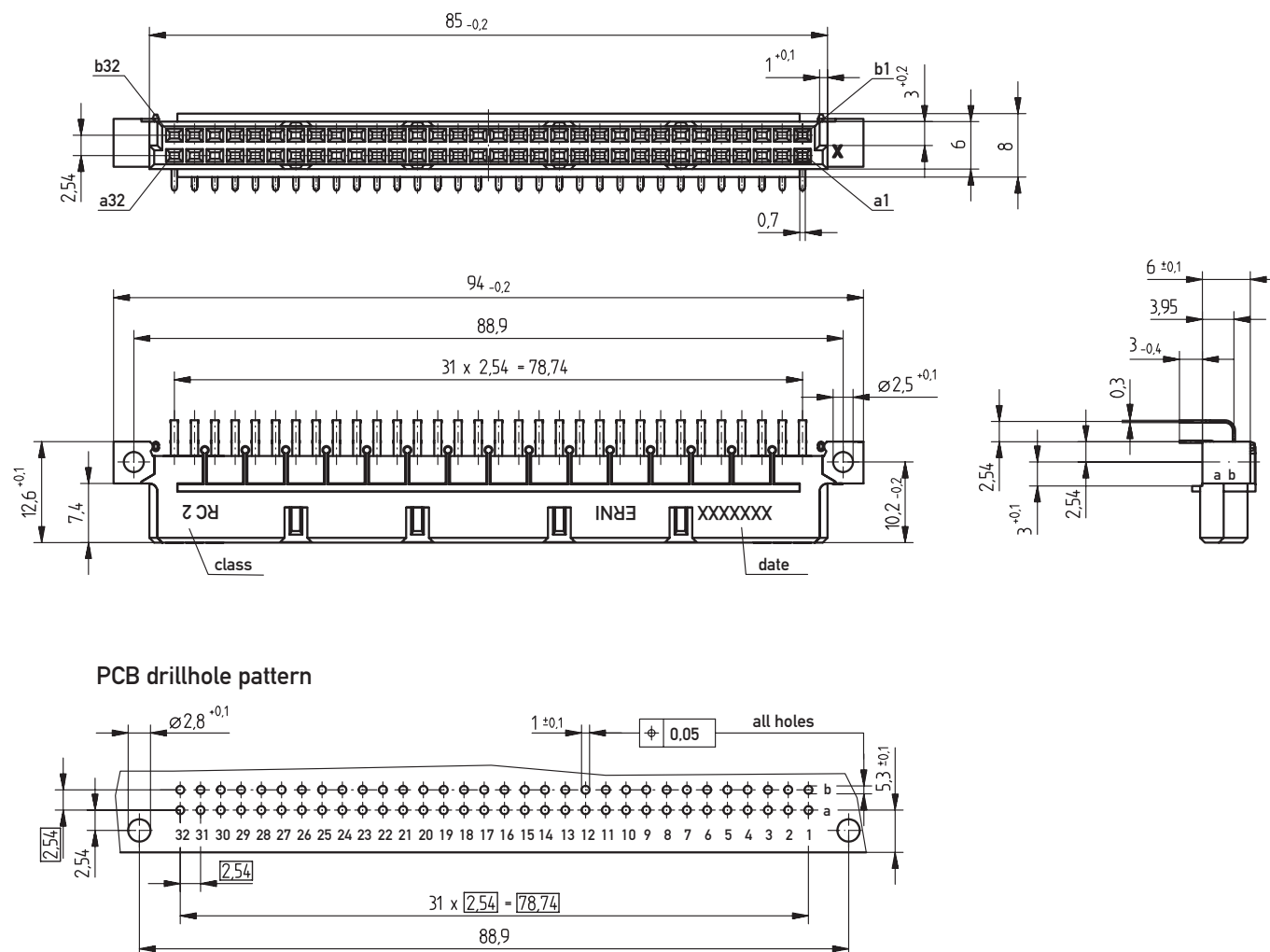
|    |        |       |              |   |   |               |
|----|--------|-------|--------------|---|---|---------------|
|    |        |       |              |   |   |               |
| 20 | Solder | 4 mm  | 0.6 x 0.6 mm | 2 | — | <b>004498</b> |
| 20 | Solder | 13 mm | 0.6 x 0.6 mm | 2 | — | <b>424213</b> |



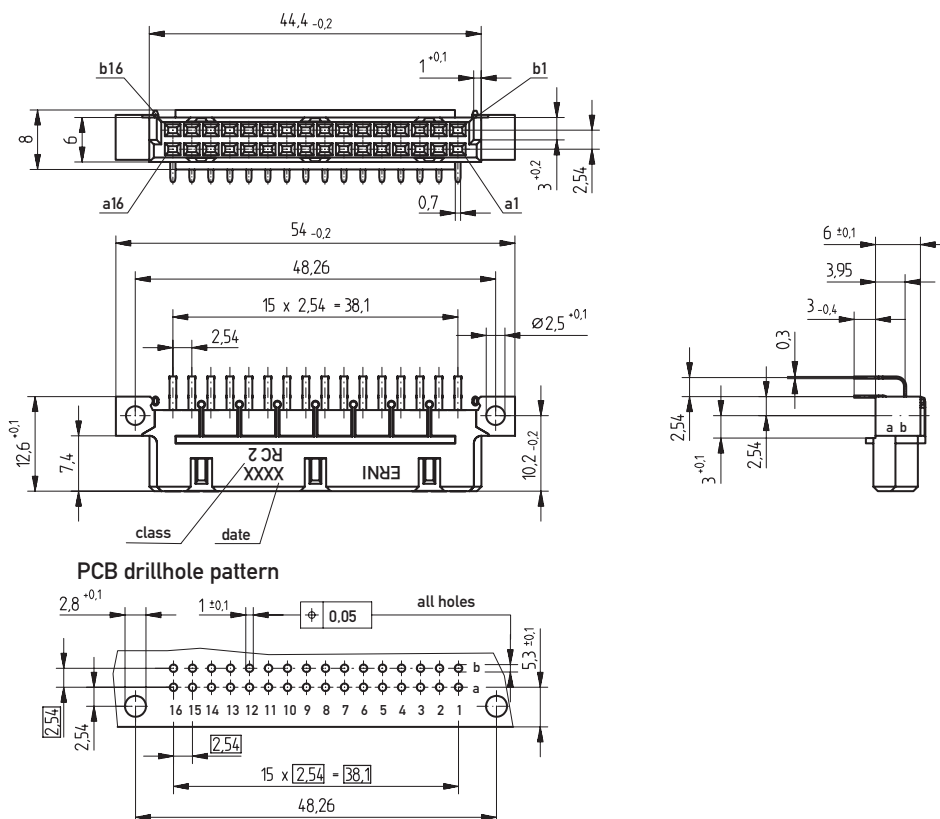
### Dimensional Drawing Pressfit Type Q



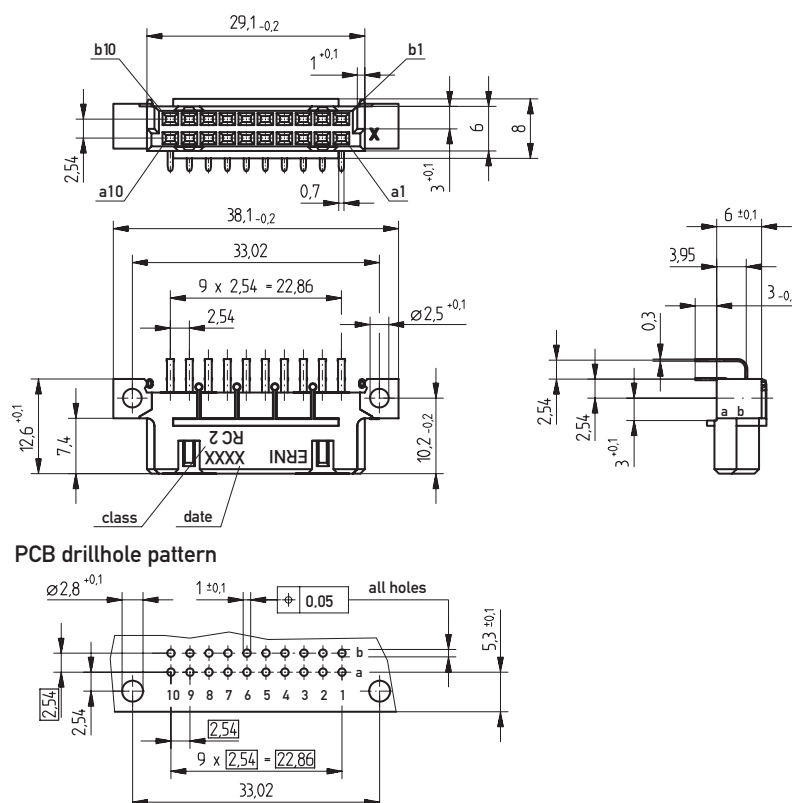
### Dimensional Drawing Solder Type Q



## Dimensional Drawing Solder Type Q/2



### Dimensional Drawing Solder Type Q/3



# DIN 41612 / IEC 60603-2 Connectors

## Type Q Female



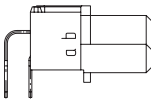
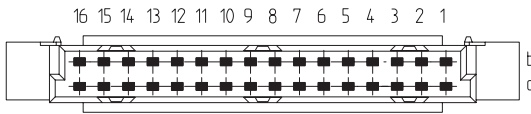
### Ordering Information

| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
|-------------|-------------|--------------|----------------|-------|---------------|-------------|

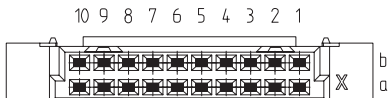
|                                                                                   |                                                                                    |      |              |   |      |               |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------|--------------|---|------|---------------|
|  |  |      |              |   |      |               |
| 64                                                                                | Pressfit                                                                           | 3 mm | 0.6 x 0.6 mm | 2 | 1 mm | <b>364104</b> |

|                                                                                   |                                                                                    |      |              |   |   |               |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------|--------------|---|---|---------------|--|
|  |  |      |              |   |   |               |  |
| 64                                                                                | Solder                                                                             | 3 mm | 0.7 x 0.3 mm | 2 | — | <b>294721</b> |  |

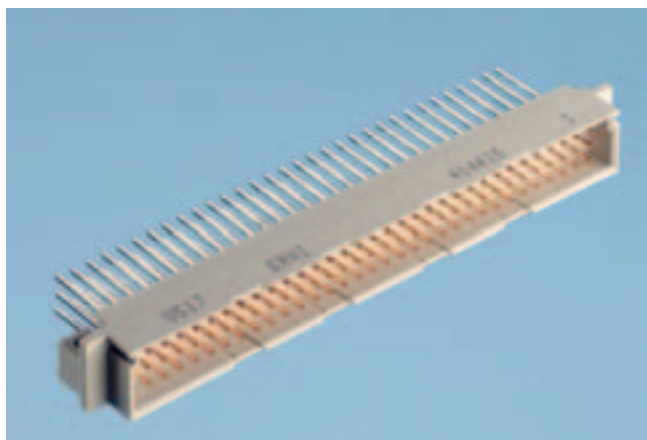
### Type Q/2

|                                                                                     |                                                                                     |      |              |   |   |               |  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|--------------|---|---|---------------|--|
|  |  |      |              |   |   |               |  |
| 32                                                                                  | Solder                                                                              | 3 mm | 0.7 x 0.3 mm | 2 | — | <b>294722</b> |  |

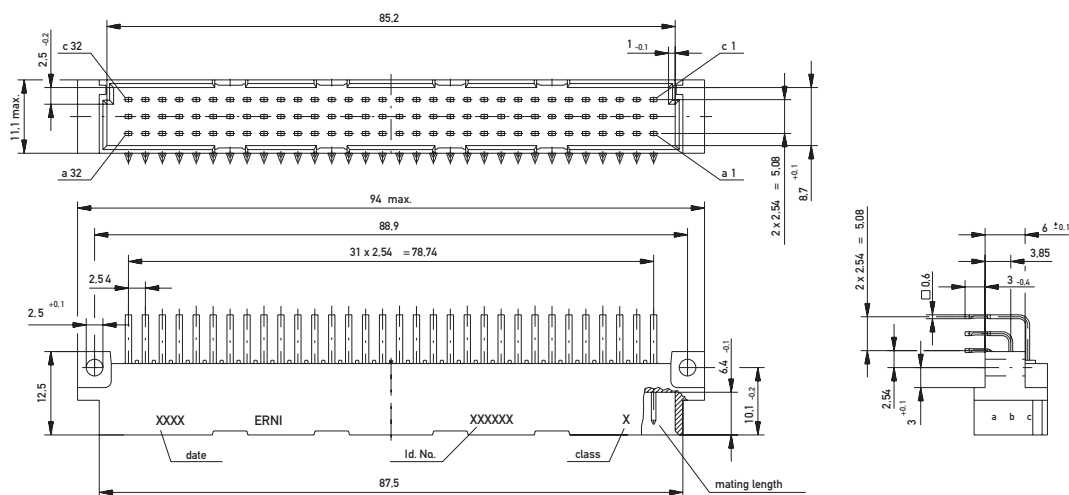
### Type Q/3

|                                                                                     |                                                                                     |      |              |   |   |               |  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|--------------|---|---|---------------|--|
|  |  |      |              |   |   |               |  |
| 20                                                                                  | Solder                                                                              | 3 mm | 0.7 x 0.3 mm | 2 | — | <b>294927</b> |  |

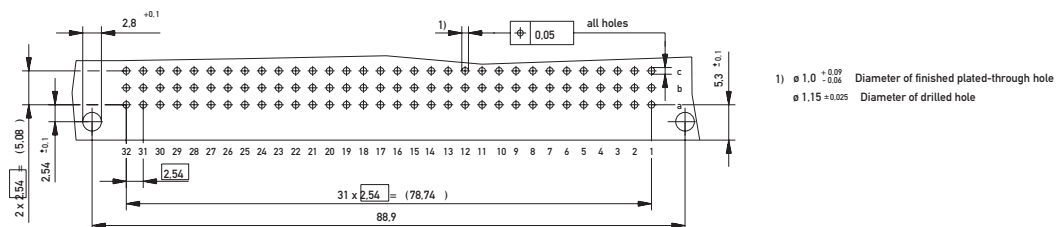
### Type C Male



## Dimensional Drawing Pressfit

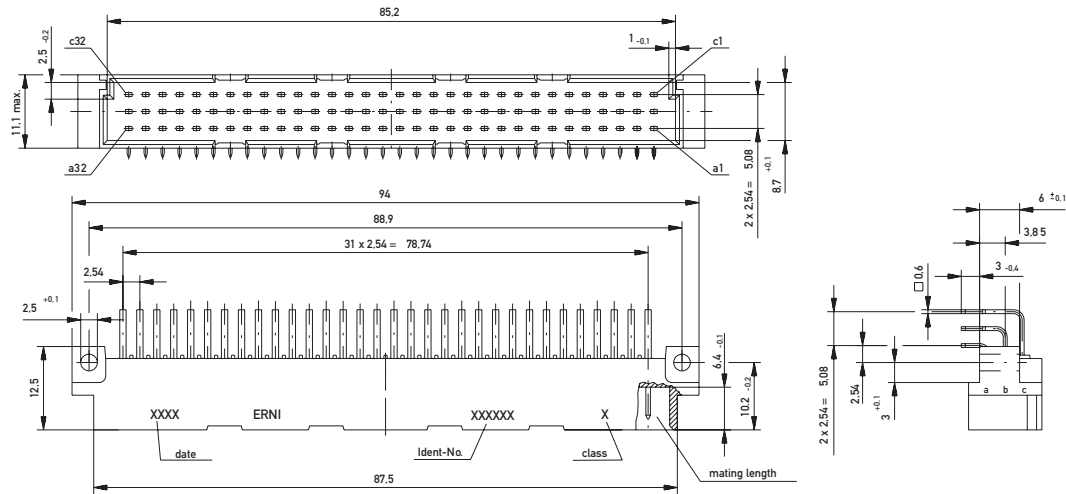


### PCB drillhole pattern

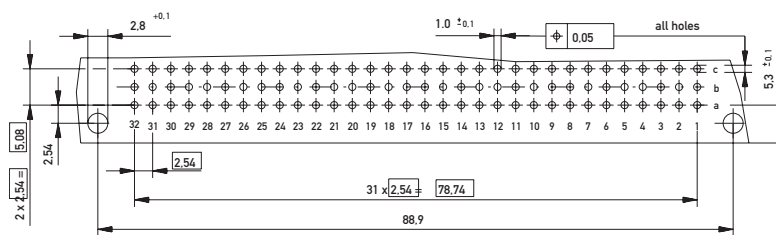




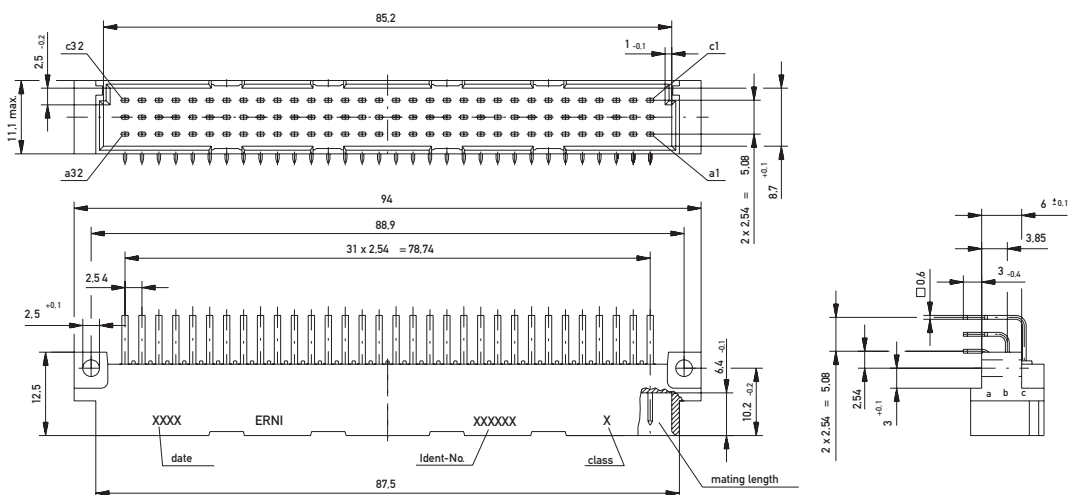
### Dimensional Drawing Solder



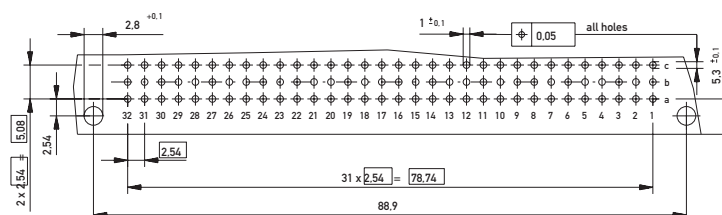
PCB drillhole pattern



### Dimensional Drawing THR



PCB drillhole pattern

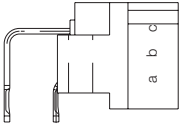
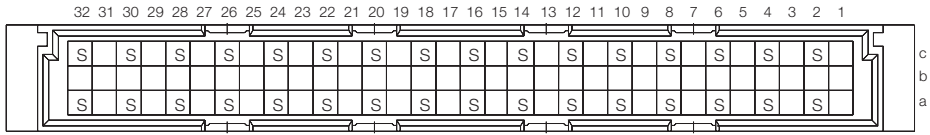
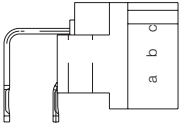
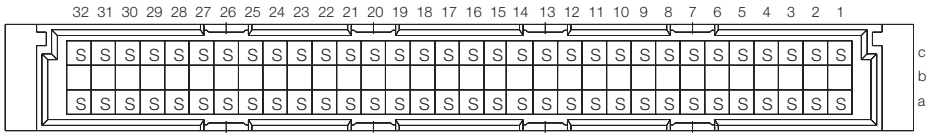
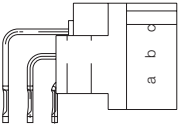
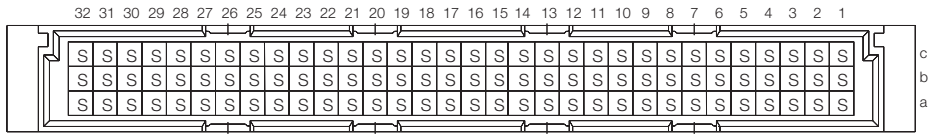


# DIN 41612 / IEC 60603-2 Connectors

## Type C Male

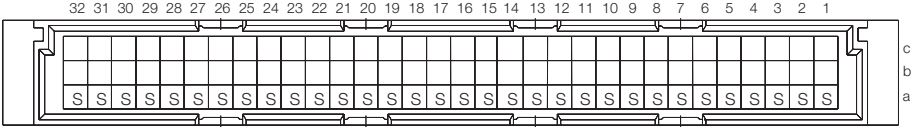
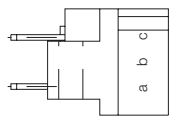
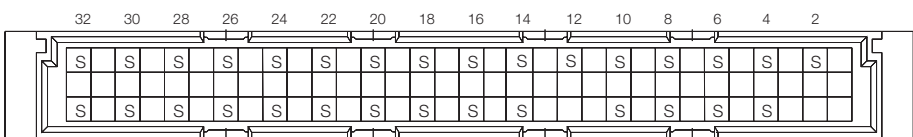
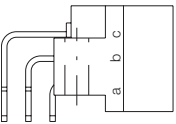
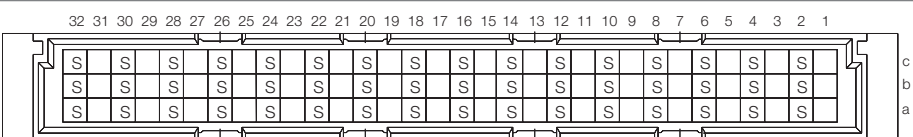


### Ordering Information

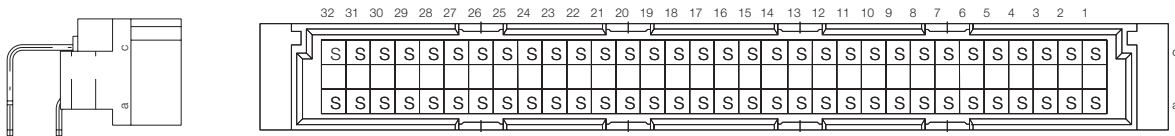
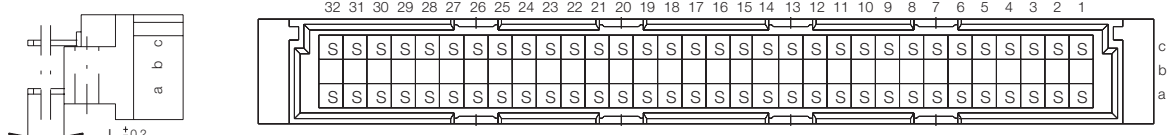
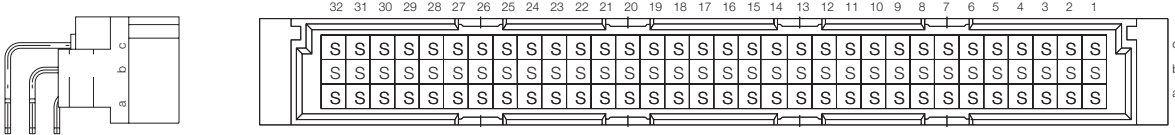
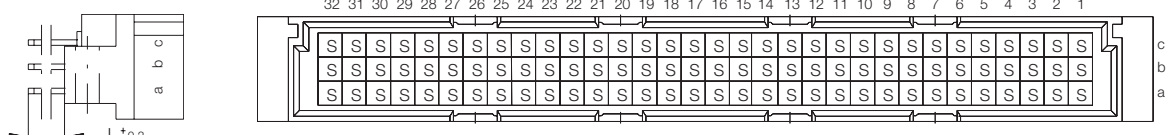
| No. of Pins                                                                         | Termination | Term. Length | Pin Dimensions                                                                       | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|-------------|--------------|--------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | Pressfit    | 3 mm         |    | 2     | 1.5 mm        | <b>013254</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
|    | Pressfit    | 3 mm         |    | 2     | 1.5 mm        | <b>013132</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
| 64                                                                                  | Pressfit *  | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | 1.5 mm        | <b>063795</b> |
|  | Pressfit    | 3 mm         |  | 2     | 1.5 mm        | <b>013131</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
| 96                                                                                  | Pressfit *  | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | 1.5 mm        | <b>104552</b> |

\*For flat press-in tool.

### Ordering Information

| No. of Pins                                                                         | Termination      | Term. Length | Pin Dimensions                                                                       | Class | Pressfit Zone | Part Number |
|-------------------------------------------------------------------------------------|------------------|--------------|--------------------------------------------------------------------------------------|-------|---------------|-------------|
|    |                  |              |    |       |               |             |
|                                                                                     | Solder           | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | —             | 533404      |
|                                                                                     | Solder           | 3 mm         | 0.6 x 0.6 mm                                                                         | 1     | —             | 533203      |
|                                                                                     | Solder           | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | —             | 533403      |
|                                                                                     | Solder with Clip | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | —             | 023783      |
|  |                  |              |  |       |               |             |
|                                                                                     | Solder           | 3.8 mm       | 0.6 x 0.6 mm                                                                         | 2     | —             | 414401      |
|                                                                                     | Solder           | 12 mm        | 0.6 x 0.6 mm                                                                         | 1     | —             | 414403      |
|  |                  |              |  |       |               |             |
|                                                                                     | Solder           | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | —             | 533423      |
|                                                                                     | Solder with Clip | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | —             | 123751      |

### Ordering Information

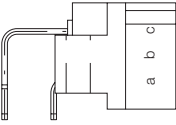
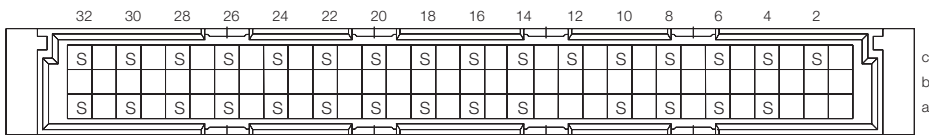
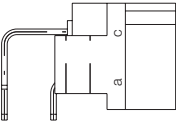
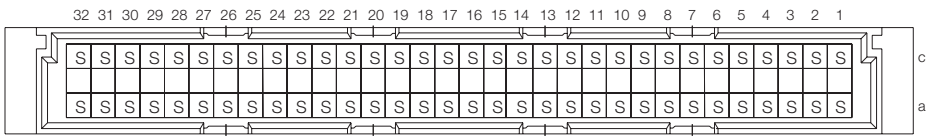
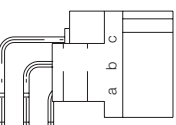
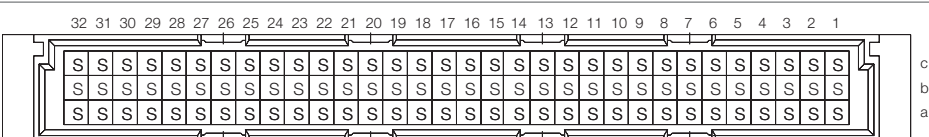
| No. of Pins                                                                          | Termination      | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|--------------------------------------------------------------------------------------|------------------|--------------|----------------|-------|---------------|-------------|
|    |                  |              |                |       |               |             |
| 64                                                                                   | Solder           | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | 533201      |
| 64                                                                                   | Solder           | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 533401      |
| 64                                                                                   | Solder with Clip | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 004413      |
|    |                  |              |                |       |               |             |
| 64                                                                                   | Solder           | 3.8 mm       | 0.6 x 0.6 mm   | 1     | —             | 414406      |
| 64                                                                                   | Solder           | 3.8 mm       | 0.6 x 0.6 mm   | 2     | —             | 414407      |
| 64                                                                                   | Solder           | 12 mm        | 0.6 x 0.6 mm   | 1     | —             | 414409      |
| 64                                                                                   | Solder           | 12 mm        | 0.6 x 0.6 mm   | 2     | —             | 414410      |
|  |                  |              |                |       |               |             |
| 96                                                                                   | Solder           | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | 533202      |
| 96                                                                                   | Solder           | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 533402      |
| 96                                                                                   | Solder with Clip | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 434325      |
|  |                  |              |                |       |               |             |
| 96                                                                                   | Solder           | 3.8 mm       | 0.6 x 0.6 mm   | 1     | —             | 414412      |
| 96                                                                                   | Solder           | 3.8 mm       | 0.6 x 0.6 mm   | 2     | —             | 414413      |
| 96                                                                                   | Solder           | 12 mm        | 0.6 x 0.6 mm   | 1     | —             | 414415      |
| 96                                                                                   | Solder           | 12 mm        | 0.6 x 0.6 mm   | 2     | —             | 414416      |

# DIN 41612 / IEC 60603-2 Connectors

## Type C Male



### Ordering Information

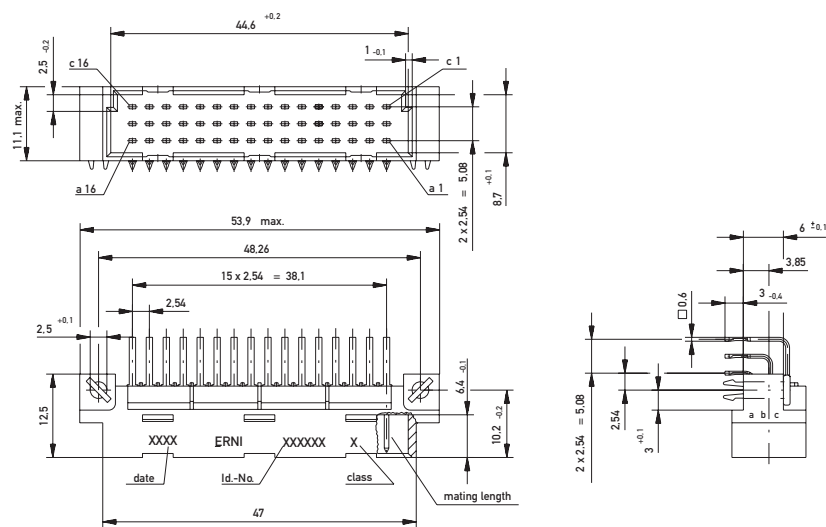
| No. of Pins                                                                         | Termination   | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number                                                                          |
|-------------------------------------------------------------------------------------|---------------|--------------|----------------|-------|---------------|--------------------------------------------------------------------------------------|
|    | THR           | 3 mm         | 0.6 x 0.6 mm   | 2     | —             |    |
|                                                                                     |               |              |                |       |               | <b>223346</b>                                                                        |
|    | THR           | 3 mm         | 0.6 x 0.6 mm   | 2     | —             |    |
|                                                                                     |               |              |                |       |               | <b>063515</b>                                                                        |
| 64                                                                                  | THR with Clip | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>164944</b>                                                                        |
|  | THR           | 3 mm         | 0.6 x 0.6 mm   | 2     | —             |  |
|                                                                                     |               |              |                |       |               | <b>134581</b>                                                                        |
| 96                                                                                  | THR with Clip | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>144705</b>                                                                        |

# DIN 41612 / IEC 60603-2 Connectors

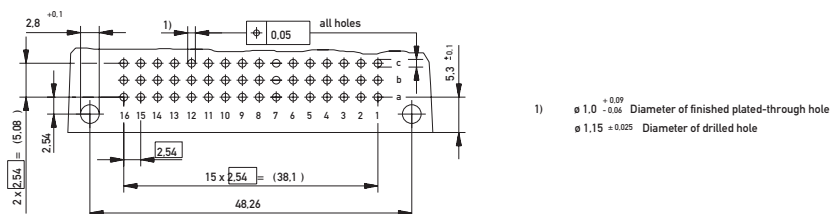
## Type C/2 Male



### Dimensional Drawing Pressfit



#### PCB drillhole pattern

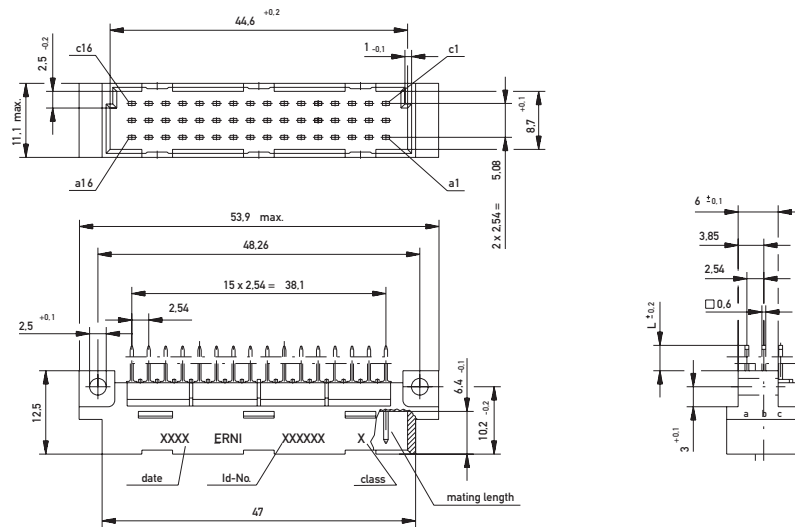


# DIN 41612 / IEC 60603-2 Connectors

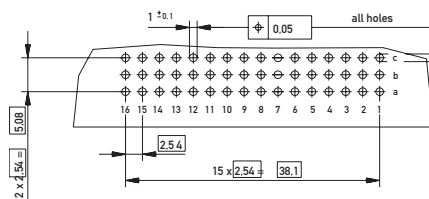
## Type C/2 Male



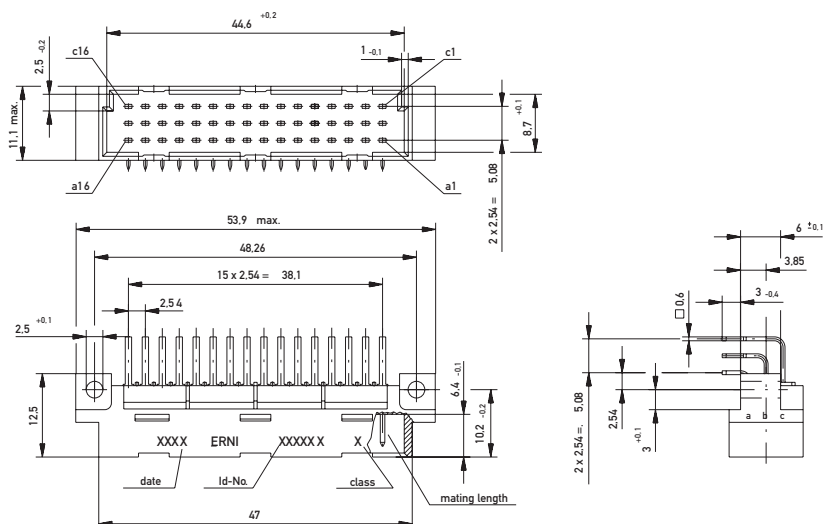
### Dimensional Drawing Solder



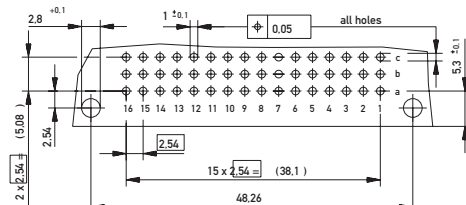
PCB drillhole pattern



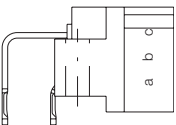
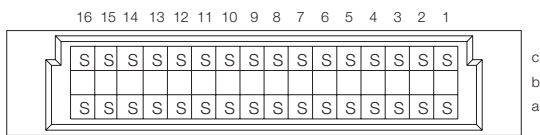
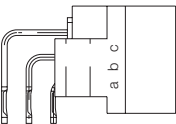
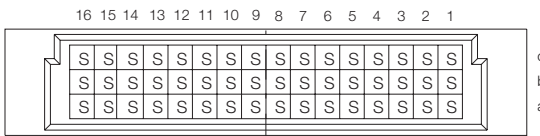
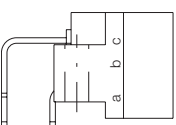
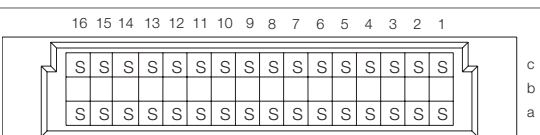
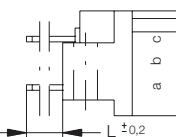
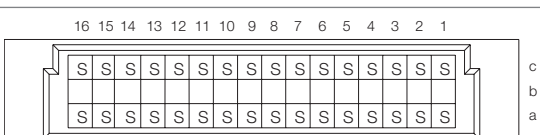
### Dimensional Drawing THR



PCB drillhole pattern



### Ordering Information

| No. of Pins                                                                         | Termination      | Term. Length | Pin Dimensions                                                                      | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|------------------|--------------|-------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | Pressfit         | 3 mm         |    | 2     | 1.5 mm        | <b>043582</b> |
|                                                                                     |                  |              |                                                                                     |       |               |               |
|    | Pressfit         | 3 mm         |    | 2     | 1.5 mm        | <b>013136</b> |
|                                                                                     |                  |              |                                                                                     |       |               |               |
|   | Solder           | 3 mm         |   | 1     | —             | <b>413858</b> |
|                                                                                     | Solder           | 3 mm         |                                                                                     | 2     | —             | <b>413859</b> |
|                                                                                     | Solder with Clip | 3 mm         |                                                                                     | 2     | —             | <b>123717</b> |
|                                                                                     |                  |              |                                                                                     |       |               |               |
|  | Solder           | 3.8 mm       |  | 1     | —             | <b>594633</b> |
|                                                                                     | Solder           | 3.8 mm       |                                                                                     | 2     | —             | <b>594634</b> |
|                                                                                     | Solder           | 12 mm        |                                                                                     | 1     | —             | <b>594635</b> |
|                                                                                     | Solder           | 12 mm        |                                                                                     | 2     | —             | <b>594636</b> |

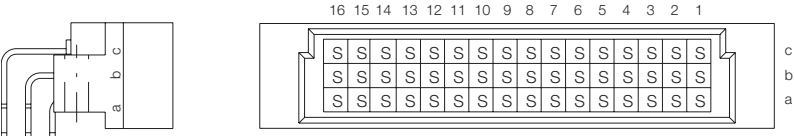
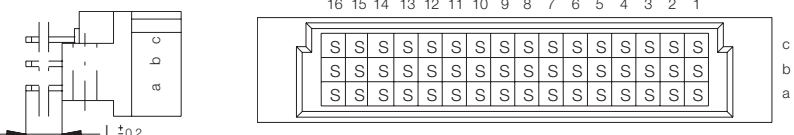
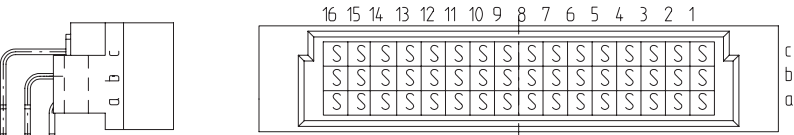


# DIN 41612 / IEC 60603-2 Connectors

## Type C/2 Male



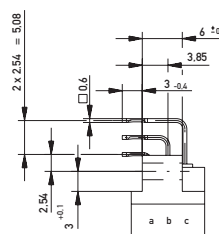
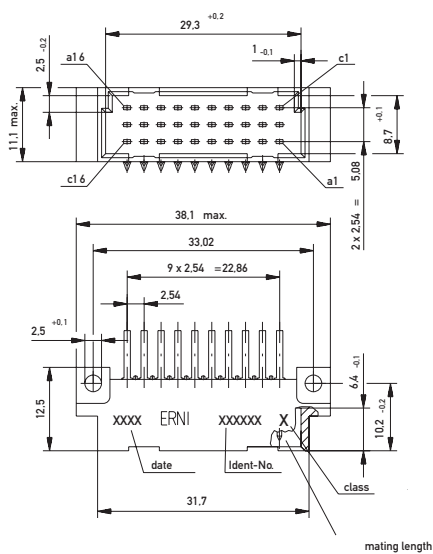
### Ordering Information

| No. of Pins                                                                         | Termination      | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|------------------|--------------|----------------|-------|---------------|---------------|
|    |                  |              |                |       |               |               |
| 48                                                                                  | Solder           | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>413864</b> |
| 48                                                                                  | Solder           | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>413865</b> |
| 48                                                                                  | Solder with Clip | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>434329</b> |
|    |                  |              |                |       |               |               |
| 48                                                                                  | Solder           | 3.8 mm       | 0.6 x 0.6 mm   | 1     | —             | <b>594400</b> |
| 48                                                                                  | Solder           | 3.8 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>594638</b> |
| 48                                                                                  | Solder           | 12 mm        | 0.6 x 0.6 mm   | 1     | —             | <b>594640</b> |
| 48                                                                                  | Solder           | 12 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>594641</b> |
|  |                  |              |                |       |               |               |
| 48                                                                                  | THR              | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>154954</b> |
| 48                                                                                  | THR with Clip    | 3 mm         | 0.6 x 0.6 mm   | —     | —             | <b>123601</b> |

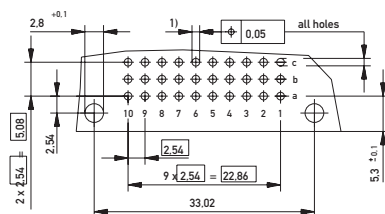
### Type C/3 Male



## Dimensional Drawing Pressfit

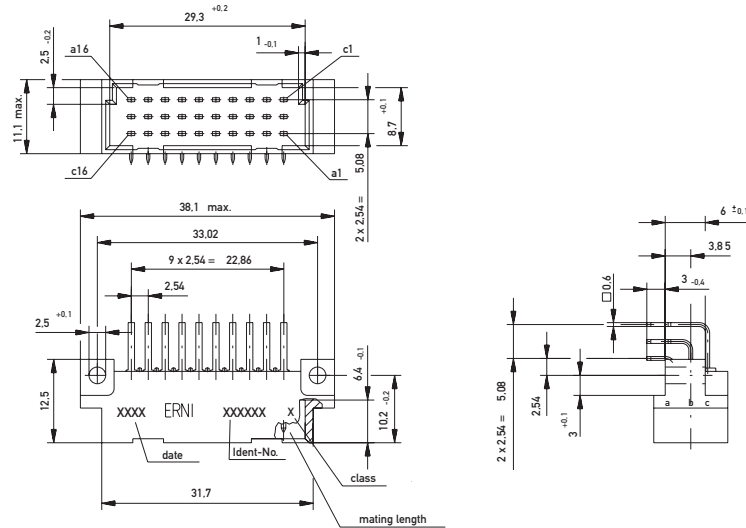


### PCB drillhole pattern

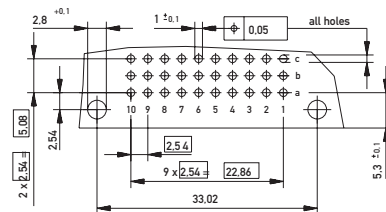


- 1)  $\varnothing 1.0^{+0.09}_{-0.06}$  Diameter of finished plated-through hole  
 $\varnothing 1.15 \pm 0.025$  Diameter of drilled hole

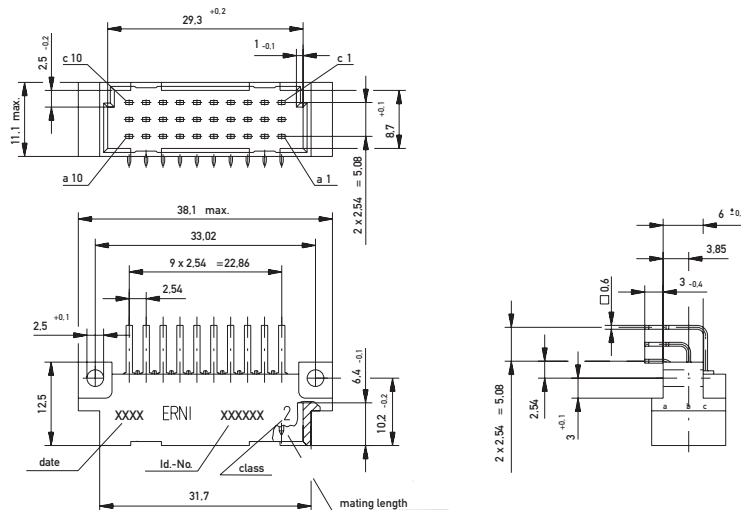
### Dimensional Drawing Solder



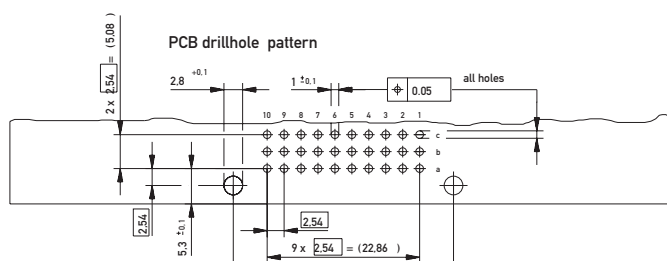
PCB drillhole pattern



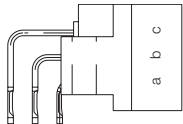
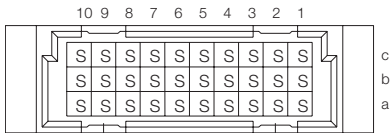
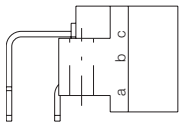
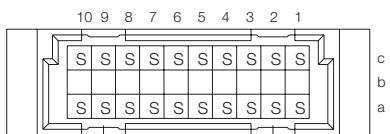
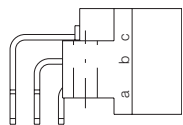
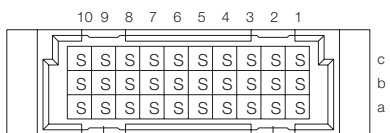
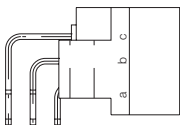
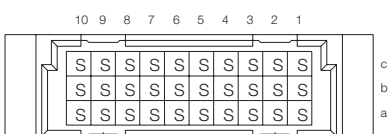
### Dimensional Drawing THR



PCB drillhole pattern

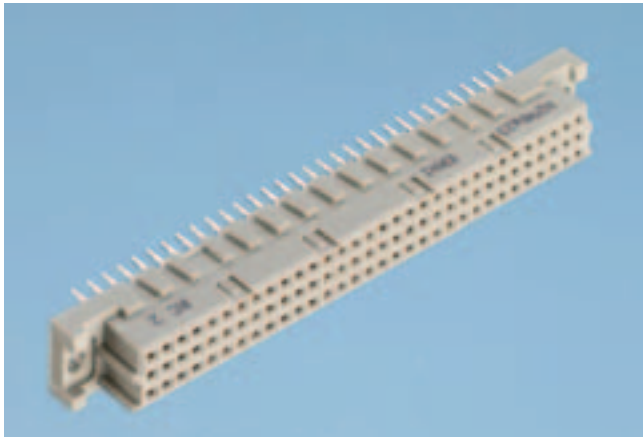


### Ordering Information

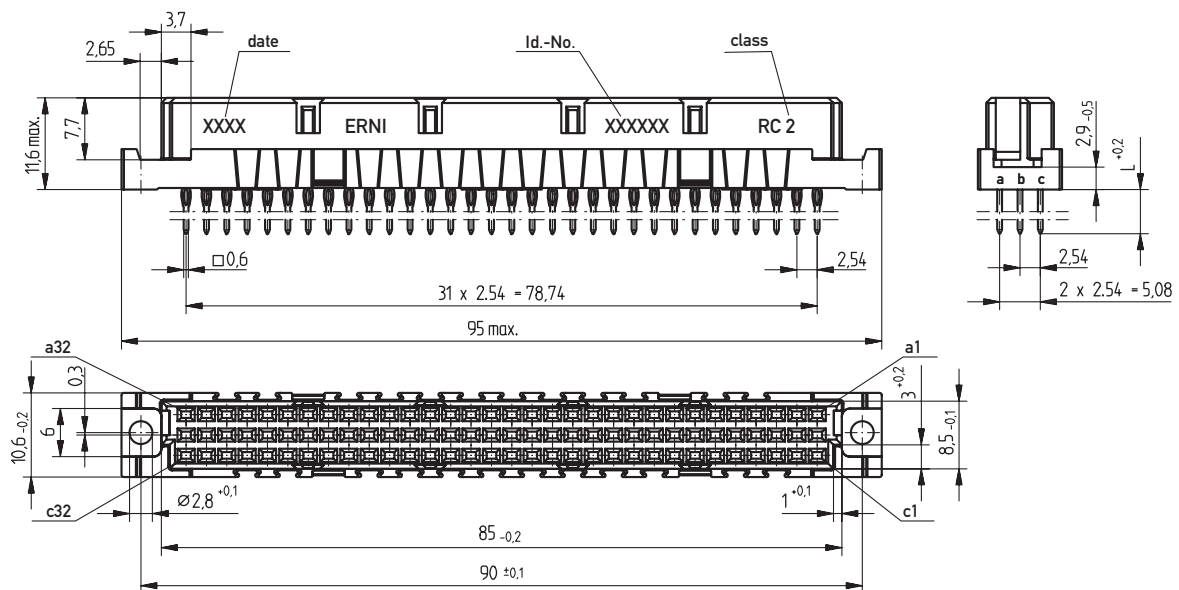
| No. of Pins                                                                         | Termination      | Term. Length | Pin Dimensions                                                                      | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|------------------|--------------|-------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | Pressfit         | 3 mm         |    | 2     | 1.5 mm        | <b>013134</b> |
|                                                                                     |                  |              |                                                                                     |       |               |               |
|    | Solder           | 3 mm         |    | 2     | —             | <b>004362</b> |
|                                                                                     |                  |              |                                                                                     |       |               |               |
|  | Solder           | 3 mm         |   | 1     | —             | <b>424188</b> |
|                                                                                     |                  |              |                                                                                     |       |               |               |
| 30                                                                                  | Solder           | 3 mm         | 0.6 x 0.6 mm                                                                        | 2     | —             | <b>424189</b> |
| 30                                                                                  | Solder with Clip | 3 mm         | 0.6 x 0.6 mm                                                                        | 2     | —             | <b>123589</b> |
|  | THR              | 3 mm         |  | 2     | —             | <b>154956</b> |
|                                                                                     |                  |              |                                                                                     |       |               |               |
| 30                                                                                  | THR with Clip    | 3 mm         | 0.6 x 0.6 mm                                                                        | 2     | —             | <b>154957</b> |

# DIN 41612 / IEC 60603-2 Connectors

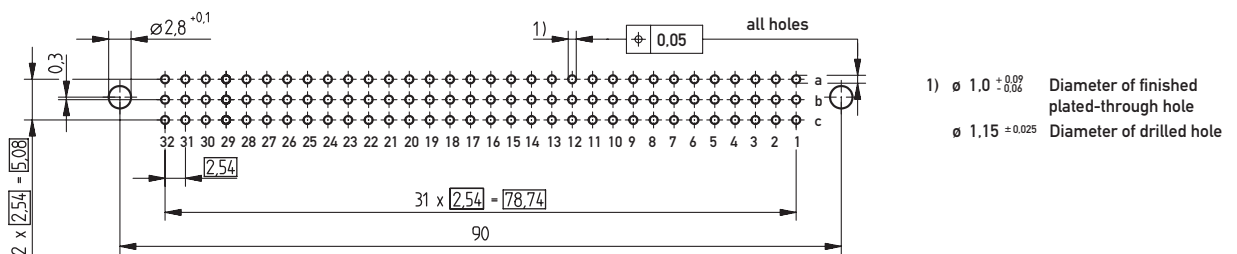
## Type C Female



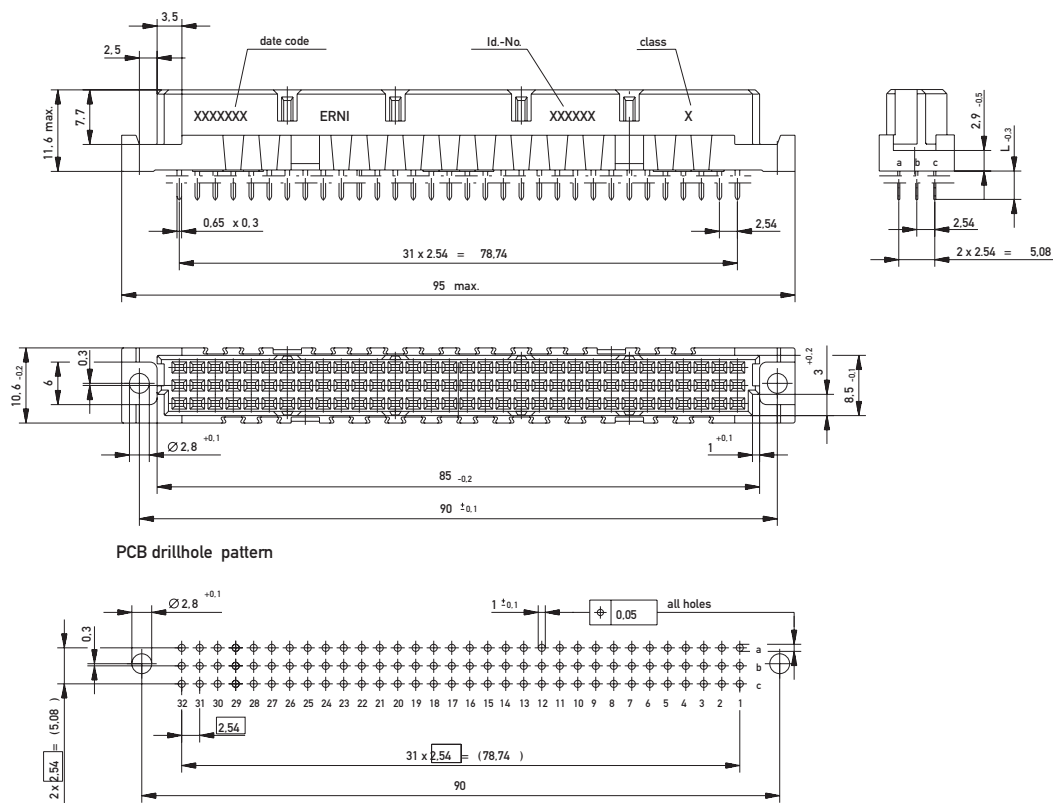
### Dimensional Drawing Pressfit



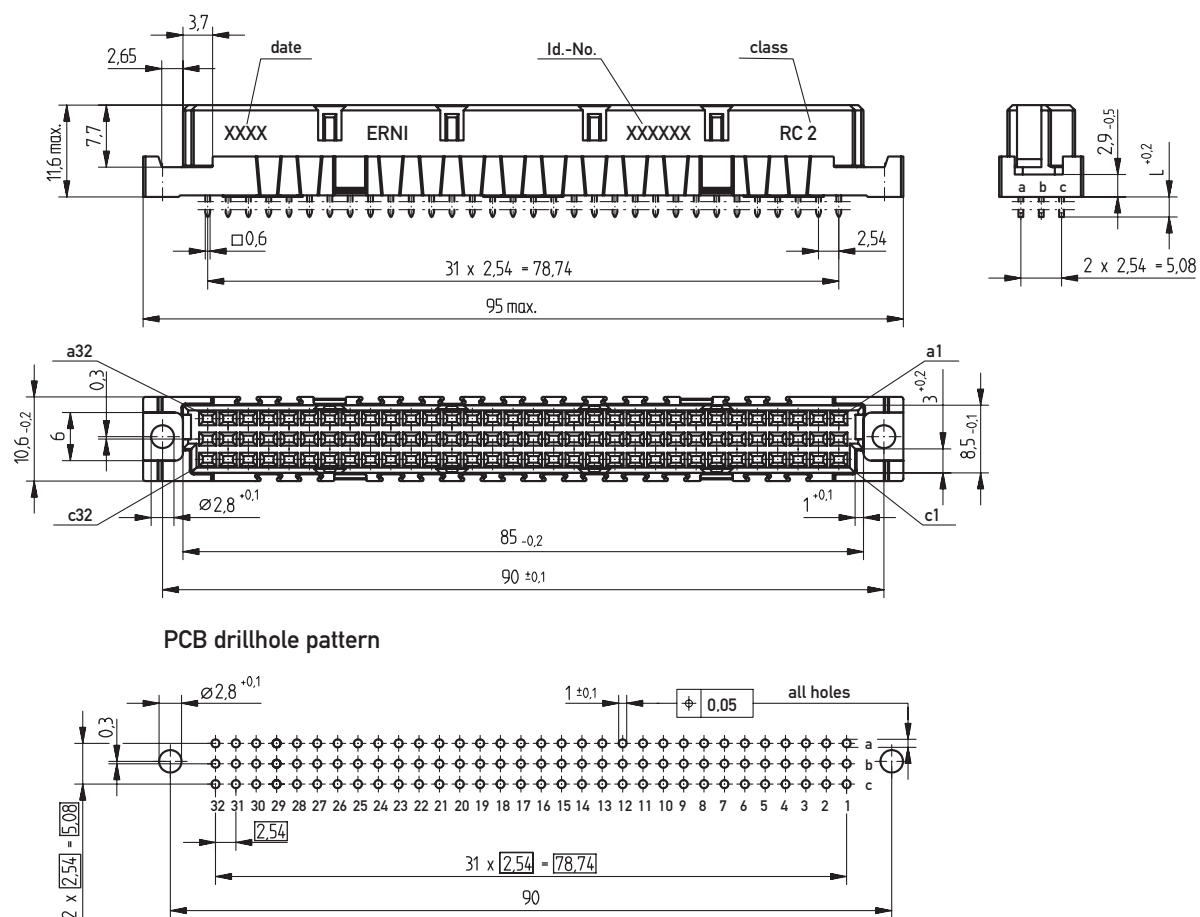
### PCB drillhole pattern



### Dimensional Drawing Solder



## Dimensional Drawing THR



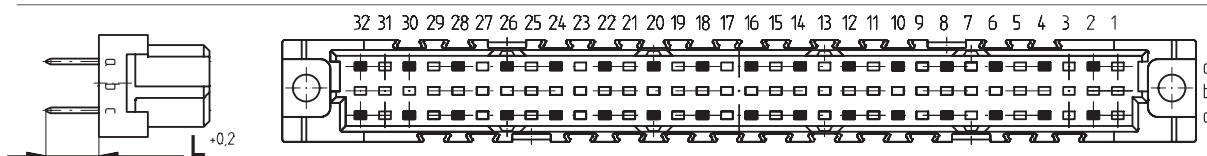
# DIN 41612 / IEC 60603-2 Connectors

## Type C Female

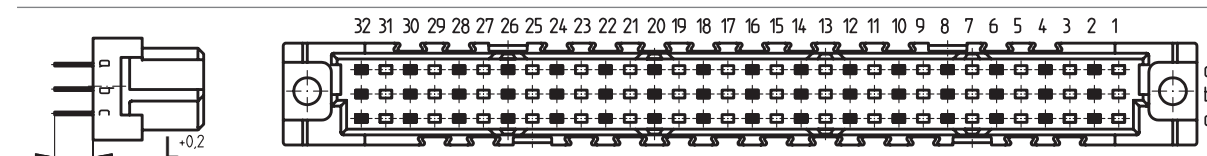


### Ordering Information

| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
|-------------|-------------|--------------|----------------|-------|---------------|-------------|



|    |          |        |              |   |        |        |
|----|----------|--------|--------------|---|--------|--------|
| 32 | Pressfit | 5.5 mm | 0.6 x 0.6 mm | 2 | –      | 254135 |
| 32 | Pressfit | 17 mm  | 0.6 x 0.6 mm | 1 | 2.5 mm | 284971 |



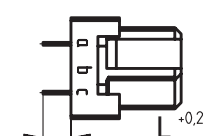
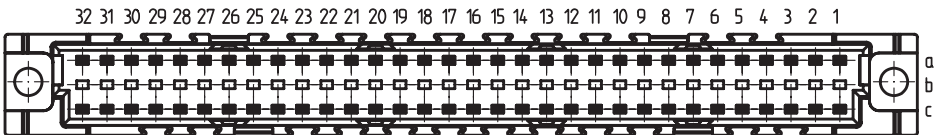
|    |          |        |              |   |   |        |
|----|----------|--------|--------------|---|---|--------|
| 48 | Pressfit | 4 mm   | 0.8 x 0.3 mm | 2 | – | 234069 |
| 48 | Pressfit | 5.5 mm | 0.6 x 0.6 mm | 2 | – | 254136 |



### Ordering Information

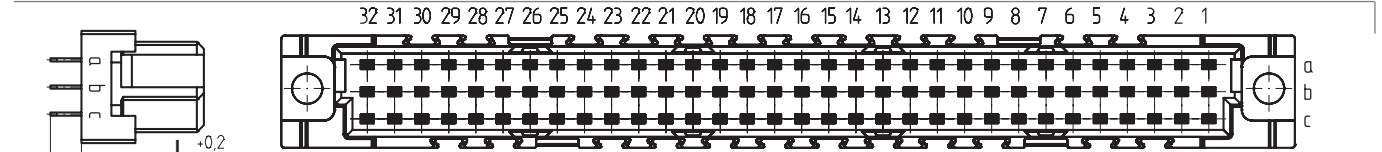
| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
|-------------|-------------|--------------|----------------|-------|---------------|-------------|

|    |                                            |        |               |   |      |               |
|----|--------------------------------------------|--------|---------------|---|------|---------------|
| 64 | Pressfit                                   | 2.9 mm | 0.65 x 0.3 mm | 2 | 2 mm | <b>254120</b> |
| 64 | Pressfit                                   | 4 mm   | 0.8 x 0.3 mm  | 2 | –    | <b>244268</b> |
| 64 | Pressfit<br>w/o Flange                     | 4.5 mm | 0.65 x 0.3 mm | 2 | 2 mm | <b>294742</b> |
| 64 | Pressfit                                   | 5.5 mm | 0.6 x 0.6 mm  | 2 | –    | <b>254137</b> |
| 64 | Pressfit<br>w/o Flange                     | 5.5 mm | 0.6 x 0.6 mm  | 2 | –    | <b>254851</b> |
| 64 | Pressfit<br>New Design<br>w. Transfer Zone | 13 mm  | 0.6 x 0.6 mm  | 2 | –    | <b>244126</b> |
| 64 | Pressfit<br>New Design                     | 17 mm  | 0.6 x 0.6 mm  | 2 | –    | <b>244294</b> |
| 64 | Pressfit<br>New Design<br>w. Transfer Zone | 17 mm  | 0.6 x 0.6 mm  | 2 | –    | <b>224410</b> |

### Ordering Information

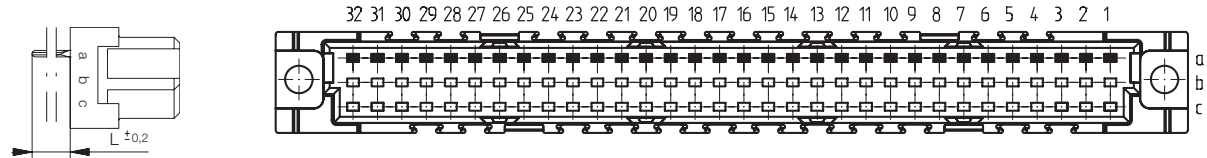
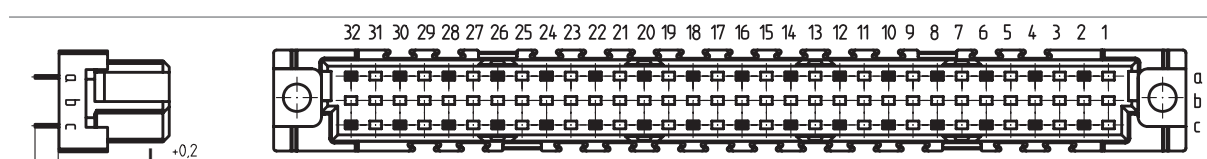
| No. of Pins                                                                       | Termination                                | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-----------------------------------------------------------------------------------|--------------------------------------------|--------------|----------------|-------|---------------|---------------|
|  |                                            |              |                |       |               |               |
| 96                                                                                | Pressfit                                   | 2.9 mm       | 0.65 x 0.3 mm  | 2     | –             | <b>254117</b> |
| 96                                                                                | Pressfit                                   | 4 mm         | 0.8 x 0.3 mm   | 2     | –             | <b>204752</b> |
| 96                                                                                | Pressfit<br>w/o Flange                     | 4 mm         | 0.8 x 0.3 mm   | 2     | –             | <b>254121</b> |
| 96                                                                                | Pressfit                                   | 5.5 mm       | 0.6 x 0.6 mm   | 1     | –             | <b>254015</b> |
| 96                                                                                | Pressfit                                   | 5.5 mm       | 0.6 x 0.6 mm   | 2     | –             | <b>224408</b> |
| 96                                                                                | Pressfit<br>w. Transfer Zone               | 13 mm        | 0.6 x 0.6 mm   | 2     | –             | <b>284135</b> |
| 96                                                                                | Pressfit<br>New Design<br>w. Transfer Zone | 13 mm        | 0.6 x 0.6 mm   | 2     | –             | <b>224412</b> |
| 96                                                                                | Pressfit                                   | 17 mm        | 0.6 x 0.6 mm   | 1     | –             | <b>284134</b> |
| 96                                                                                | Pressfit<br>New Design                     | 17 mm        | 0.6 x 0.6 mm   | 2     | –             | <b>234516</b> |
| 96                                                                                | Pressfit<br>w. Transfer Zone               | 17 mm        | 0.6 x 0.6 mm   | 1     | –             | <b>284752</b> |
| 96                                                                                | Pressfit<br>New Design<br>w. Transfer Zone | 17 mm        | 0.6 x 0.6 mm   | 2     | –             | <b>244295</b> |

# DIN 41612 / IEC 60603-2 Connectors

## Type C Female



### Ordering Information

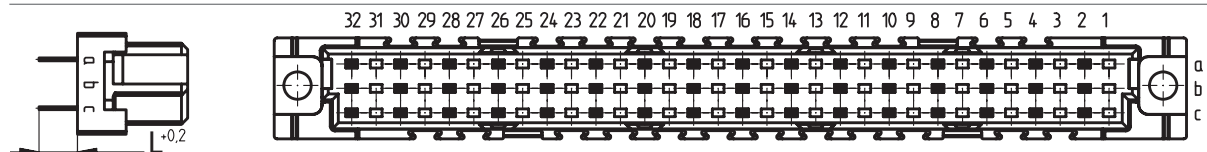
| No. of Pins                                                                        | Termination                              | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|------------------------------------------------------------------------------------|------------------------------------------|--------------|----------------|-------|---------------|---------------|
|  |                                          |              |                |       |               |               |
| 32                                                                                 | Solder<br>New Design                     | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>244296</b> |
|  |                                          |              |                |       |               |               |
| 32                                                                                 | Solder                                   | 2.5 mm       | 0.65 x 0.3 mm  | 2     | —             | <b>284652</b> |
| 32                                                                                 | Solder                                   | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | <b>284970</b> |
| 32                                                                                 | Solder                                   | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | <b>244265</b> |
| 32                                                                                 | Solder                                   | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | <b>284968</b> |
| 32                                                                                 | Solder<br>New Design                     | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>244297</b> |
| 32                                                                                 | Solder<br>New Design<br>w. Transfer Zone | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>244298</b> |
| 32                                                                                 | Solder<br>New Design<br>w. Transfer Zone | 17 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>244299</b> |

# DIN 41612 / IEC 60603-2 Connectors

## Type C Female



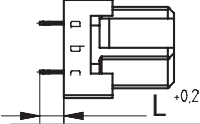
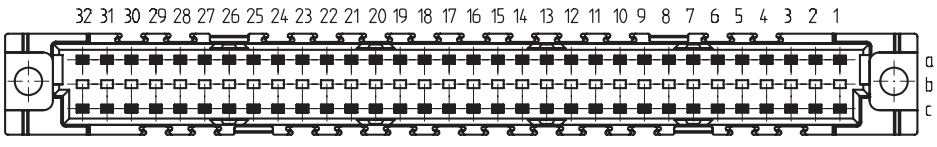
### Ordering Information

| No. of Pins                                                                        | Termination                 | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|------------------------------------------------------------------------------------|-----------------------------|--------------|----------------|-------|---------------|---------------|
|  |                             |              |                |       |               |               |
| 48                                                                                 | Solder                      | 4 mm         | 0.65 x 0.3 mm  | 1     | –             | <b>284975</b> |
| 48                                                                                 | Solder New Design with Clip | 4 mm         | 0.65 x 0.3 mm  | 2     | –             | <b>234432</b> |
| 48                                                                                 | Solder                      | 4 mm         | 0.65 x 0.3 mm  | 2     | –             | <b>284082</b> |
| 48                                                                                 | Solder New Design           | 13 mm        | 0.6 x 0.6 mm   | 2     | –             | <b>244300</b> |

### Ordering Information

| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
|-------------|-------------|--------------|----------------|-------|---------------|-------------|

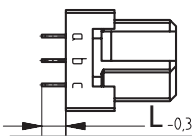
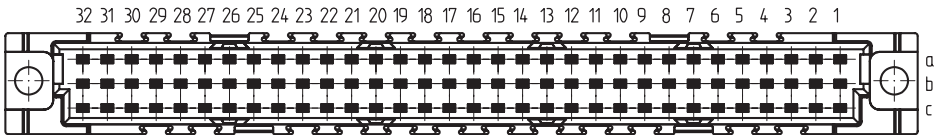



|    |                                          |        |               |   |   |               |
|----|------------------------------------------|--------|---------------|---|---|---------------|
| 64 | Solder<br>w. retaining Loop              | 2.5 mm | 0.65 x 0.3 mm | 2 | — | <b>284170</b> |
| 64 | Solder                                   | 4 mm   | 0.65 x 0.3 mm | 1 | — | <b>284979</b> |
| 64 | Solder<br>New Design                     | 4 mm   | 0.65 x 0.3 mm | 2 | — | <b>224411</b> |
| 64 | Solder New<br>Design with Clip           | 4 mm   | 0.65 x 0.3 mm | 2 | — | <b>224471</b> |
| 64 | Solder<br>w. retaining Loop              | 4 mm   | 0.8 x 0.3 mm  | 2 | — | <b>223839</b> |
| 64 | Solder                                   | 13 mm  | 0.6 x 0.6 mm  | 1 | — | <b>284977</b> |
| 64 | Solder<br>New Design                     | 13 mm  | 0.6 x 0.6 mm  | 2 | — | <b>244301</b> |
| 64 | Solder<br>New Design<br>w. Transfer Zone | 13 mm  | 0.6 x 0.6 mm  | 2 | — | <b>244302</b> |
| 64 | Solder<br>w. Transfer Zone               | 17 mm  | 0.6 x 0.6 mm  | 1 | — | <b>284976</b> |
| 64 | Solder<br>New Design<br>w. Transfer Zone | 17 mm  | 0.6 x 0.6 mm  | 2 | — | <b>244303</b> |

### Ordering Information

| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
|-------------|-------------|--------------|----------------|-------|---------------|-------------|

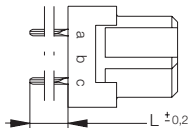
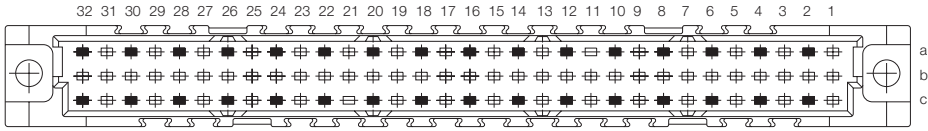
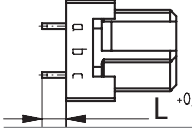
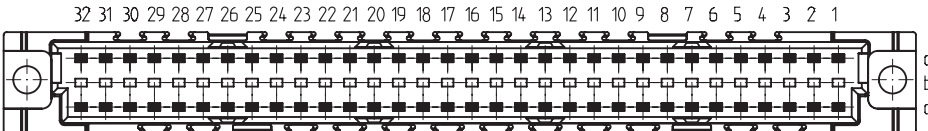
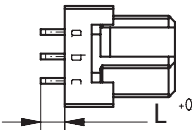
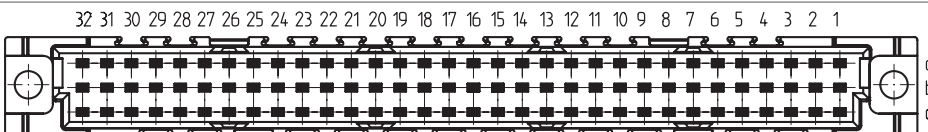
|    |                                          |        |               |   |   |               |
|----|------------------------------------------|--------|---------------|---|---|---------------|
| 96 | Solder                                   | 2.5 mm | 0.65 x 0.3 mm | 2 | — | <b>224470</b> |
| 96 | Solder<br>w. retaining Loop              | 2.5 mm | 0.65 x 0.3 mm | 2 | — | <b>284991</b> |
| 96 | Solder                                   | 4 mm   | 0.65 x 0.3 mm | 1 | — | <b>254897</b> |
| 96 | Solder<br>New Design                     | 4 mm   | 0.65 x 0.3 mm | 2 | — | <b>214836</b> |
| 96 | Solder<br>w. retaining Loop              | 4 mm   | 0.65 x 0.3 mm | 2 | — | <b>284308</b> |
| 96 | Solder                                   | 13 mm  | 0.6 x 0.6 mm  | 1 | — | <b>284984</b> |
| 96 | Solder<br>New Design                     | 13 mm  | 0.6 x 0.6 mm  | 2 | — | <b>244304</b> |
| 96 | Solder<br>New Design<br>w. Transfer Zone | 13 mm  | 0.6 x 0.6 mm  | 2 | — | <b>244305</b> |
| 96 | Solder<br>New Design                     | 17 mm  | 0.6 x 0.6 mm  | 2 | — | <b>244306</b> |
| 96 | Solder<br>w. Transfer Zone               | 17 mm  | 0.6 x 0.6 mm  | 1 | — | <b>254931</b> |
| 96 | Solder<br>New Design<br>w. Transfer Zone | 17 mm  | 0.6 x 0.6 mm  | 2 | — | <b>244307</b> |

# DIN 41612 / IEC 60603-2 Connectors

## Type C Female



### Ordering Information

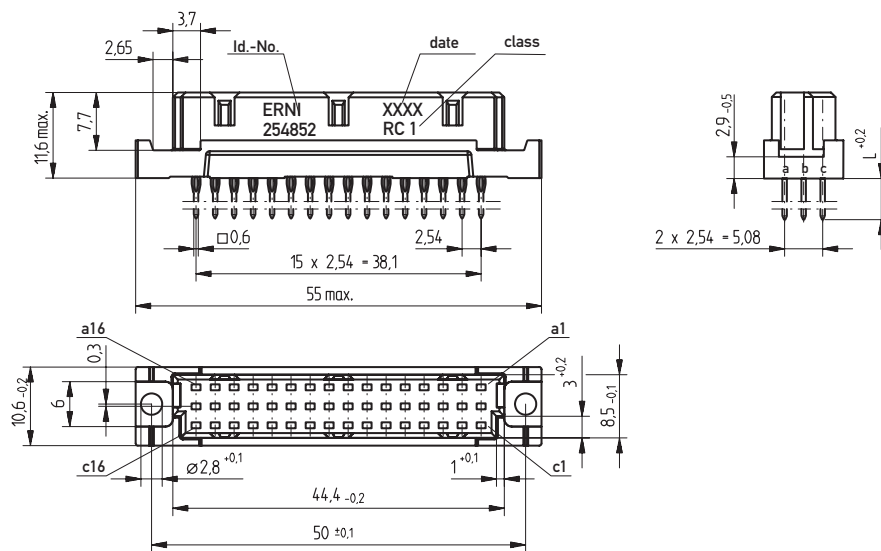
| No. of Pins                                                                         | Termination | Term. Length | Pin Dimensions                                                                       | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|-------------|--------------|--------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | THR         | 2.9 mm       |    | 2     | —             | <b>223368</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
|    | THR         | 2.5 mm       |    | 2     | —             | <b>224475</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
| 64                                                                                  | THR         | 2.5 mm       | 0.6 x 0.6 mm                                                                         | 2     | —             | <b>224476</b> |
|  | THR         | 2.5 mm       |  | 2     | —             | <b>224473</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
| 96                                                                                  | THR         | 2.5 mm       | 0.6 x 0.6 mm                                                                         | 2     | —             | <b>224474</b> |

# DIN 41612 / IEC 60603-2 Connectors

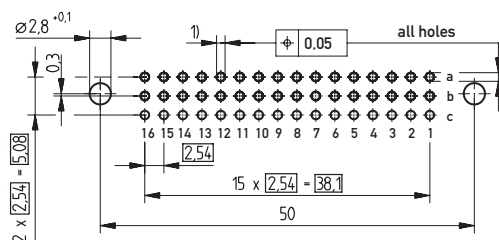
## Type C/2 Female



### Dimensional Drawing Pressfit



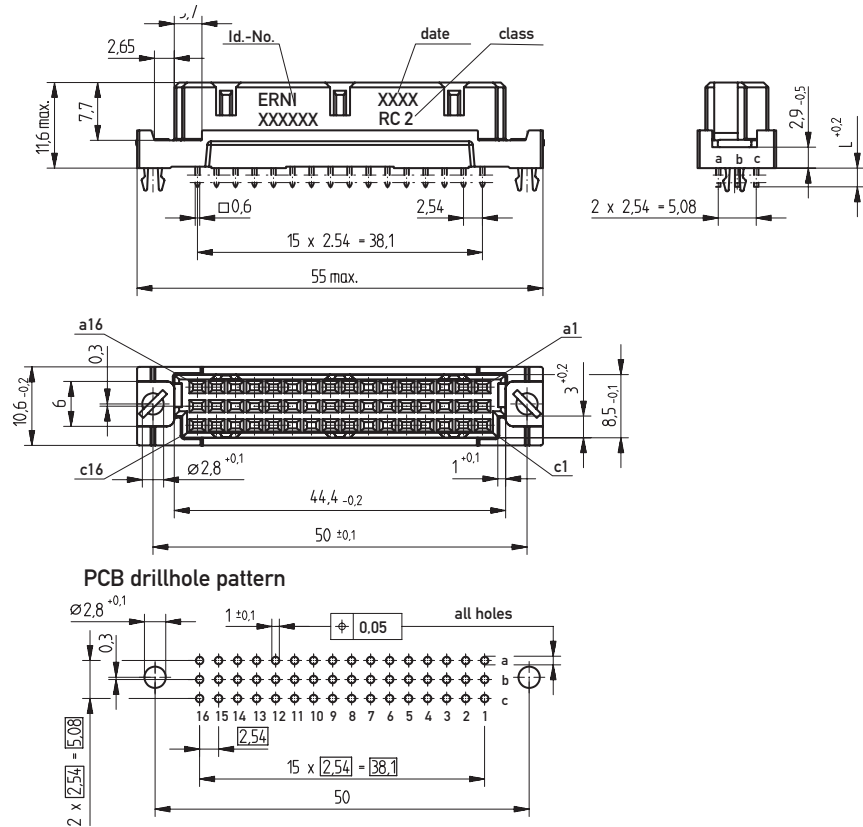
### PCB drillhole pattern



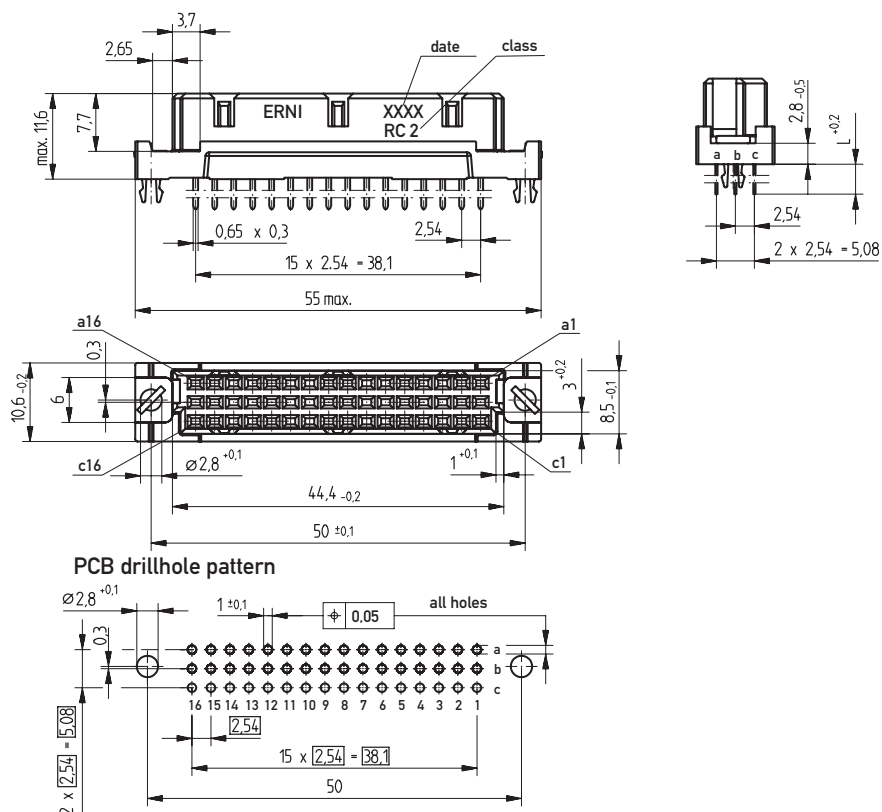
- 1)  $\varnothing 1,0 \pm 0,02$  Diameter of finished plated-through hole
- $\varnothing 1,15 \pm 0,025$  Diameter of drilled hole



### Dimensional Drawing Solder



### Dimensional Drawing THR

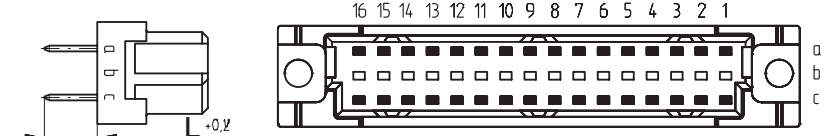
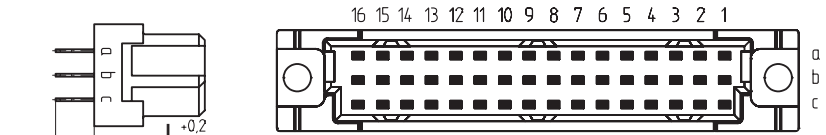
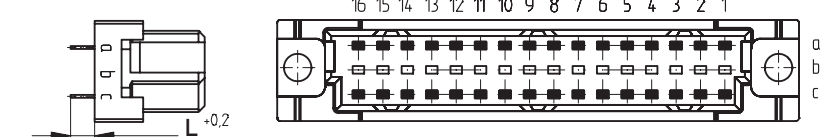


# DIN 41612 / IEC 60603-2 Connectors

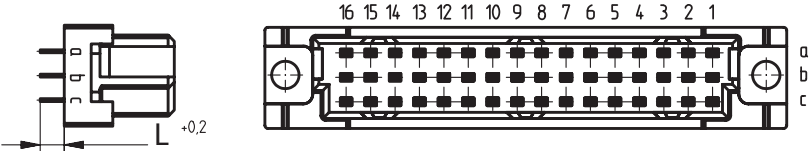
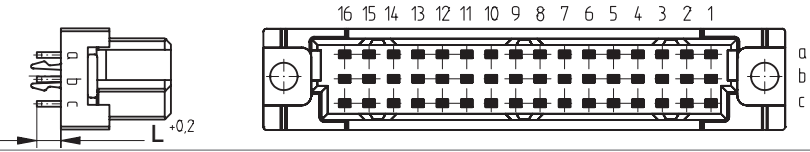
## Type C/2 Female



### Ordering Information

| No. of Pins                                                                         | Termination                  | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------------------------------------------------------------------------------|------------------------------|--------------|----------------|-------|---------------|-------------|
|    |                              |              |                |       |               |             |
| 32                                                                                  | Pressfit                     | 5.5 mm       | 0.6 x 0.6 mm   | 2     | —             | 254854      |
| 32                                                                                  | Pressfit                     | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 294738      |
|    |                              |              |                |       |               |             |
| 48                                                                                  | Pressfit                     | 4 mm         | 0.8 x 0.3 mm   | 2     | —             | 254887      |
| 48                                                                                  | Pressfit                     | 5.5 mm       | 0.6 x 0.6 mm   | 1     | —             | 254852      |
| 48                                                                                  | Pressfit                     | 5.5 mm       | 0.6 x 0.6 mm   | 2     | —             | 234647      |
| 48                                                                                  | Pressfit<br>w. Transfer Zone | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 284136      |
| 48                                                                                  | Pressfit<br>w. Transfer Zone | 17 mm        | 0.6 x 0.6 mm   | 2     | —             | 254896      |
|  |                              |              |                |       |               |             |
| 32                                                                                  | Solder                       | 2.5 mm       | 0.65 x 0.3 mm  | 2     | —             | 254893      |
| 32                                                                                  | Solder                       | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | 284933      |
| 32                                                                                  | Solder                       | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 284171      |
| 32                                                                                  | Solder                       | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 284323      |
| 32                                                                                  | Solder                       | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 414327      |

### Ordering Information

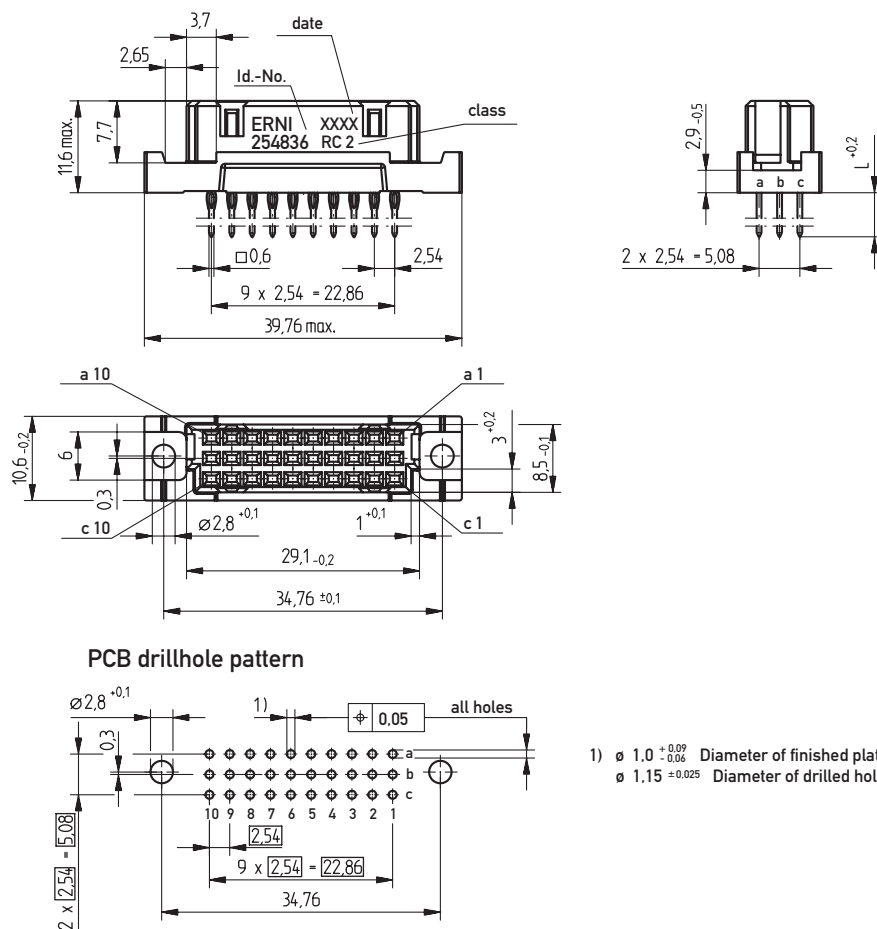
| No. of Pins                                                                         | Termination          | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------------------------------------------------------------------------------|----------------------|--------------|----------------|-------|---------------|-------------|
|    |                      |              |                |       |               |             |
| 48                                                                                  | Solder               | 2.5 mm       | 0.65 x 0.3 mm  | 1     | —             | 284035      |
| 48                                                                                  | Solder               | 2.5 mm       | 0.65 x 0.3 mm  | 2     | —             | 254498      |
| 48                                                                                  | Solder<br>w/o Flange | 2.5 mm       | 0.65 x 0.3 mm  | 2     | —             | 284942      |
| 48                                                                                  | Solder               | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 284174      |
| 48                                                                                  | Solder<br>w/o Flange | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 284175      |
| 48                                                                                  | Solder               | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | 254895      |
| 48                                                                                  | Solder with Clip     | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 284944      |
| 48                                                                                  | Solder               | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | 284941      |
| 48                                                                                  | Solder               | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 284172      |
| 48                                                                                  | Solder               | 17 mm        | 0.6 x 0.6 mm   | 2     | —             | 284938      |
|  |                      |              |                |       |               |             |
| 48                                                                                  | THR with Clip        | 2.5 mm       | 0.6 x 0.6 mm   | 2     | —             | 254970      |

# DIN 41612 / IEC 60603-2 Connectors

## Type C/3 Female



### Dimensional Drawing Pressfit

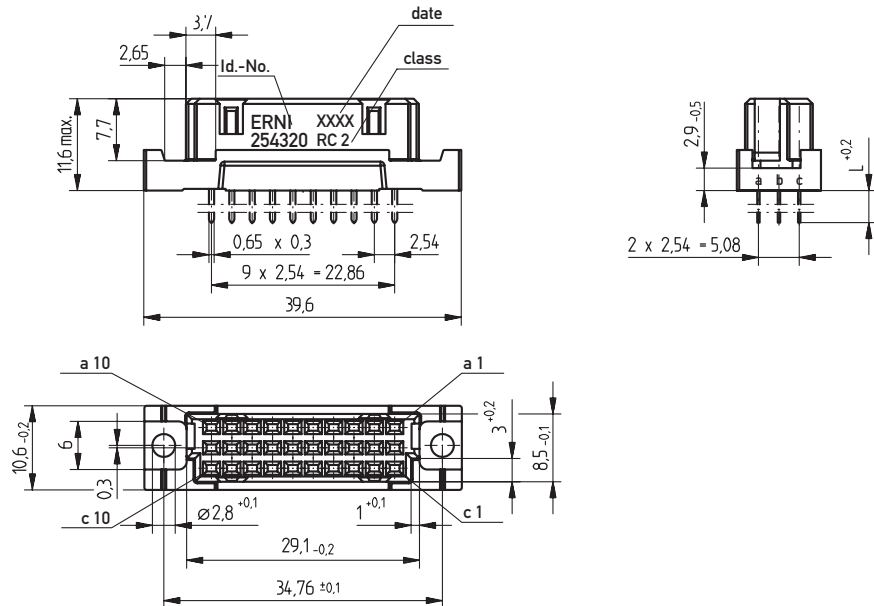


# DIN 41612 / IEC 60603-2 Connectors

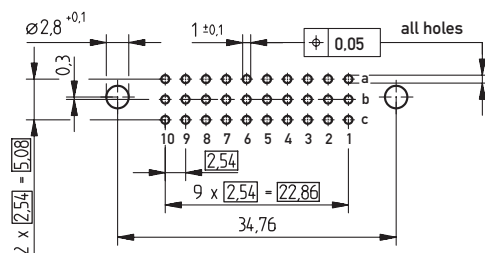
## Type C/3 Female



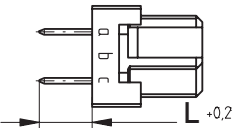
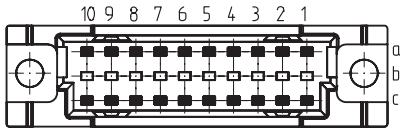
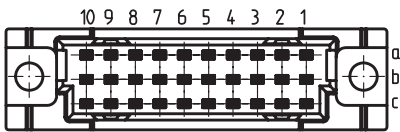
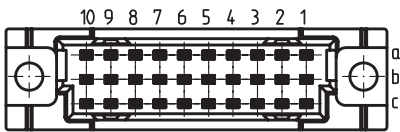
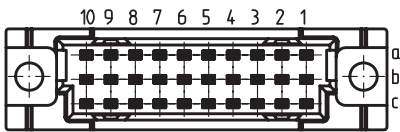
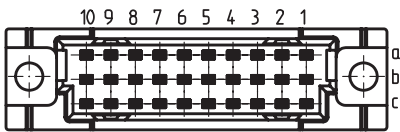
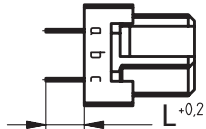
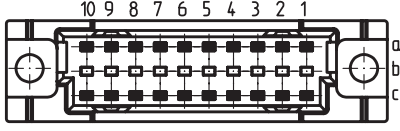
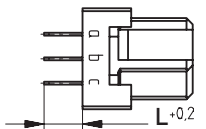
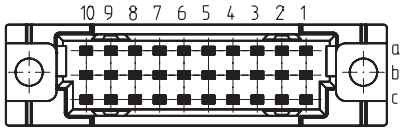
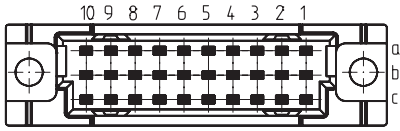
### Dimensional Drawing Solder



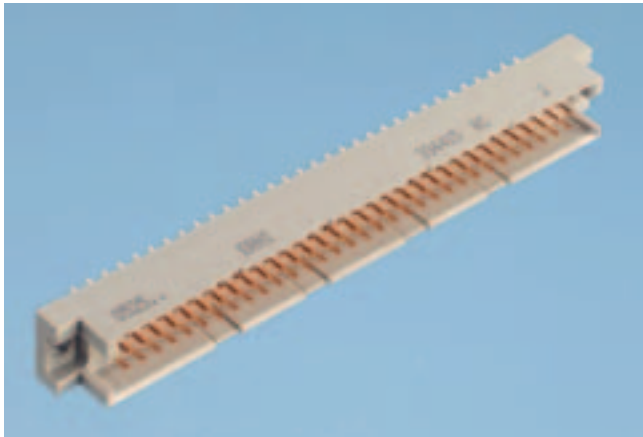
### PCB drillhole pattern



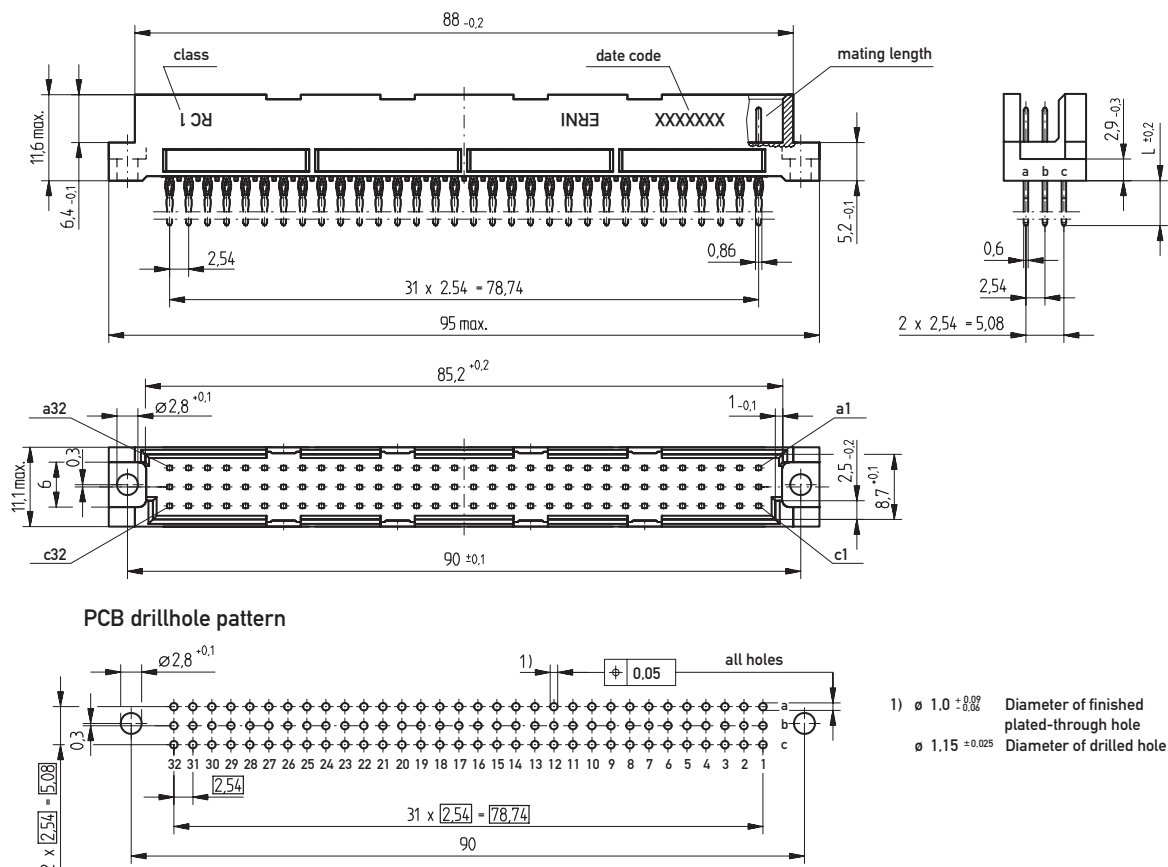
### Ordering Information

| No. of Pins                                                                               | Termination                  | Term. Length | Pin Dimensions                                                                      | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------------|------------------------------|--------------|-------------------------------------------------------------------------------------|-------|---------------|---------------|
| <br>20   | Pressfit                     | 5.5 mm       |    | 2     | —             | <b>254838</b> |
|                                                                                           |                              |              |                                                                                     |       |               |               |
| <br>30   | Pressfit                     | 4 mm         |    | 2     | —             | <b>254995</b> |
|                                                                                           | Pressfit                     | 5.5 mm       |    | 2     | —             | <b>254836</b> |
|                                                                                           | Pressfit<br>w/o Flange       | 5.5 mm       |    | 2     | —             | <b>254321</b> |
|                                                                                           | Pressfit<br>w. Transfer Zone | 13 mm        |    | 2     | —             | <b>284176</b> |
| <br>20 | Solder                       | 4 mm         |  | 2     | —             | <b>284318</b> |
|                                                                                           |                              |              |                                                                                     |       |               |               |
| <br>30 | Solder                       | 4 mm         |  | 2     | —             | <b>254320</b> |
|                                                                                           |                              |              |                                                                                     |       |               |               |
| 30                                                                                        | Solder                       | 13 mm        |  | 2     | —             | <b>284173</b> |

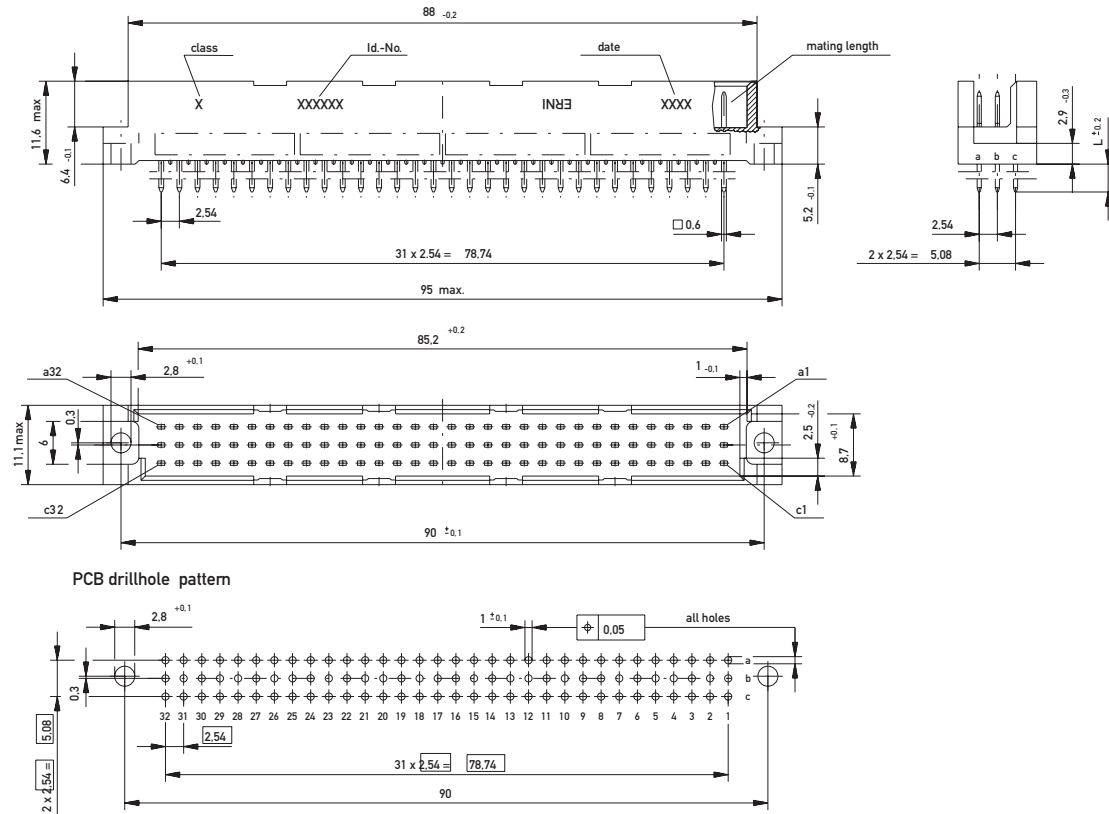
## Type R Male



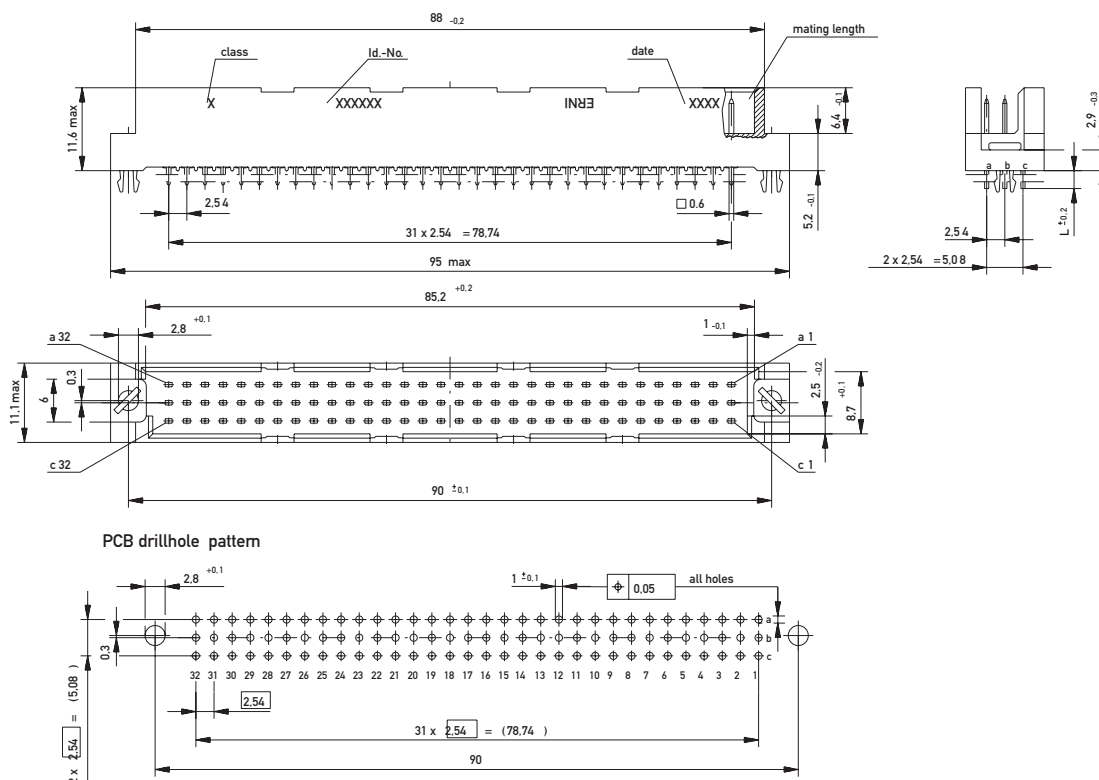
## Dimensional Drawing Pressfit



### Dimensional Drawing Solder



### Dimensional Drawing THR



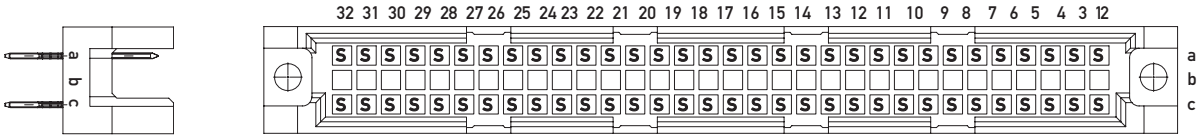
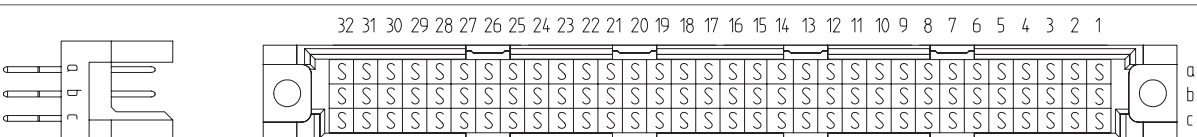


# DIN 41612 / IEC 60603-2 Connectors

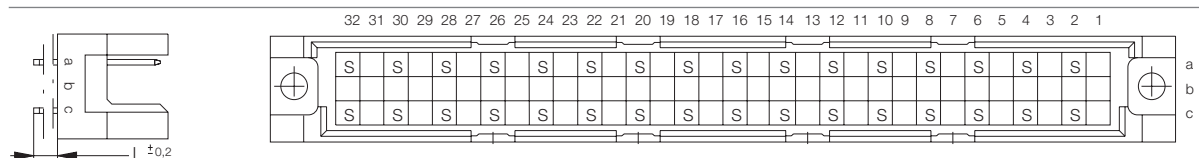
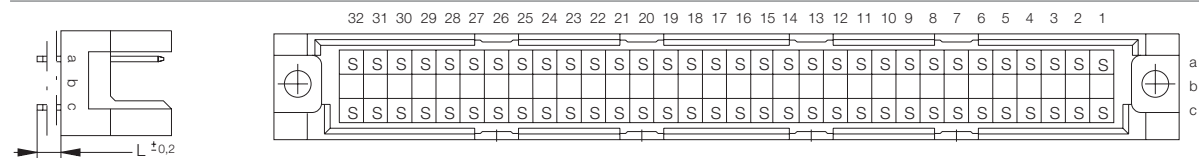
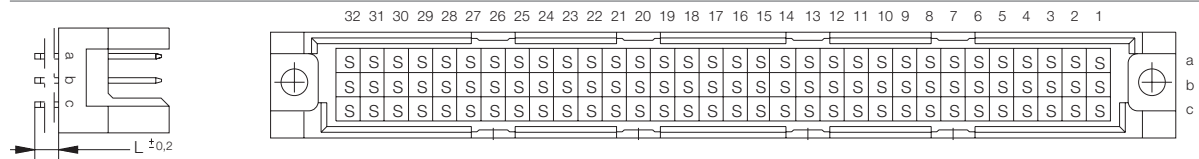
## Type R Male



### Ordering Information

| No. of Pins                                                                          | Termination                  | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|--------------------------------------------------------------------------------------|------------------------------|--------------|----------------|-------|---------------|---------------|
|    |                              |              |                |       |               |               |
| 64                                                                                   | Pressfit                     | 6 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>354385</b> |
| 64                                                                                   | Pressfit                     | 6 mm         | 0.86 x 0.6 mm  | 2     | —             | <b>234713</b> |
| 64                                                                                   | Pressfit<br>w. Transfer Zone | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>354381</b> |
| 64                                                                                   | Pressfit                     | 20 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>354395</b> |
| 64                                                                                   | Pressfit<br>w. Transfer Zone | 20 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>354400</b> |
|  |                              |              |                |       |               |               |
| 96                                                                                   | Pressfit                     | 6 mm         | 0.86 x 0.6 mm  | 1     | —             | <b>354418</b> |
| 96                                                                                   | Pressfit                     | 6 mm         | 0.86 x 0.6 mm  | 2     | —             | <b>234712</b> |
| 96                                                                                   | Pressfit<br>w. Transfer Zone | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>284420</b> |
| 96                                                                                   | Pressfit                     | 20 mm        | 0.86 x 0.6 mm  | 1     | —             | <b>354396</b> |
| 96                                                                                   | Pressfit                     | 20 mm        | 0.86 x 0.6 mm  | 2     | —             | <b>354399</b> |
| 96                                                                                   | Pressfit<br>w. Transfer Zone | 20 mm        | 0.6 x 0.6 mm   | 1     | 2.5 mm        | <b>414702</b> |
| 96                                                                                   | Pressfit<br>w. Transfer Zone | 20 mm        | 0.86 x 0.6 mm  | 2     | —             | <b>254141</b> |

### Ordering Information

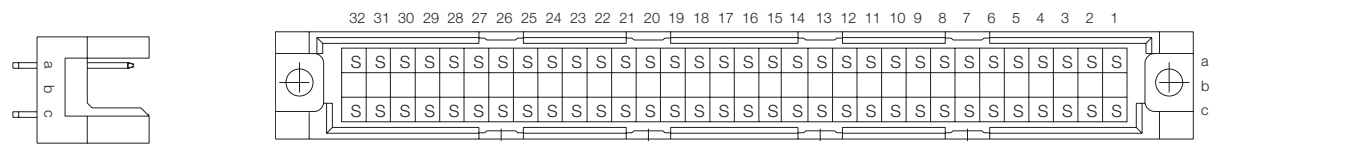
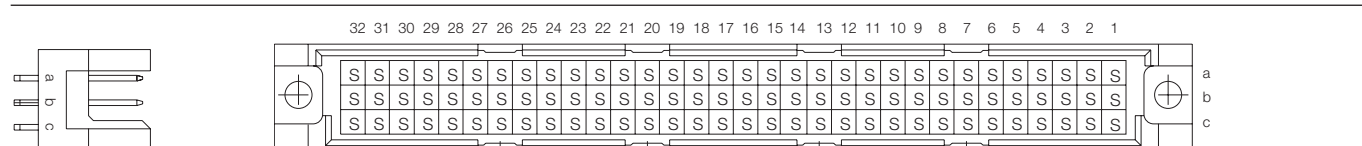
| No. of Pins                                                                          | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|--------------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|---------------|
|    |             |              |                |       |               |               |
| 32                                                                                   | Solder      | 4 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>304225</b> |
| 32                                                                                   | Solder      | 4 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>304425</b> |
| 32                                                                                   | Solder      | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | <b>304221</b> |
| 32                                                                                   | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>304421</b> |
|   |             |              |                |       |               |               |
| 64                                                                                   | Solder      | 4 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>334214</b> |
| 64                                                                                   | Solder      | 4 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>334414</b> |
| 64                                                                                   | Solder      | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | <b>334210</b> |
| 64                                                                                   | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>334410</b> |
|  |             |              |                |       |               |               |
| 96                                                                                   | Solder      | 4 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>334215</b> |
| 96                                                                                   | Solder      | 4 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>334415</b> |
| 96                                                                                   | Solder      | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | <b>334211</b> |
| 96                                                                                   | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>334411</b> |

# DIN 41612 / IEC 60603-2 Connectors

## Type R Male



### Ordering Information

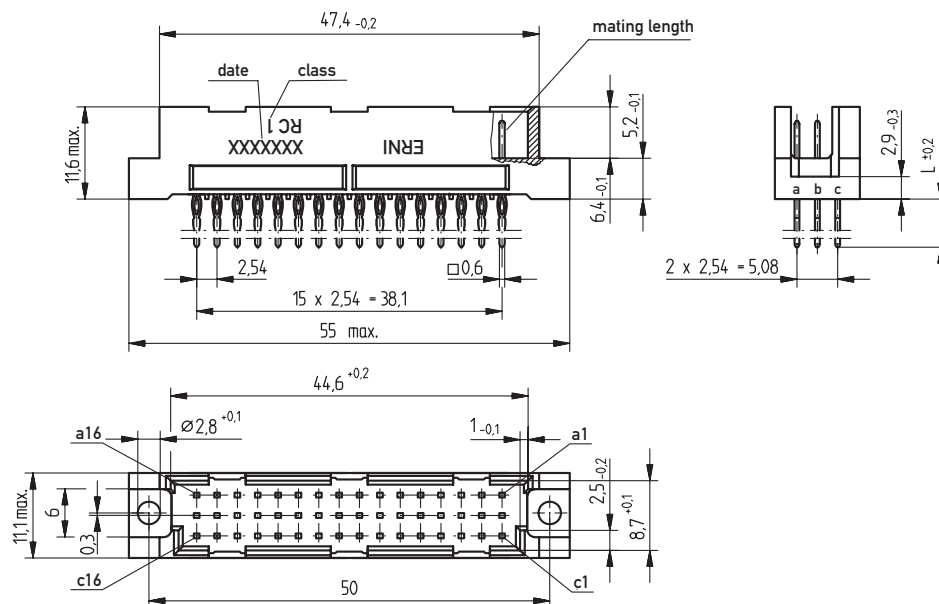
| No. of Pins                                                                        | Termination   | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|------------------------------------------------------------------------------------|---------------|--------------|----------------|-------|---------------|---------------|
|  |               |              |                |       |               |               |
| 64                                                                                 | THR           | 2.5 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>194576</b> |
| 64                                                                                 | THR with Clip | 2.5 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>194578</b> |
|  |               |              |                |       |               |               |
| 96                                                                                 | THR           | 2.5 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>164306</b> |
| 96                                                                                 | THR with Clip | 2.5 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>154961</b> |

# DIN 41612 / IEC 60603-2 Connectors

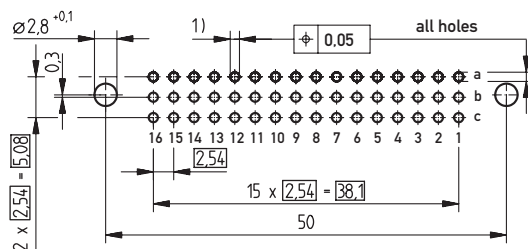
## Type R/2 Male



### Dimensional Drawing Pressfit

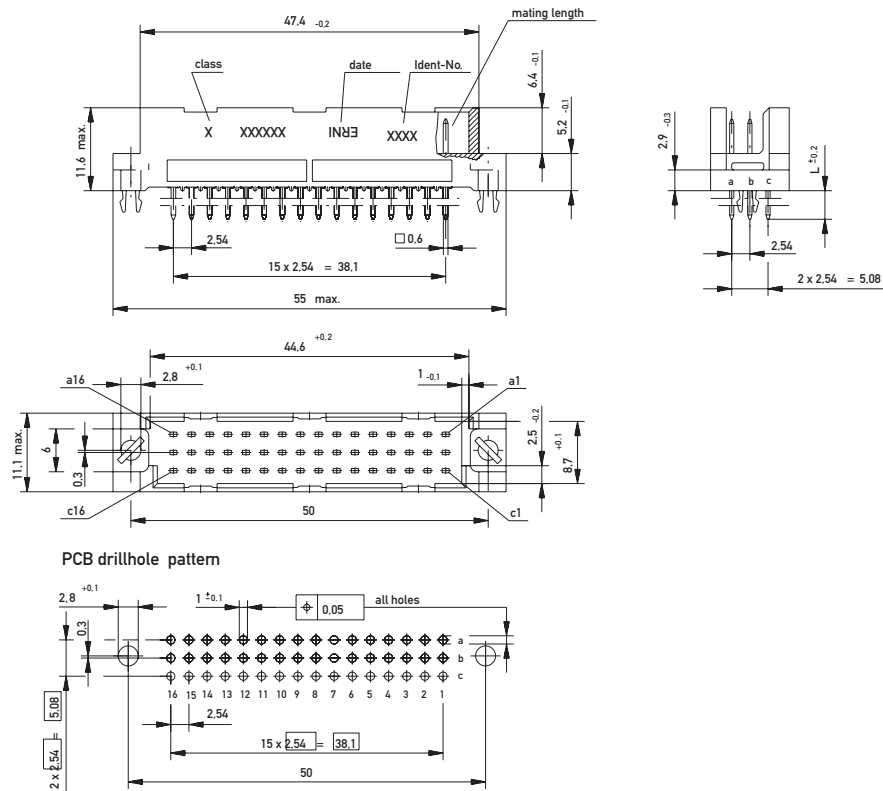


### PCB drillhole pattern

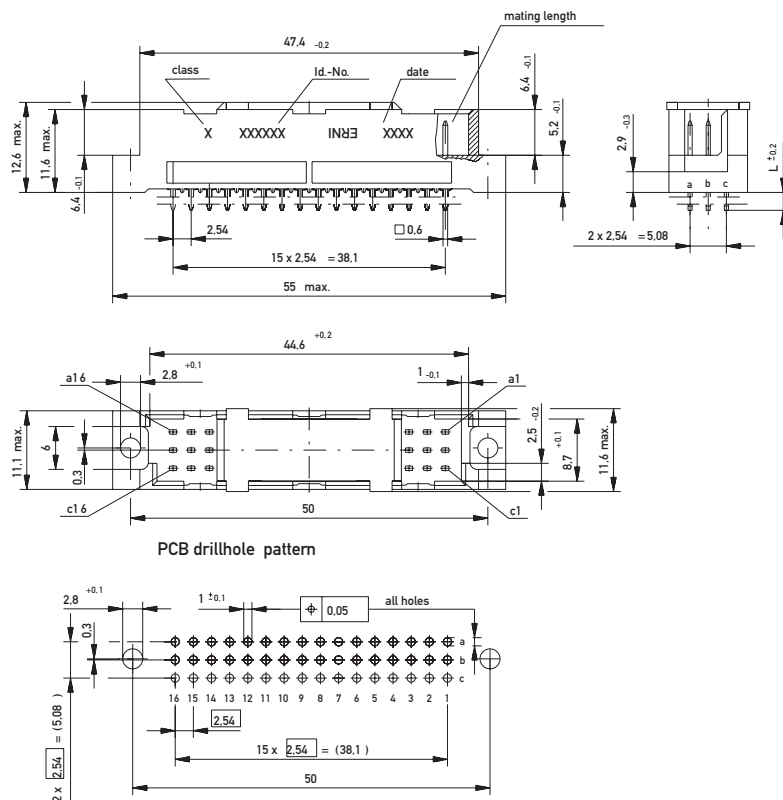


- 1)  $\phi 1,0 \pm 0,09$  Diameter of finished plated-through hole
- $\phi 1,15 \pm 0,025$  Diameter of drilled hole

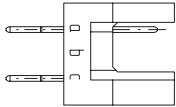
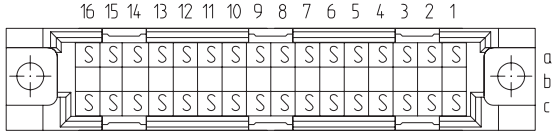
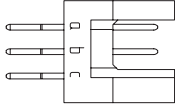
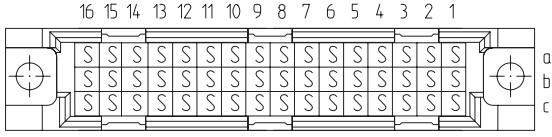
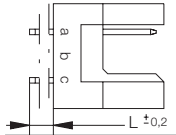
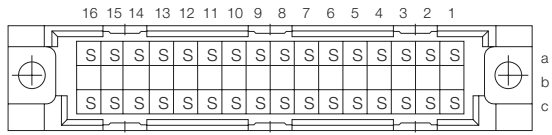
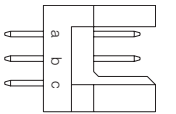
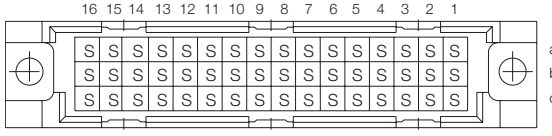
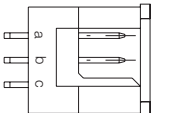
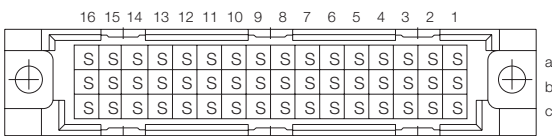
### Dimensional Drawing Solder



### Dimensional Drawing THR



### Ordering Information

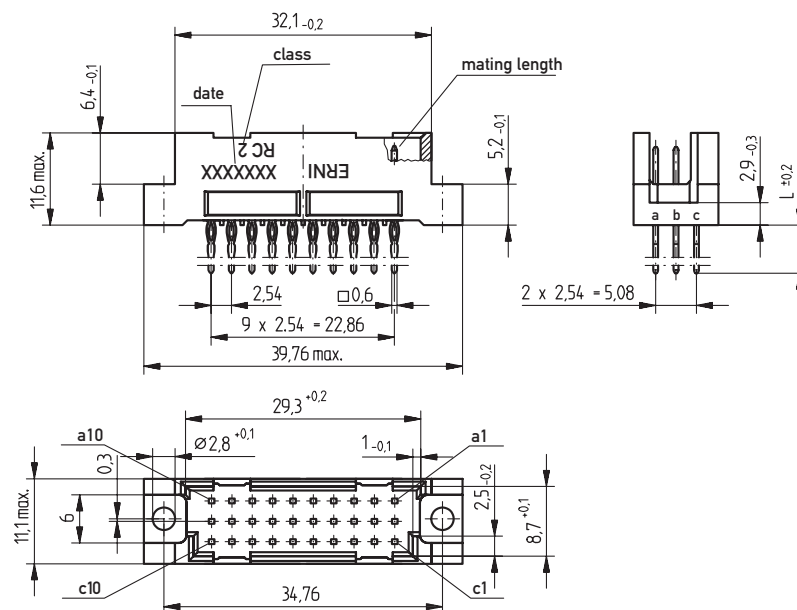
| No. of Pins                                                                                                                                                             | Termination                  | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|----------------|-------|---------------|---------------|
|       |                              |              |                |       |               |               |
| 32                                                                                                                                                                      | Pressfit                     | 6 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>284272</b> |
|       |                              |              |                |       |               |               |
| 48                                                                                                                                                                      | Pressfit                     | 6 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>354406</b> |
| 48                                                                                                                                                                      | Pressfit                     | 6 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>354382</b> |
| 48                                                                                                                                                                      | Pressfit<br>w. Transfer Zone | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | <b>354397</b> |
| 48                                                                                                                                                                      | Pressfit                     | 20 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>354384</b> |
|   |                              |              |                |       |               |               |
| 32                                                                                                                                                                      | Solder                       | 4 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>004485</b> |
|   |                              |              |                |       |               |               |
| 48                                                                                                                                                                      | Solder                       | 4 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>004484</b> |
| 48                                                                                                                                                                      | Solder with Clip             | 4 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>063277</b> |
| 48                                                                                                                                                                      | Solder                       | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>424201</b> |
|   |                              |              |                |       |               |               |
| 48                                                                                                                                                                      | THR                          | 2.5 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>154964</b> |
| 48                                                                                                                                                                      | THR with Clip                | 2.5 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>144710</b> |

# DIN 41612 / IEC 60603-2 Connectors

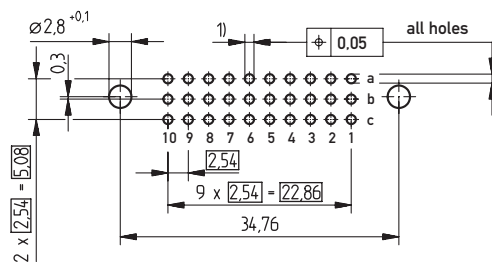
## Type R/3 Male



### Dimensional Drawing Pressfit

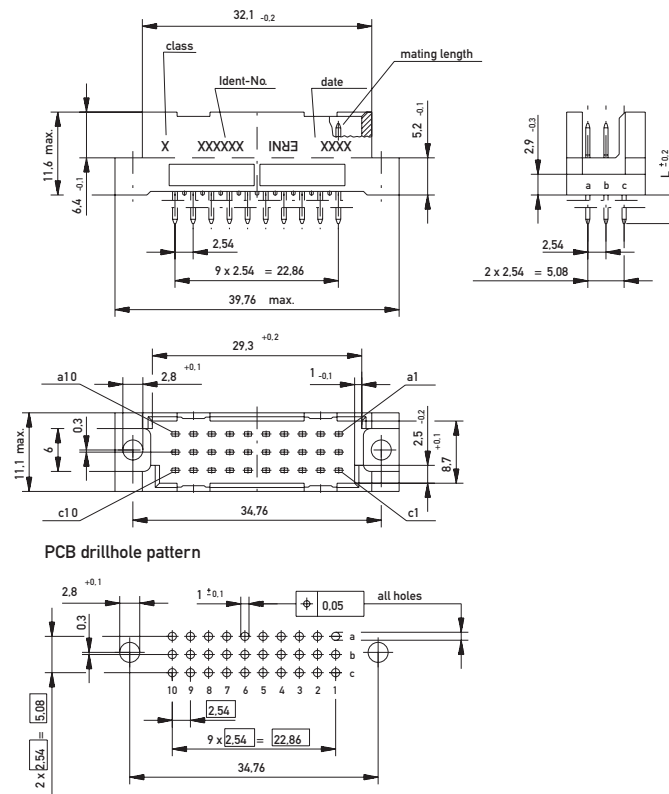


### PCB drillhole pattern

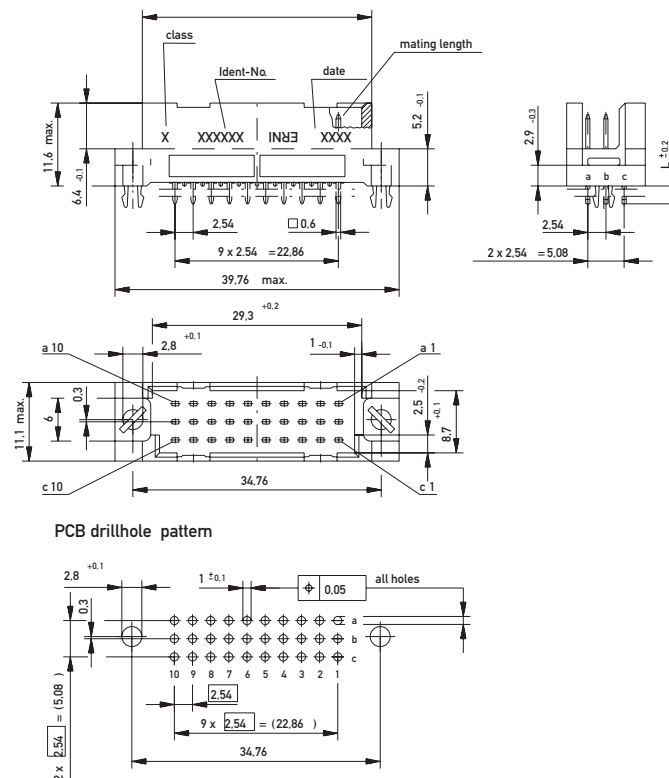


- 1)  $\phi 1.0_{-0.025}^{+0.009}$  Diameter of finished plated-through hole  
 $\phi 1.15_{-0.025}^{+0.009}$  Diameter of drilled hole

### Dimensional Drawing Solder



### Dimensional Drawing THR



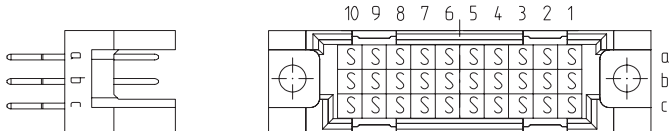
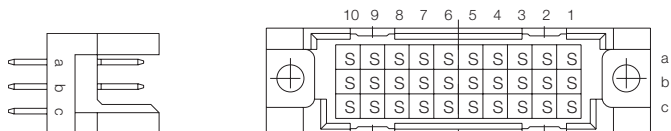
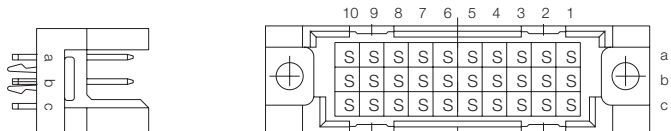


# DIN 41612 / IEC 60603-2 Connectors

## Type R/3 Male



### Ordering Information

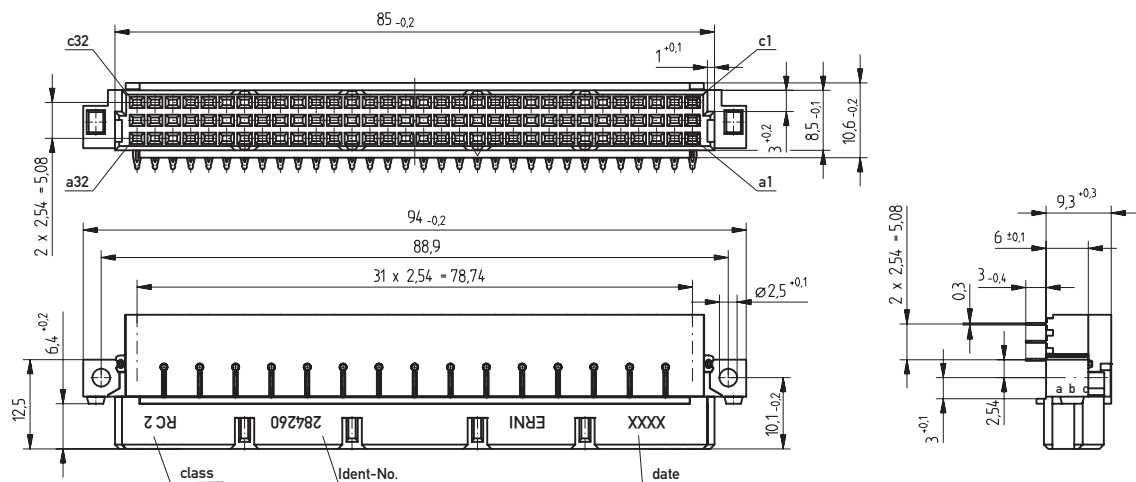
| No. of Pins                                                                         | Termination                  | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|------------------------------|--------------|----------------|-------|---------------|---------------|
|    |                              |              |                |       |               |               |
| 30                                                                                  | Pressfit                     | 6 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>354383</b> |
| 30                                                                                  | Pressfit<br>w. Transfer Zone | 20 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>354388</b> |
|    |                              |              |                |       |               |               |
| 30                                                                                  | Solder                       | 4 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>004500</b> |
| 30                                                                                  | Solder                       | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>424195</b> |
|  |                              |              |                |       |               |               |
| 30                                                                                  | THR with Clip                | 2.5 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>144708</b> |

# DIN 41612 / IEC 60603-2 Connectors

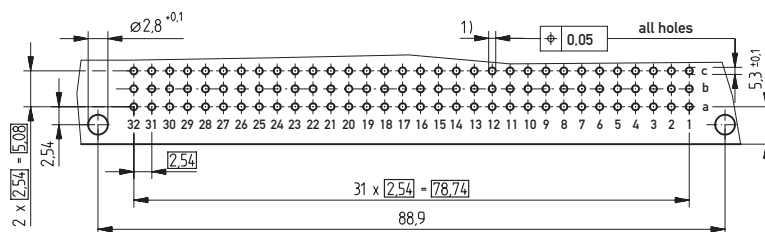
## Type R Female



### Dimensional Drawing Pressfit

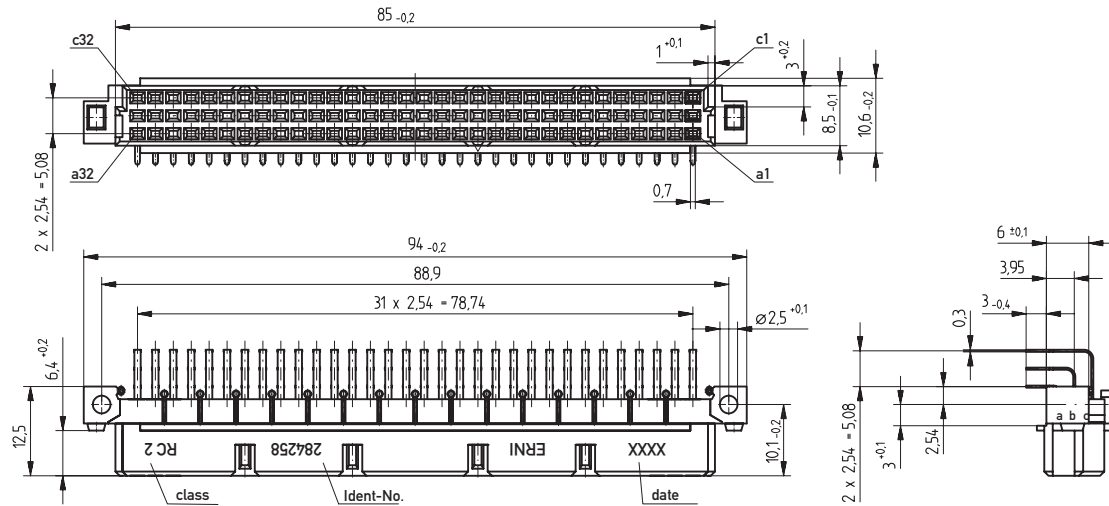


### PCB drillhole pattern

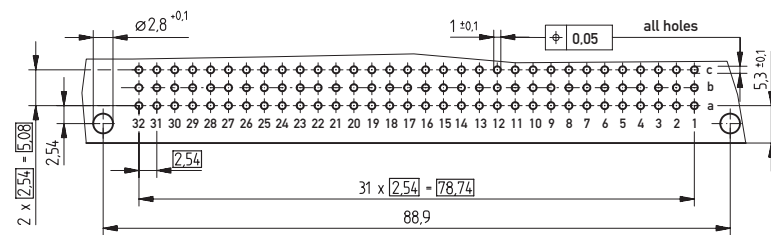


- 1)  $\varnothing 1.0^{+0.09}_{-0.06}$  Diameter of finished plated-through hole
- $\varnothing 1.15^{+0.025}_{-0.025}$  Diameter of drilled hole

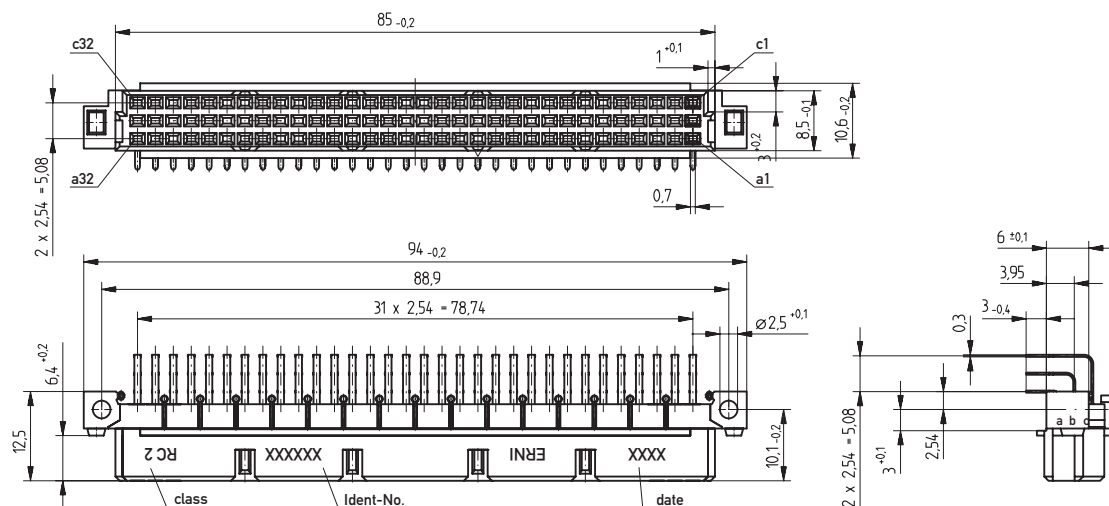
### Dimensional Drawing Solder



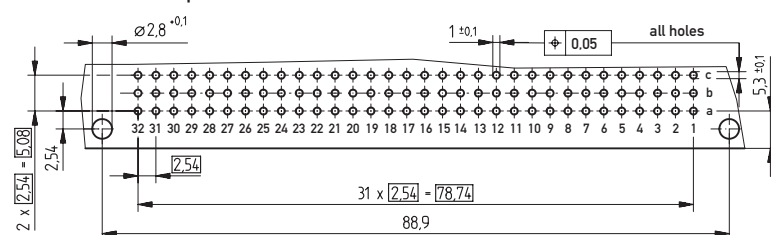
PCB drillhole pattern



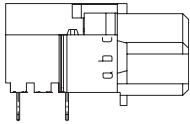
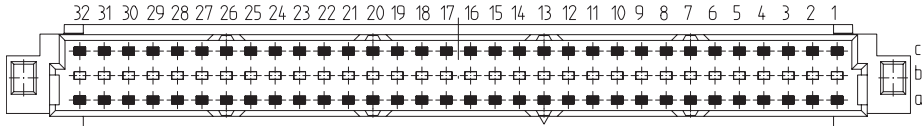
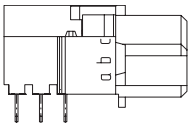
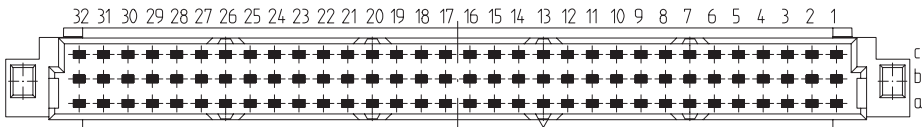
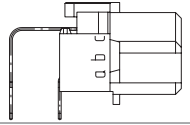
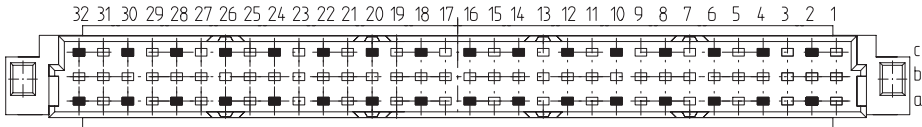
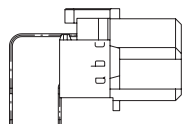
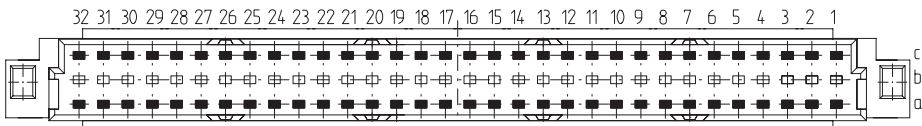
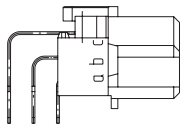
### Dimensional Drawing THR



PCB drillhole pattern



### Ordering Information

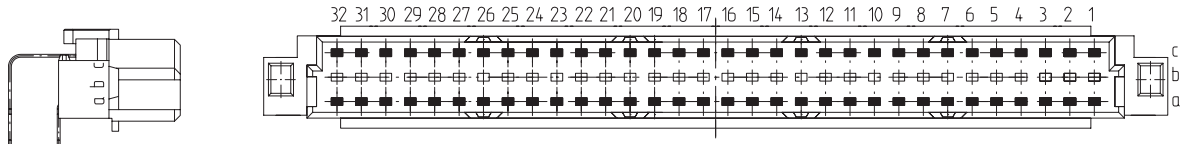
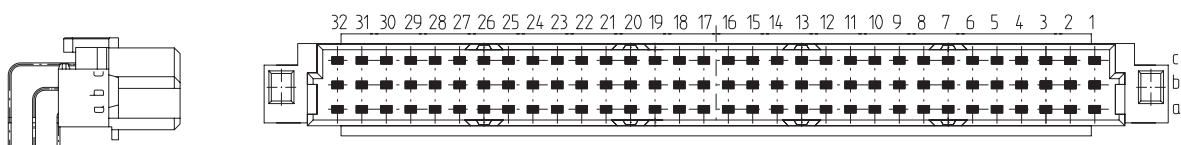
| No. of Pins                                                                         | Termination      | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number                                                                          |
|-------------------------------------------------------------------------------------|------------------|--------------|----------------|-------|---------------|--------------------------------------------------------------------------------------|
|    | Pressfit         | 3 mm         | 0.7 x 0.3 mm   | 2     | —             |    |
|                                                                                     |                  |              |                |       |               | <b>284262</b>                                                                        |
|    | Pressfit         | 3 mm         | 0.7 x 0.3 mm   | 2     | —             |    |
|                                                                                     |                  |              |                |       |               | <b>284260</b>                                                                        |
|  | Solder           | 3 mm         | 0.7 x 0.3 mm   | 2     | —             |   |
|                                                                                     |                  |              |                |       |               | <b>284261</b>                                                                        |
|  | Solder           | 3 mm         | 0.7 x 0.3 mm   | 2     | —             |  |
|                                                                                     |                  |              |                |       |               | <b>284259</b>                                                                        |
| 64                                                                                  | Solder with Clip | 3 mm         | 0.7 x 0.3 mm   | 2     | —             | <b>284263</b>                                                                        |
|  | Solder           | 3 mm         | 0.7 x 0.3 mm   | 1     | —             | <b>354135</b>                                                                        |
|                                                                                     | Solder           | 3 mm         | 0.7 x 0.3 mm   | 2     | —             | <b>284258</b>                                                                        |
|                                                                                     | Solder with Clip | 3 mm         | 0.7 x 0.3 mm   | 2     | —             | <b>284264</b>                                                                        |

## DIN 41612 / IEC 60603-2 Connectors

### Type R Female



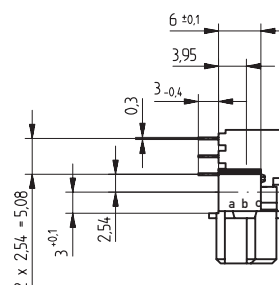
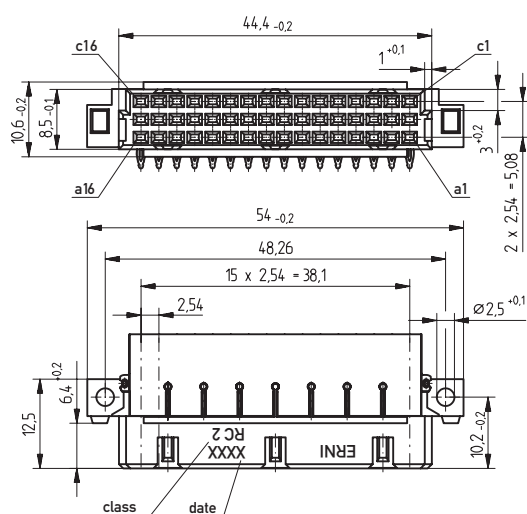
### Ordering Information

| No. of Pins                                                                        | Termination   | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|------------------------------------------------------------------------------------|---------------|--------------|----------------|-------|---------------|---------------|
|  |               |              |                |       |               |               |
| 64                                                                                 | THR           | 3 mm         | 0.7 x 0.3 mm   | 2     | —             | <b>284270</b> |
| 64                                                                                 | THR with Clip | 3 mm         | 0.7 x 0.3 mm   | 2     | —             | <b>284653</b> |
|  |               |              |                |       |               |               |
| 96                                                                                 | THR           | 3 mm         | 0.7 x 0.3 mm   | 2     | —             | <b>244139</b> |
| 96                                                                                 | THR with Clip | 3 mm         | 0.7 x 0.3 mm   | 2     | —             | <b>284269</b> |

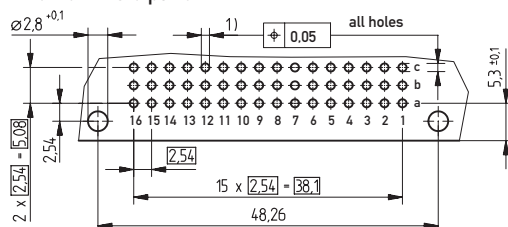
**Type R/2 Female**



## Dimensional Drawing Pressfit



### PCB drillhole pattern



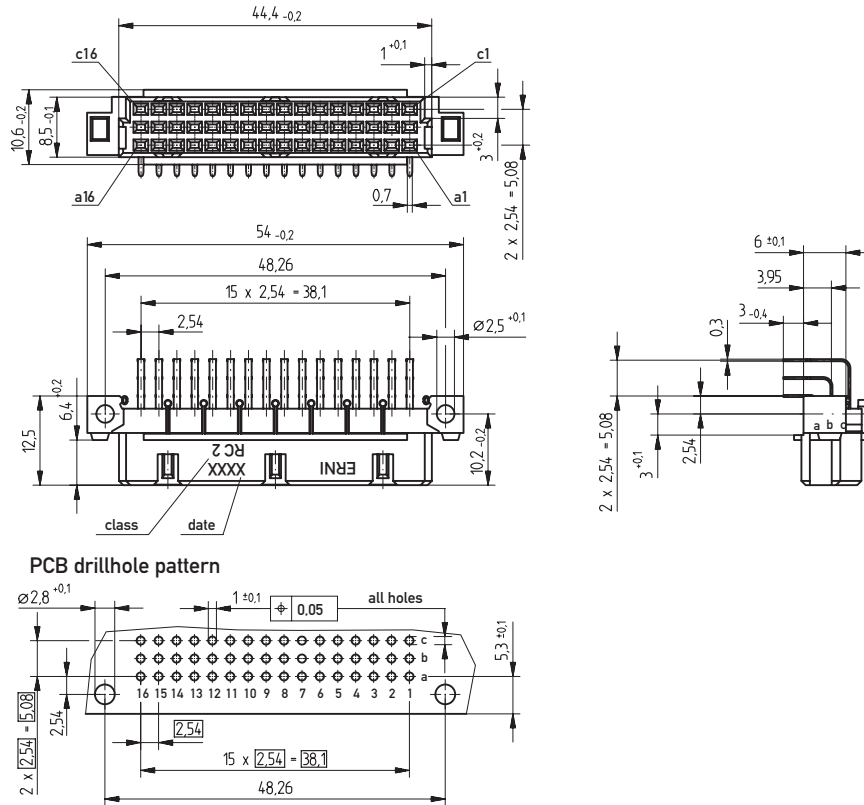
- 1)  $\varnothing 1.0 \pm 0.09$  Diameter of finished plated-through hole  
 $\varnothing 1.15 \pm 0.025$  Diameter of drilled hole

# DIN 41612 / IEC 60603-2 Connectors

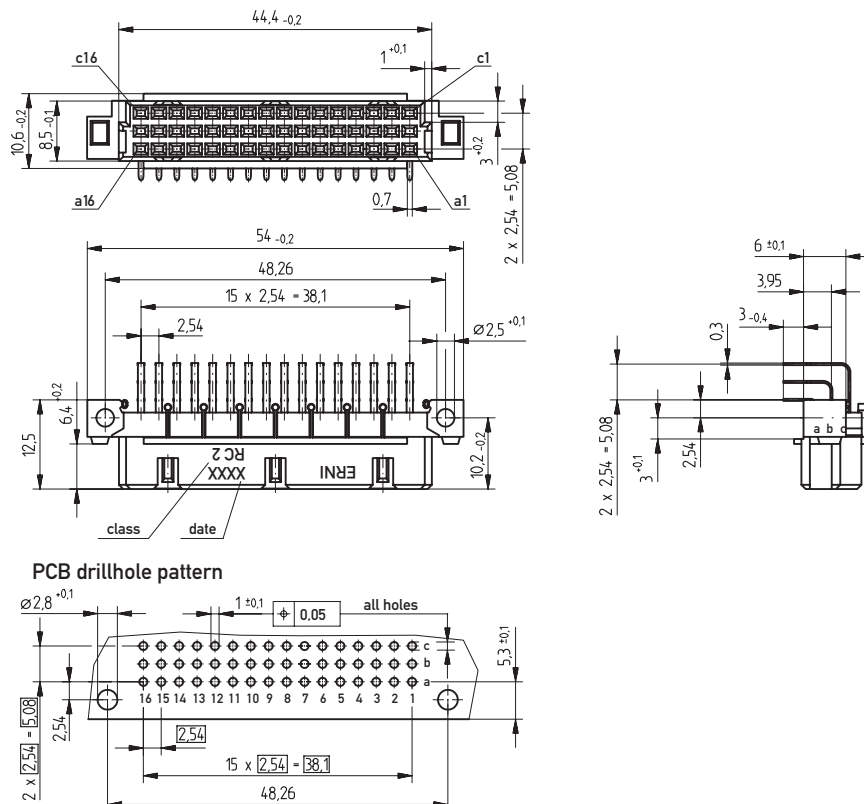
## Type R/2 Female



### Dimensional Drawing Solder



### Dimensional Drawing THR

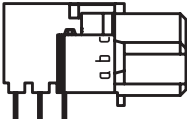
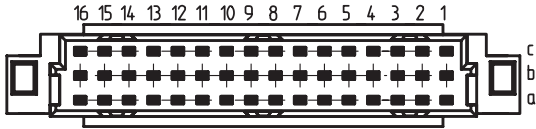
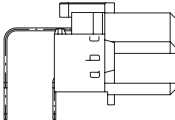
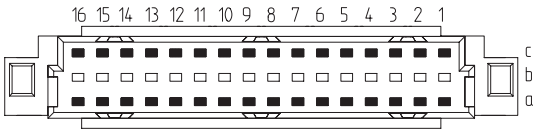
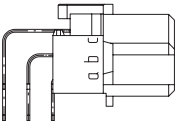
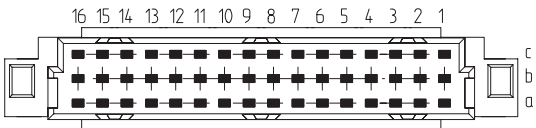
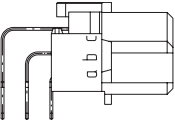
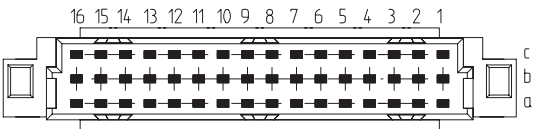


# DIN 41612 / IEC 60603-2 Connectors

## Type R/2 Female



### Ordering Information

| No. of Pins                                                                         | Termination   | Term. Length | Pin Dimensions                                                                      | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|---------------|--------------|-------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | Pressfit      | 3 mm         |    | 2     | —             | <b>354159</b> |
|                                                                                     |               |              |                                                                                     |       |               |               |
|    | Solder        | 3 mm         |    | 2     | —             | <b>284324</b> |
|                                                                                     |               |              |                                                                                     |       |               |               |
|  | Solder        | 3 mm         |   | 1     | —             | <b>354251</b> |
|                                                                                     |               |              |                                                                                     |       |               |               |
| 48                                                                                  | Solder        | 3 mm         | 0.7 x 0.3 mm                                                                        | 2     | —             | <b>284325</b> |
|  | THR           | 3 mm         |  | 2     | —             | <b>354134</b> |
|                                                                                     |               |              |                                                                                     |       |               |               |
| 48                                                                                  | THR with Clip | 3 mm         | 0.7 x 0.3 mm                                                                        | 2     | —             | <b>354220</b> |

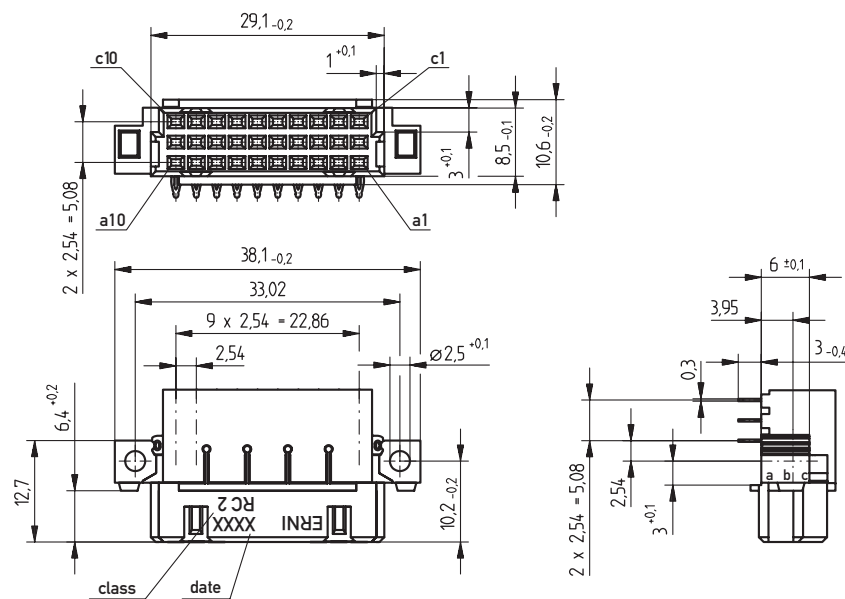


# DIN 41612 / IEC 60603-2 Connectors

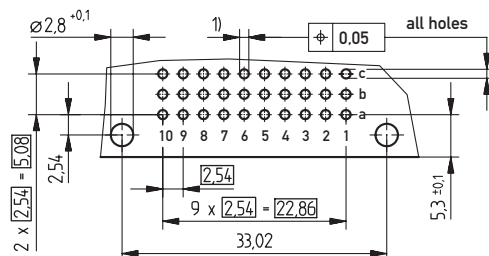
## Type R/3 Female



### Dimensional Drawing Pressfit



### PCB drillhole pattern



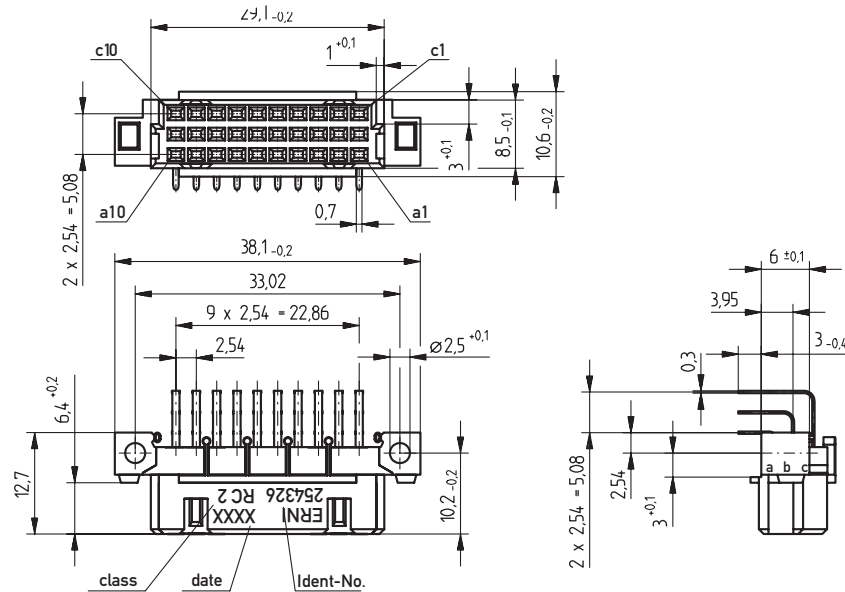
- 1) Ø 1,0<sup>+0,09</sup> Diameter of finished plated-through hole  
 Ø 1,15<sup>±0,025</sup> Diameter of drilled hole

# DIN 41612 / IEC 60603-2 Connectors

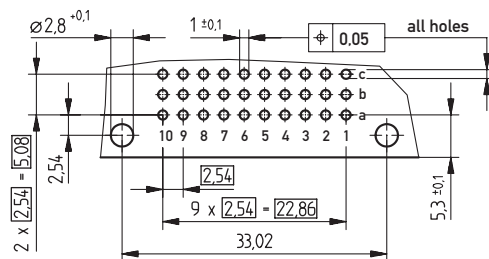
## Type R/3 Female



### Dimensional Drawing Solder



### PCB drillhole pattern

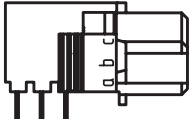
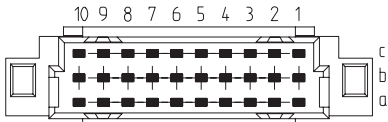
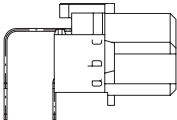
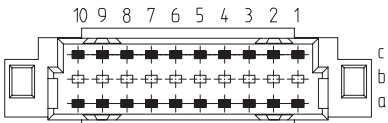
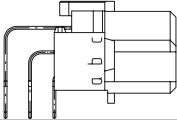
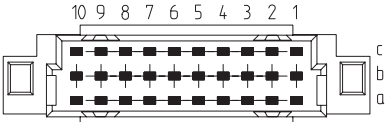


# DIN 41612 / IEC 60603-2 Connectors

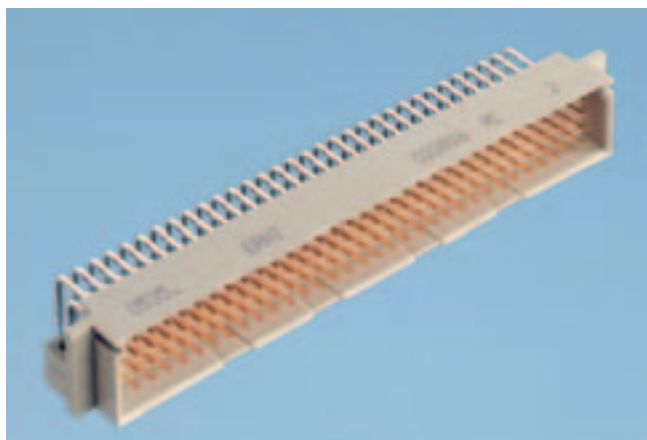
## Type R/3 Female



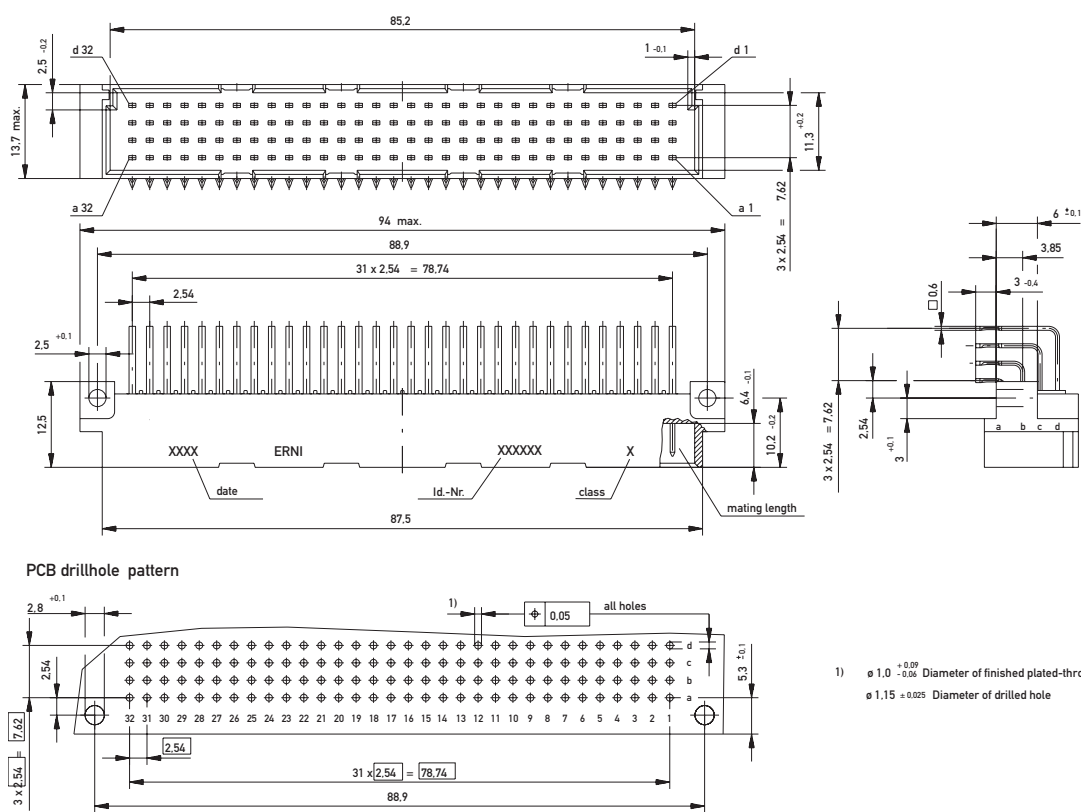
### Ordering Information

| No. of Pins                                                                         | Termination | Term. Length | Pin Dimensions                                                                     | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|-------------|--------------|------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | Pressfit    | 3 mm         |   | 2     | —             | <b>294863</b> |
|                                                                                     |             |              |                                                                                    |       |               |               |
|    | Solder      | 3 mm         |   | 2     | —             | <b>284419</b> |
|                                                                                     |             |              |                                                                                    |       |               |               |
|  | Solder      | 3 mm         |  | 1     | —             | <b>294716</b> |
|                                                                                     |             |              |                                                                                    |       |               |               |
| 30                                                                                  | Solder      | 3 mm         | 0.7 x 0.3 mm                                                                       | 2     | —             | <b>254326</b> |

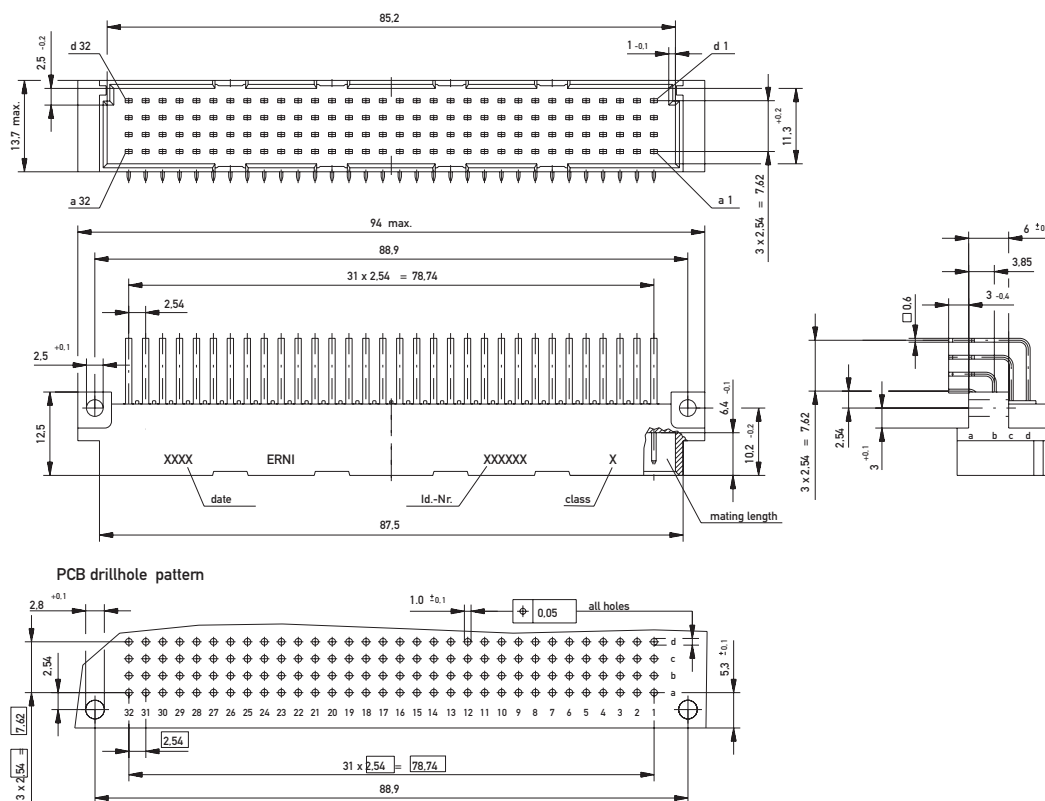
## Type CD Male



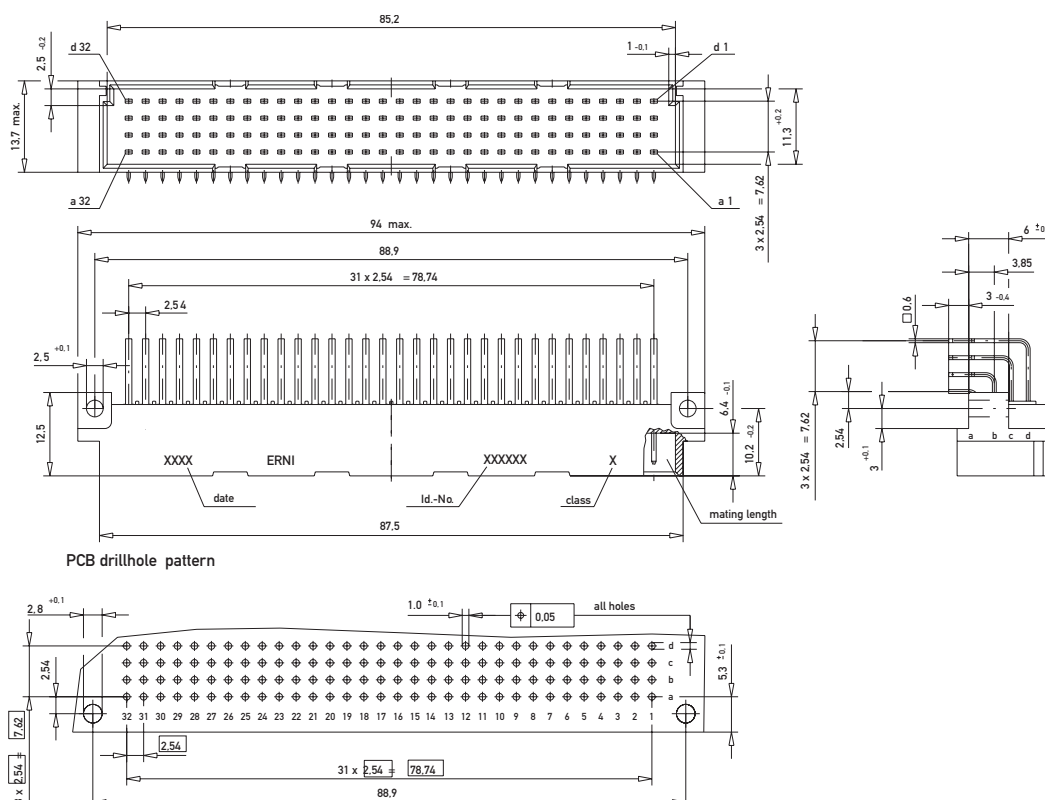
## Dimensional Drawing Pressfit



## Dimensional Drawing Solder



## Dimensional Drawing THR

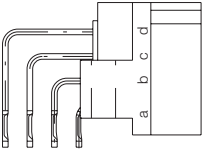
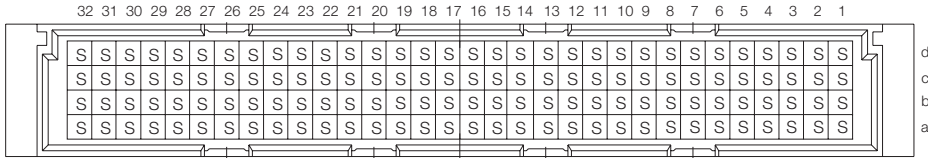
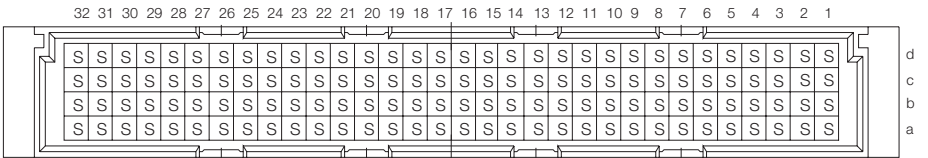
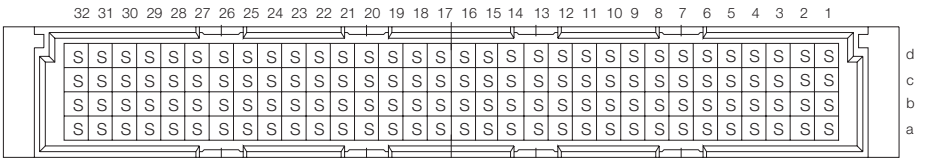
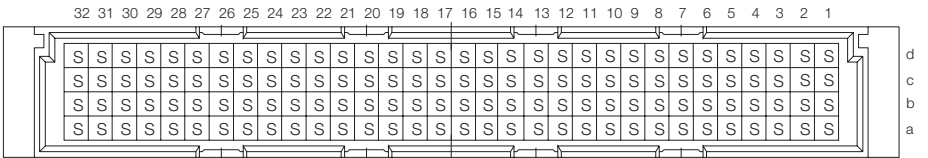
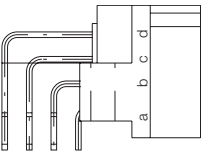
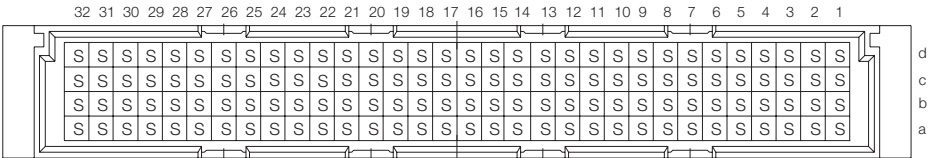
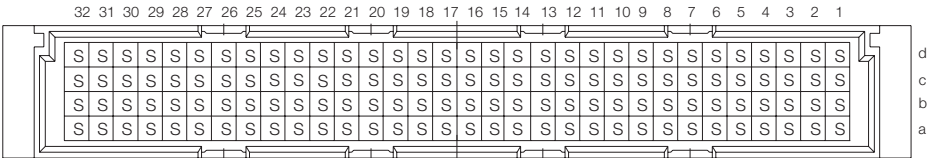


# DIN 41612 / IEC 60603-2 Connectors

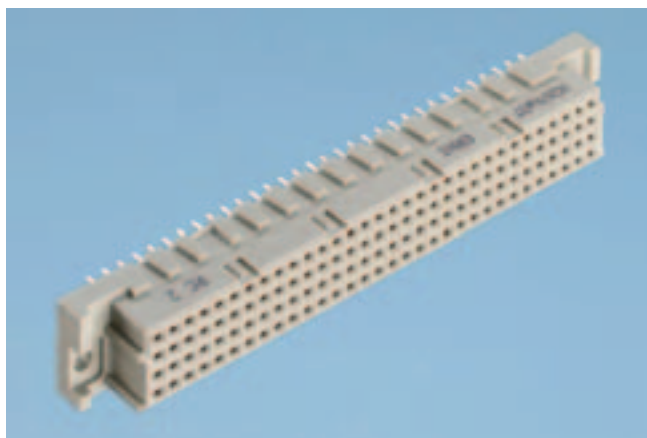
## Type CD Male



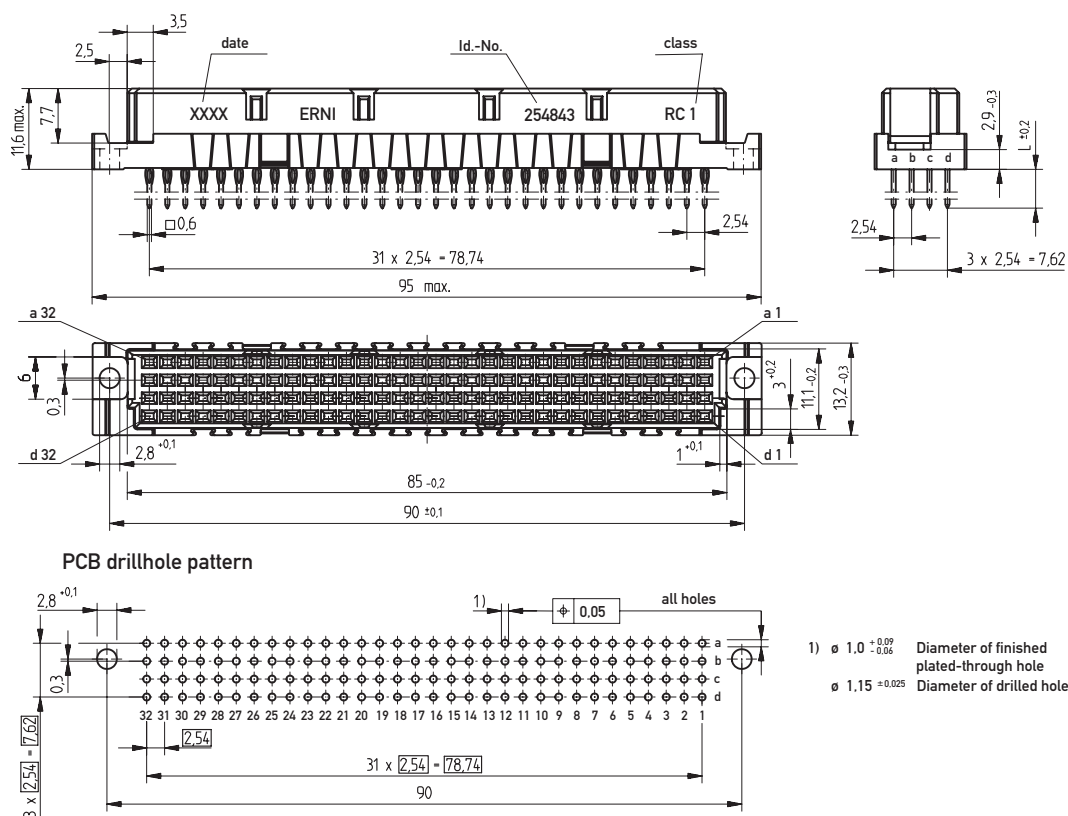
### Ordering Information

| No. of Pins                                                                         | Termination      | Term. Length | Pin Dimensions                                                                       | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|------------------|--------------|--------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | Pressfit         | 3 mm         |    | 2     | 1.5 mm        | <b>033436</b> |
|                                                                                     | Solder           | 3 mm         |    | 1     | —             | <b>033298</b> |
|                                                                                     | Solder           | 3 mm         |    | 2     | —             | <b>023816</b> |
|                                                                                     | Solder with Clip | 3 mm         |    | 2     | —             | <b>913767</b> |
|  | THR              | 3 mm         |  | 2     | —             | <b>144713</b> |
|                                                                                     | THR with Clip    | 3 mm         |  | 2     | —             | <b>154959</b> |

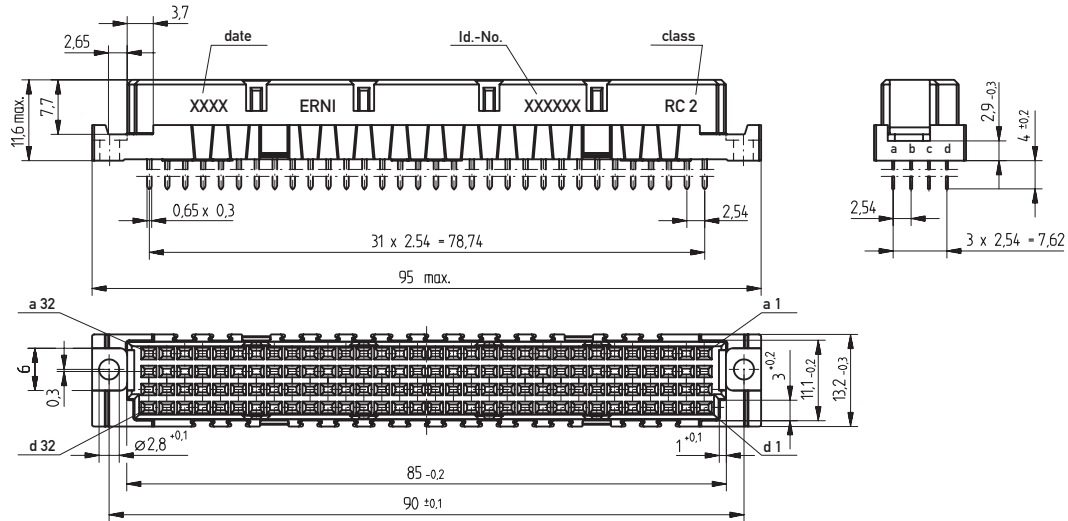
## Type CD Female



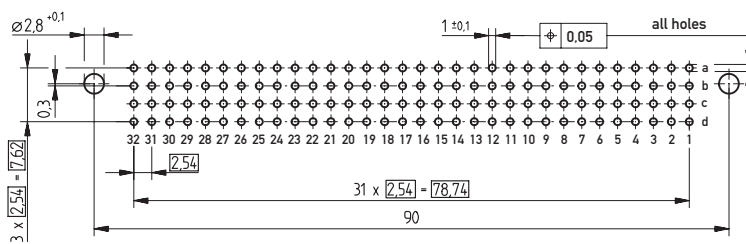
## Dimensional Drawing Pressfit



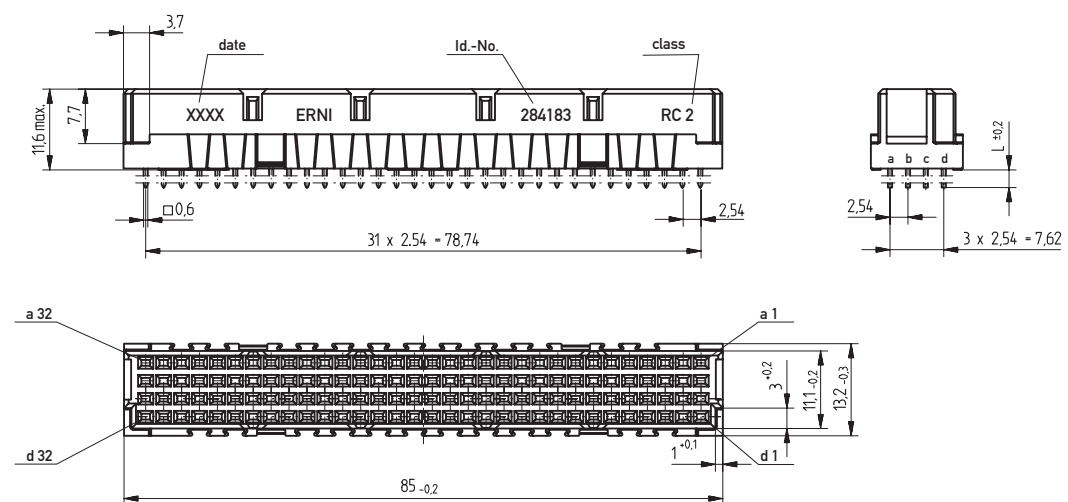
### Dimensional Drawing Solder



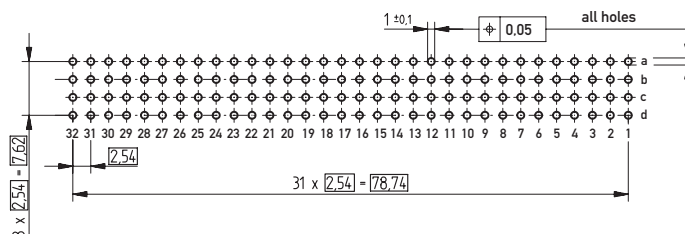
PCB drillhole pattern



### Dimensional Drawing THR



PCB drillhole pattern



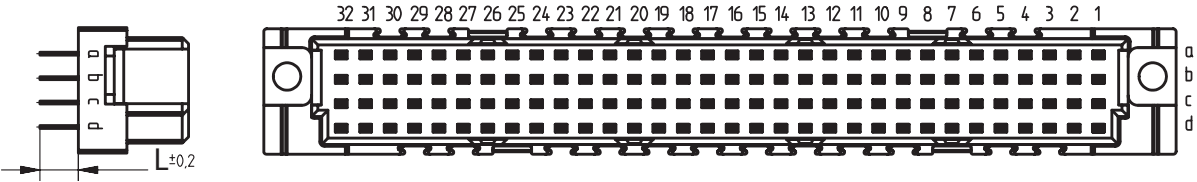
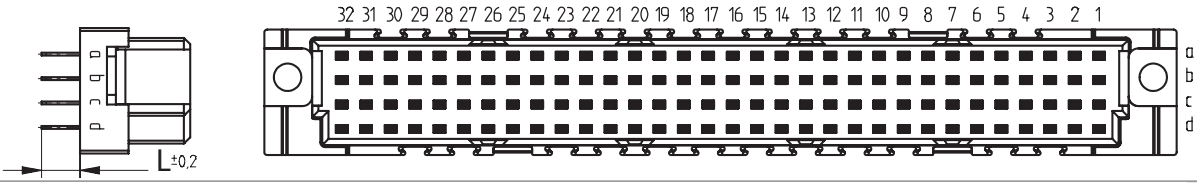
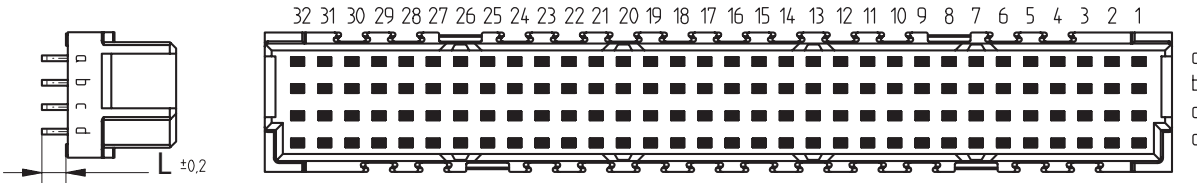


# DIN 41612 / IEC 60603-2 Connectors

## Type CD Female



### Ordering Information

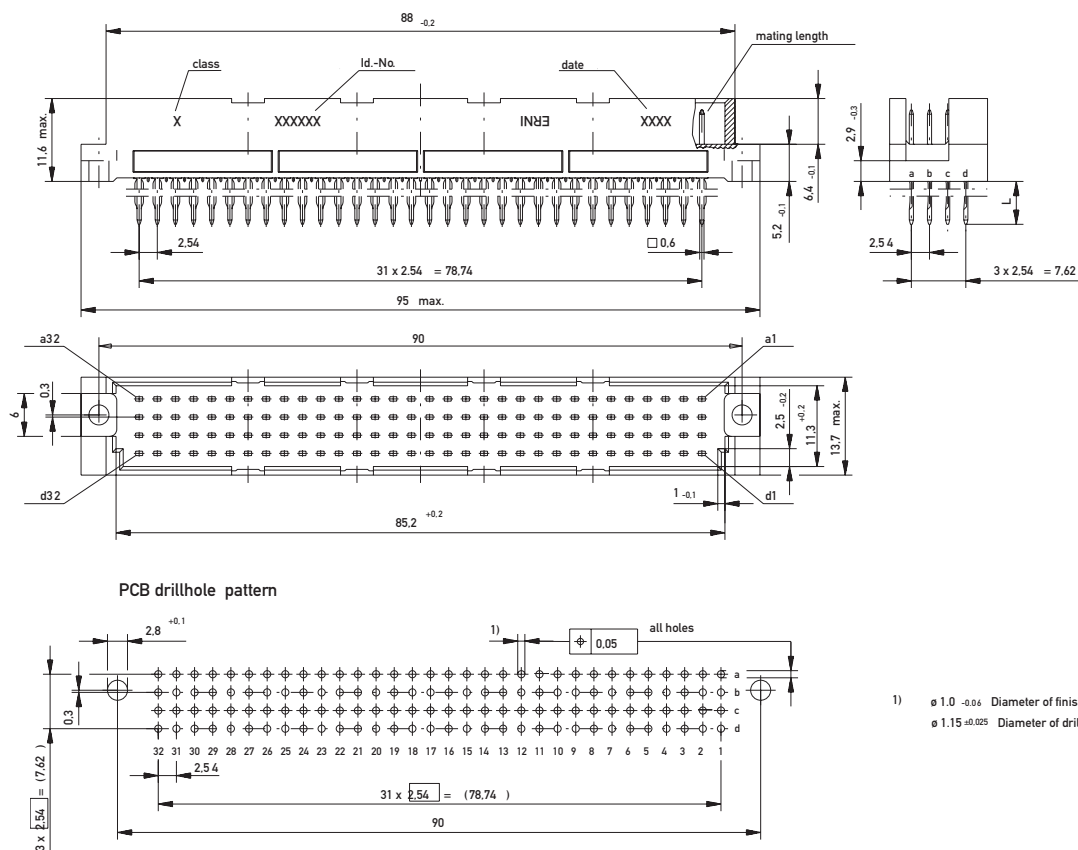
| No. of Pins                                                                          | Termination                  | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|--------------------------------------------------------------------------------------|------------------------------|--------------|----------------|-------|---------------|-------------|
|    |                              |              |                |       |               |             |
| 128                                                                                  | Pressfit                     | 4 mm         | 0.8 x 0.3 mm   | 2     | —             | 254118      |
| 128                                                                                  | Pressfit                     | 5.5 mm       | 0.6 x 0.6 mm   | 1     | —             | 254843      |
| 128                                                                                  | Pressfit                     | 5.5 mm       | 0.6 x 0.6 mm   | 2     | —             | 244999      |
| 128                                                                                  | Pressfit<br>w/o Flange       | 5.5 mm       | 0.6 x 0.6 mm   | 2     | —             | 254844      |
| 128                                                                                  | Pressfit<br>w. Transfer Zone | 13 mm        | 0.6 x 0.6 mm   | 2     | 2.5 mm        | 254979      |
| 128                                                                                  | Pressfit<br>w. Transfer Zone | 17 mm        | 0.6 x 0.6 mm   | 2     | 2.5 mm        | 284181      |
|  |                              |              |                |       |               |             |
| 128                                                                                  | Solder                       | 3.7 mm       | 0.65 x 0.3 mm  | 1     | —             | 284182      |
| 128                                                                                  | Solder                       | 3.7 mm       | 0.65 x 0.3 mm  | 2     | —             | 254977      |
| 128                                                                                  | Solder<br>w/o Flange         | 3.7 mm       | 0.65 x 0.3 mm  | 2     | —             | 284180      |
| 128                                                                                  | Solder with Clip             | 3.7 mm       | 0.65 x 0.3 mm  | 2     | —             | 254978      |
| 128                                                                                  | Solder<br>w. kinked Legs     | 4.5 mm       | 0.8 x 0.3 mm   | 2     | —             | 284951      |
|  |                              |              |                |       |               |             |
| 128                                                                                  | THR<br>w/o Flange            | 2.5 mm       | 0.6 x 0.6 mm   | 2     | —             | 284183      |

# DIN 41612 / IEC 60603-2 Connectors

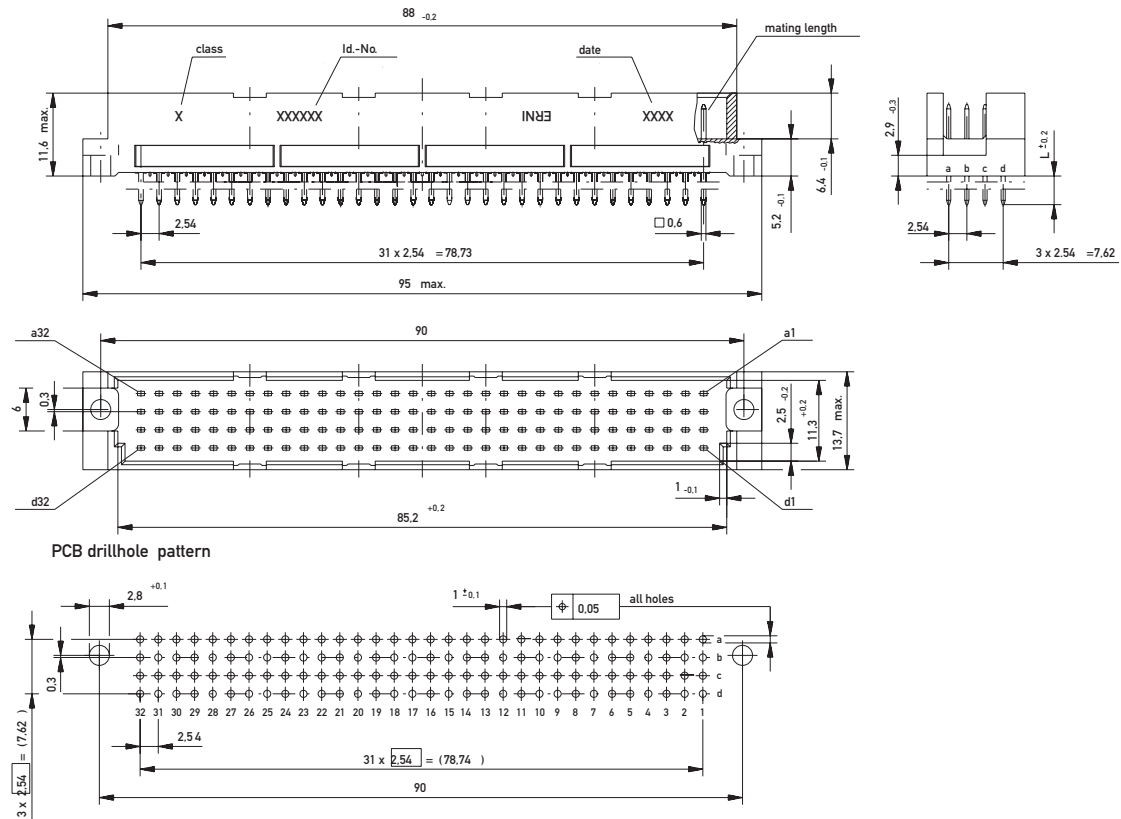
## Type RD Male



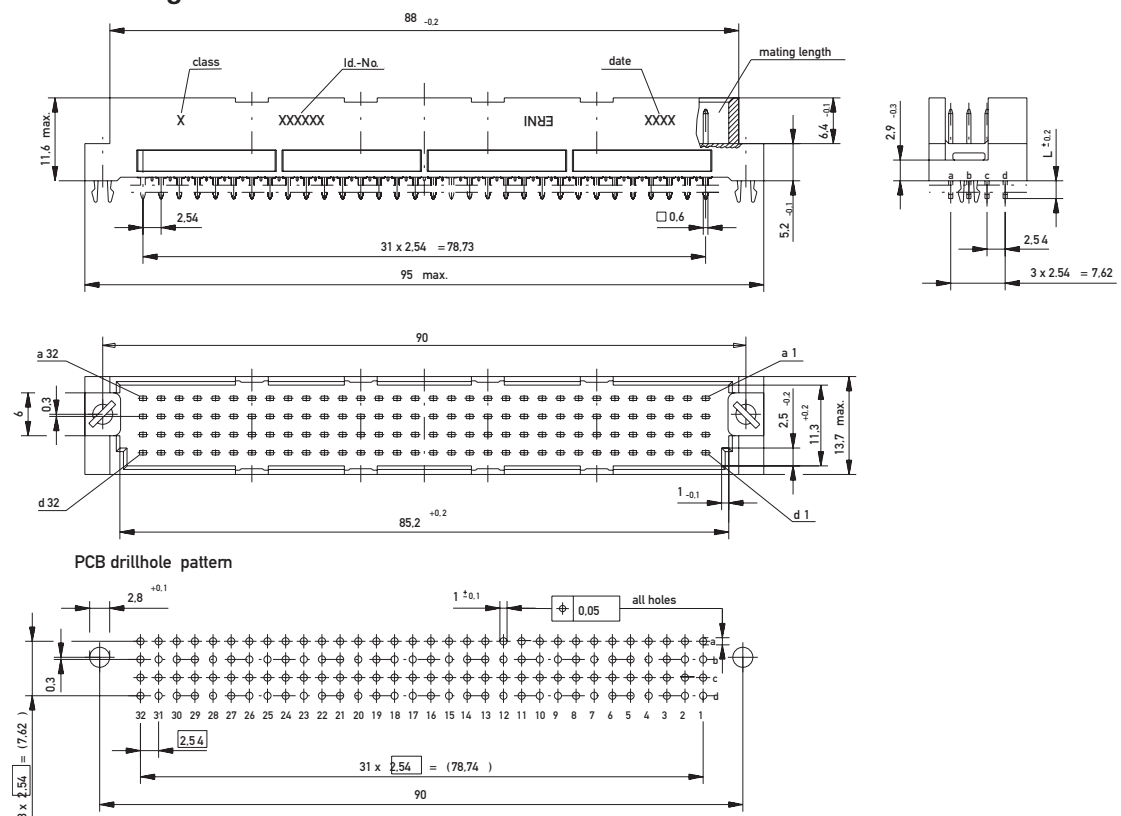
### Dimensional Drawing Pressfit



### Dimensional Drawing Solder



### Dimensional Drawing THR



# DIN 41612 / IEC 60603-2 Connectors

## Type RD Male

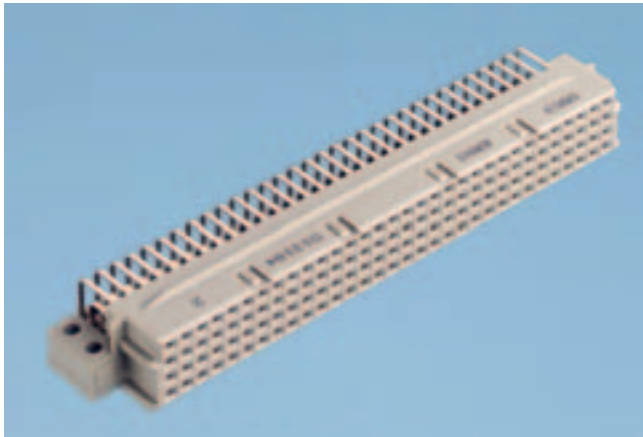


### Ordering Information

| No. of Pins | Termination                  | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------|------------------------------|--------------|----------------|-------|---------------|---------------|
|             |                              |              |                |       |               |               |
| 128         | Pressfit                     | 6 mm         | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>013178</b> |
| 128         | Pressfit<br>w. Transfer Zone | 20 mm        | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>013154</b> |
|             |                              |              |                |       |               |               |
| 128         | Solder                       | 4 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>013171</b> |
| 128         | Solder                       | 4 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>013172</b> |
| 128         | Solder                       | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | <b>013174</b> |
| 128         | Solder                       | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>013175</b> |
|             |                              |              |                |       |               |               |
| 128         | THR with Clip                | 2.5 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>154970</b> |

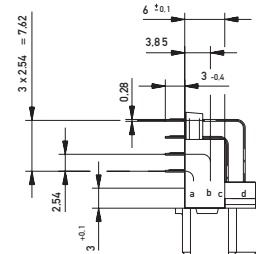
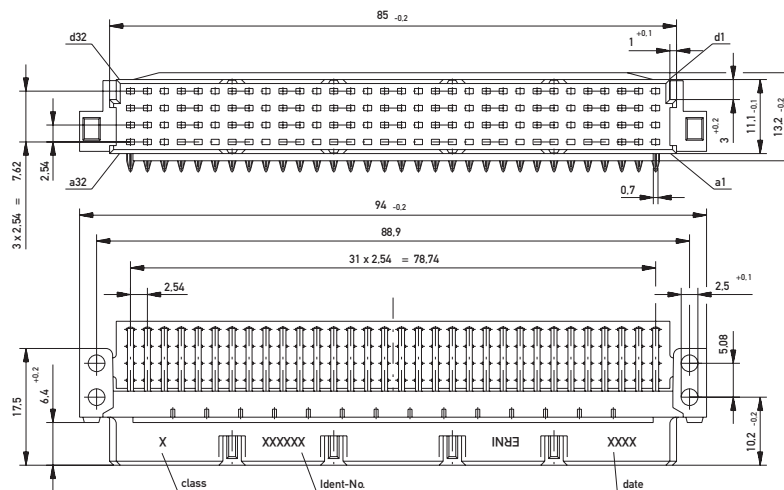
# DIN 41612 / IEC 60603-2 Connectors

## Type RD Female

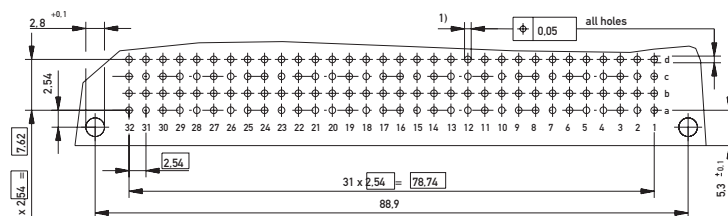


Size RD 128 female connectors are provided with locating strip. This plastic component is attached to the extended mounting flanges and serves to guide the pins accurately. The extended mounting flanges have two mounting holes at a pitch of 5.08mm. The length of the mounting flanges provides improved support for the connector on the PC board.

### Dimensional Drawing Pressfit



#### PCB drillhole pattern



- 1)  $\phi 1.0 \pm 0.06$  Diameter of finished plated-through hole
- $\phi 1.15 \pm 0.025$  Diameter of drilled hole

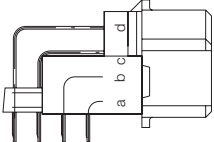
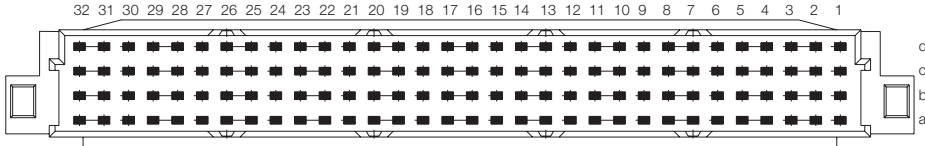
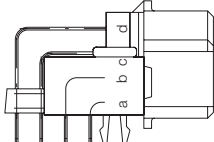
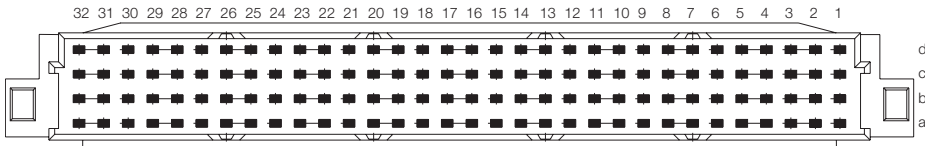


# DIN 41612 / IEC 60603-2 Connectors

## Type RD Female

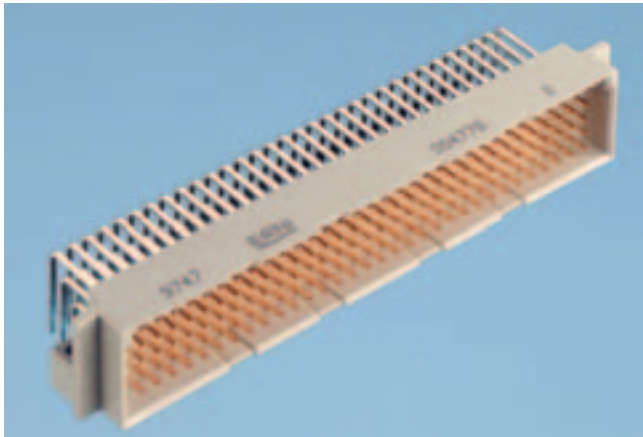


### Ordering Information

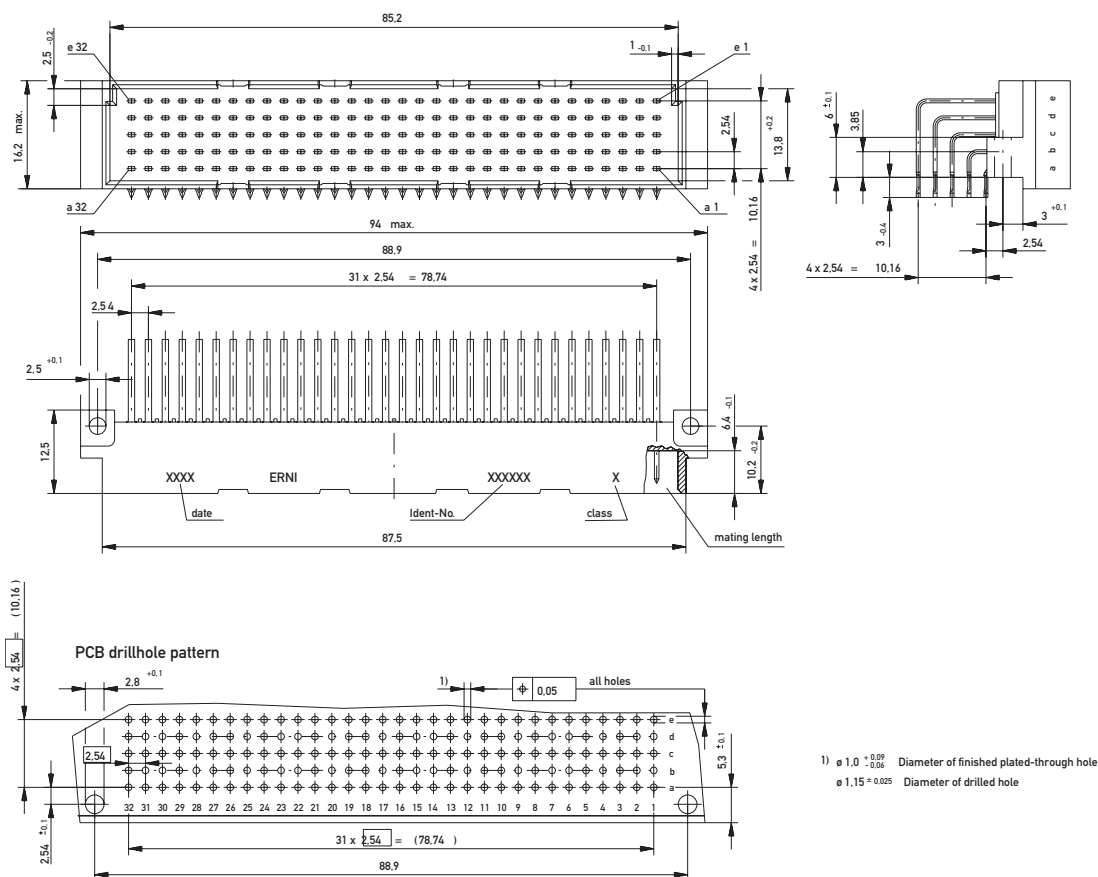
| No. of Pins                                                                         | Termination   | Term. Length | Pin Dimensions                                                                       | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|---------------|--------------|--------------------------------------------------------------------------------------|-------|---------------|---------------|
|    |               |              |    |       |               |               |
|                                                                                     | Pressfit      | 3 mm         | 0.28 x 0.7 mm                                                                        | 2     | 1 mm          | <b>013156</b> |
|                                                                                     | Solder        | 3 mm         | 0.28 x 0.7 mm                                                                        | 1     | —             | <b>013183</b> |
| 128                                                                                 | Solder        | 3 mm         | 0.28 x 0.7 mm                                                                        | 2     | —             | <b>013184</b> |
|  |               |              |  |       |               |               |
|                                                                                     | THR with Clip | 3 mm         | 0.28 x 0.7 mm                                                                        | 2     | —             | <b>154971</b> |

# DIN 41612 / IEC 60603-2 Connectors

## Type E 160 / E 80 Male

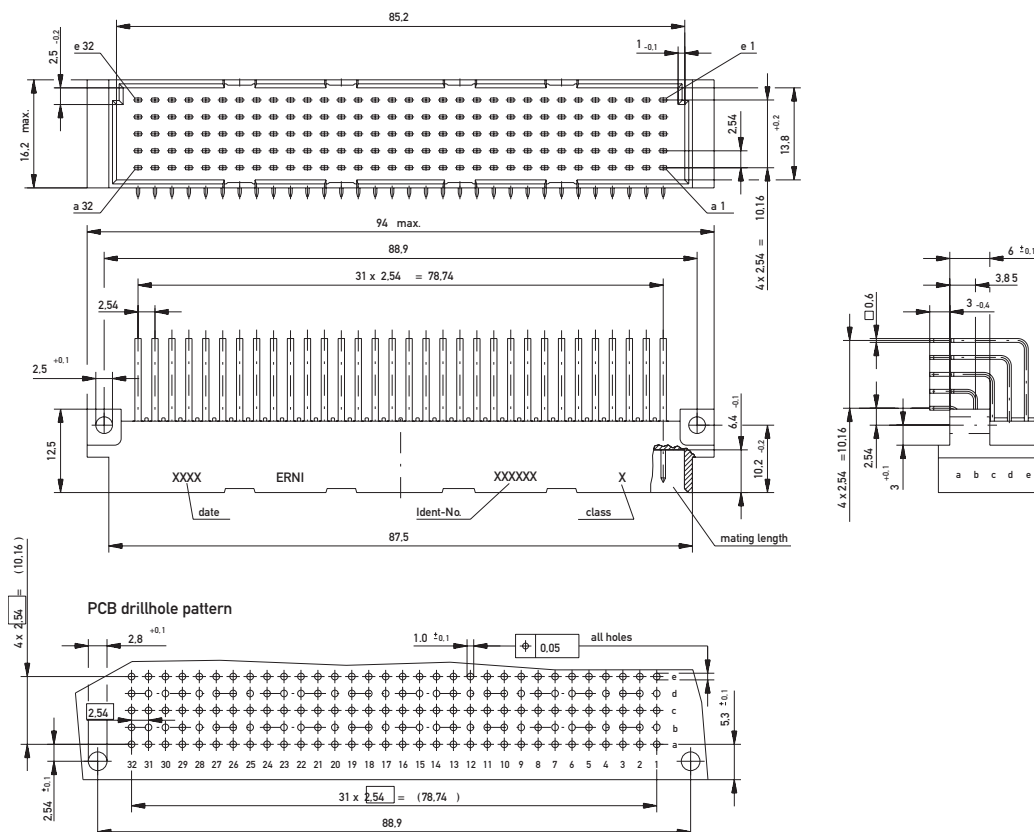


### Dimensional Drawing Pressfit Type E 160

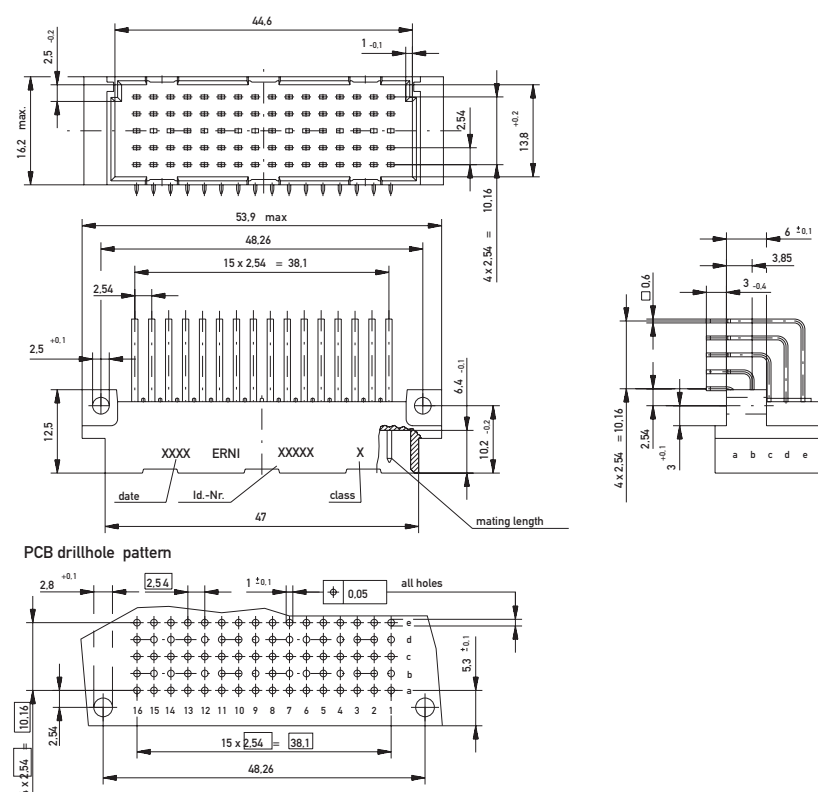




## Dimensional Drawing Solder Type E 160



## Dimensional Drawing Solder Type E 80



# DIN 41612 / IEC 60603-2 Connectors

## Type E 160 Male



### Ordering Information

| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
| 160         | Pressfit    | 3 mm         | 0.6 x 0.6 mm   | 2     | 1.5 mm        | 013096      |

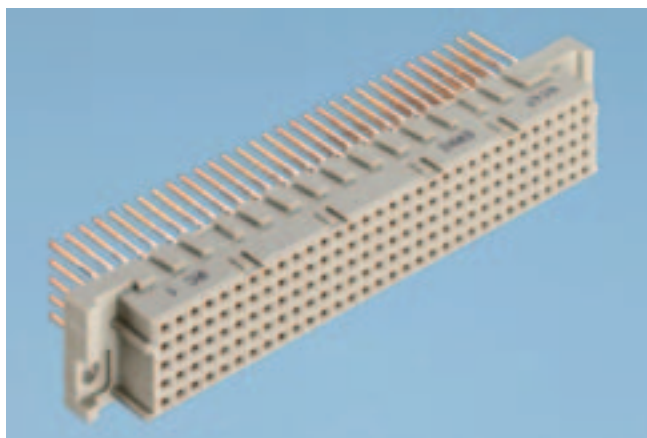
|     |                  |      |              |   |   |        |
|-----|------------------|------|--------------|---|---|--------|
| 160 | Solder           | 3 mm | 0.6 x 0.6 mm | 1 | — | 004777 |
| 160 | Solder           | 3 mm | 0.6 x 0.6 mm | 2 | — | 004778 |
| 160 | Solder with Clip | 3 mm | 0.6 x 0.6 mm | 2 | — | 913615 |

|     |        |        |              |   |   |        |
|-----|--------|--------|--------------|---|---|--------|
| 160 | Solder | 3.8 mm | 0.6 x 0.6 mm | 2 | — | 013058 |
|-----|--------|--------|--------------|---|---|--------|

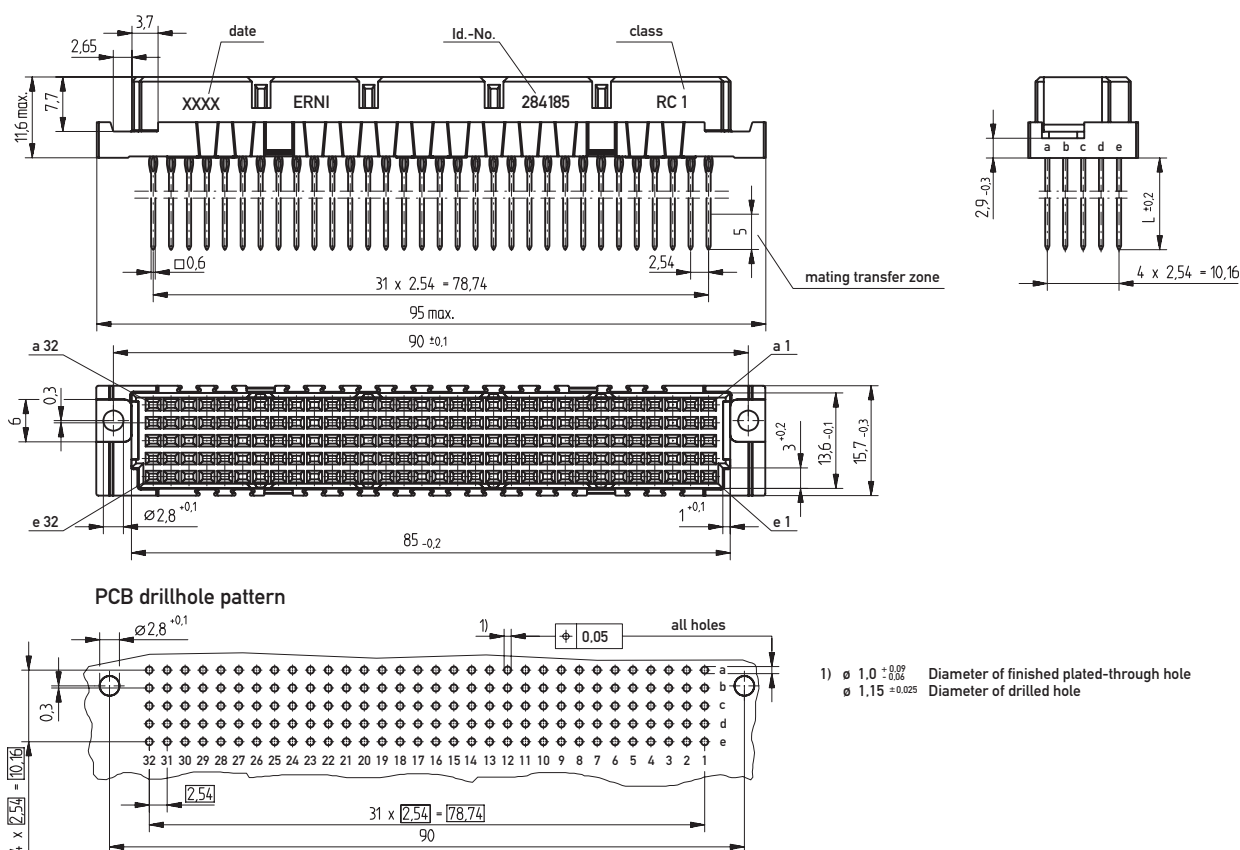
## Type E 80 Male

|    |        |      |              |   |   |        |
|----|--------|------|--------------|---|---|--------|
| 80 | Solder | 3 mm | 0.6 x 0.6 mm | 2 | — | 033704 |
|----|--------|------|--------------|---|---|--------|

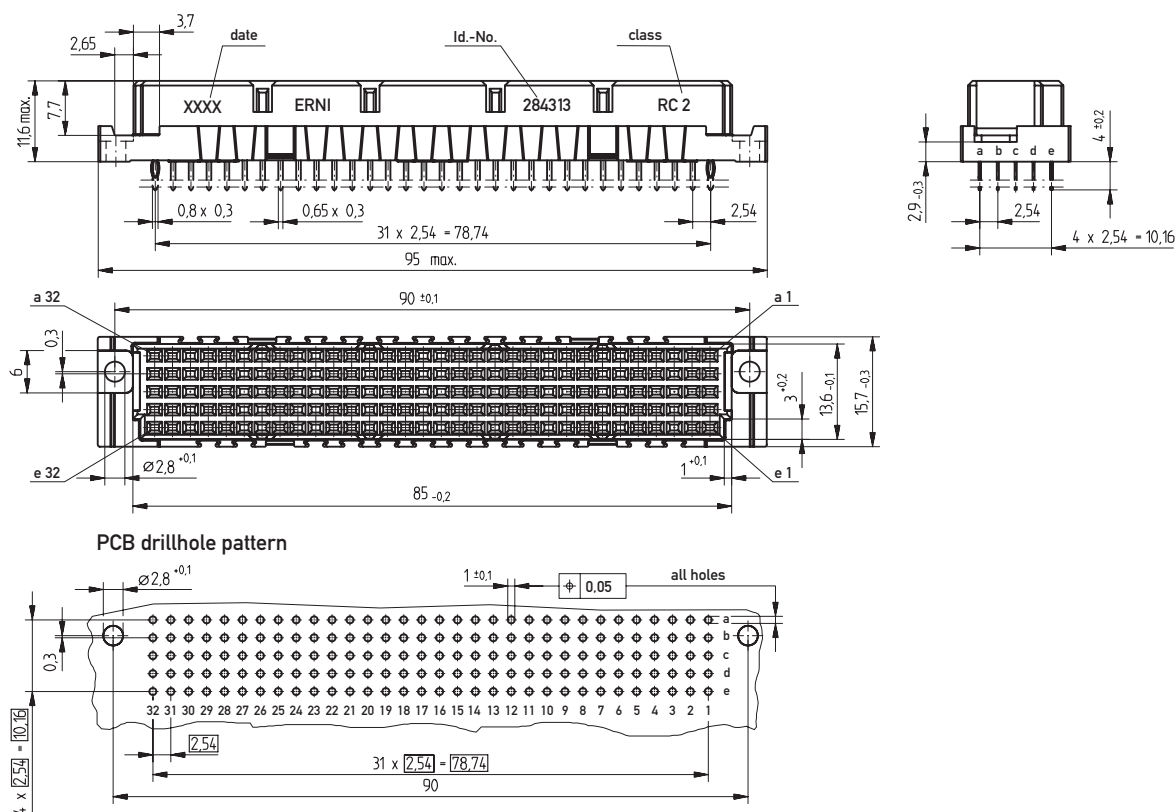
## Type E 160 Female



## Dimensional Drawing Pressfit



### Dimensional Drawing Solder

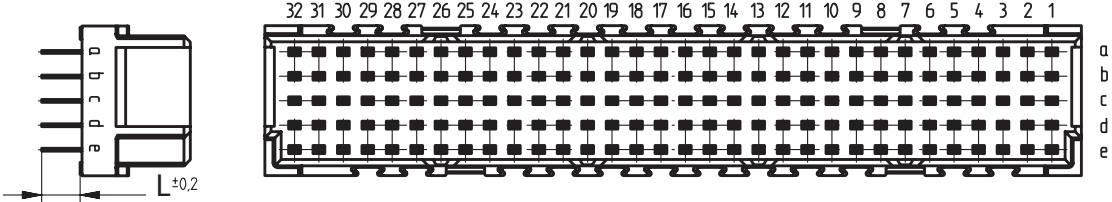
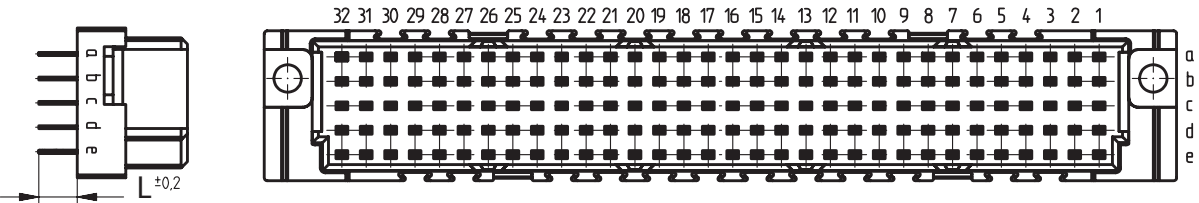


# DIN 41612 / IEC 60603-2 Connectors

## Type E 160 Female



### Ordering Information

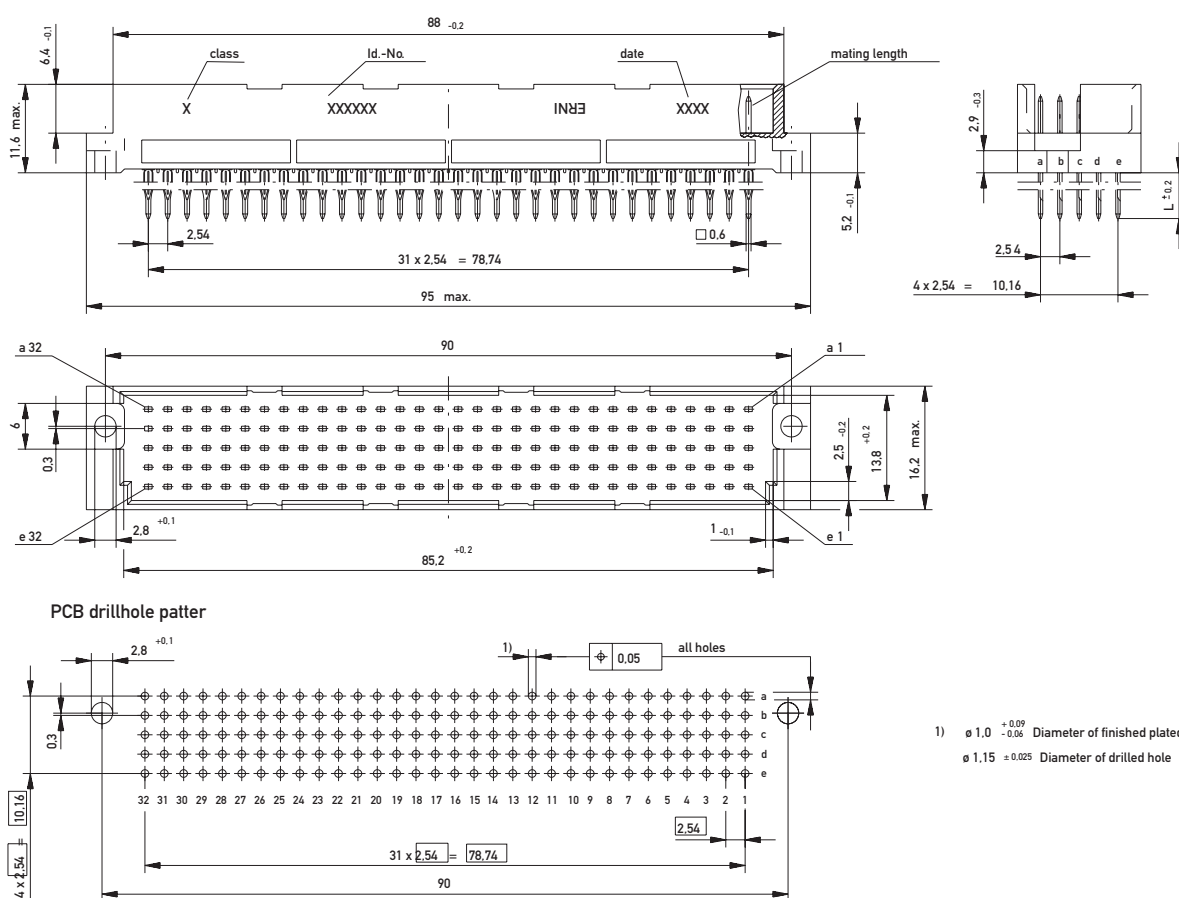
| No. of Pins                                                                          | Termination                  | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|--------------------------------------------------------------------------------------|------------------------------|--------------|----------------|-------|---------------|---------------|
|    |                              |              |                |       |               |               |
| 160                                                                                  | Pressfit<br>w/o Flange       | 4 mm         | 0.8 x 0.3 mm   | 2     | 2 mm          | <b>254124</b> |
| 160                                                                                  | Pressfit<br>w. Transfer Zone | 13 mm        | 0.6 x 0.6 mm   | 1     | 2.5 mm        | <b>284185</b> |
| 160                                                                                  | Pressfit<br>w. Transfer Zone | 13 mm        | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>254975</b> |
| 160                                                                                  | Pressfit                     | 17 mm        | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>244672</b> |
| 160                                                                                  | Pressfit<br>w. Transfer Zone | 17 mm        | 0.6 x 0.6 mm   | 1     | 2.5 mm        | <b>284184</b> |
| 160                                                                                  | Pressfit<br>w. Transfer Zone | 17 mm        | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>254960</b> |
|  |                              |              |                |       |               |               |
| 160                                                                                  | Solder<br>w. retaining Loop  | 4 mm         | 0.8 x 0.3 mm   | 2     | —             | <b>284313</b> |

# DIN 41612 / IEC 60603-2 Connectors

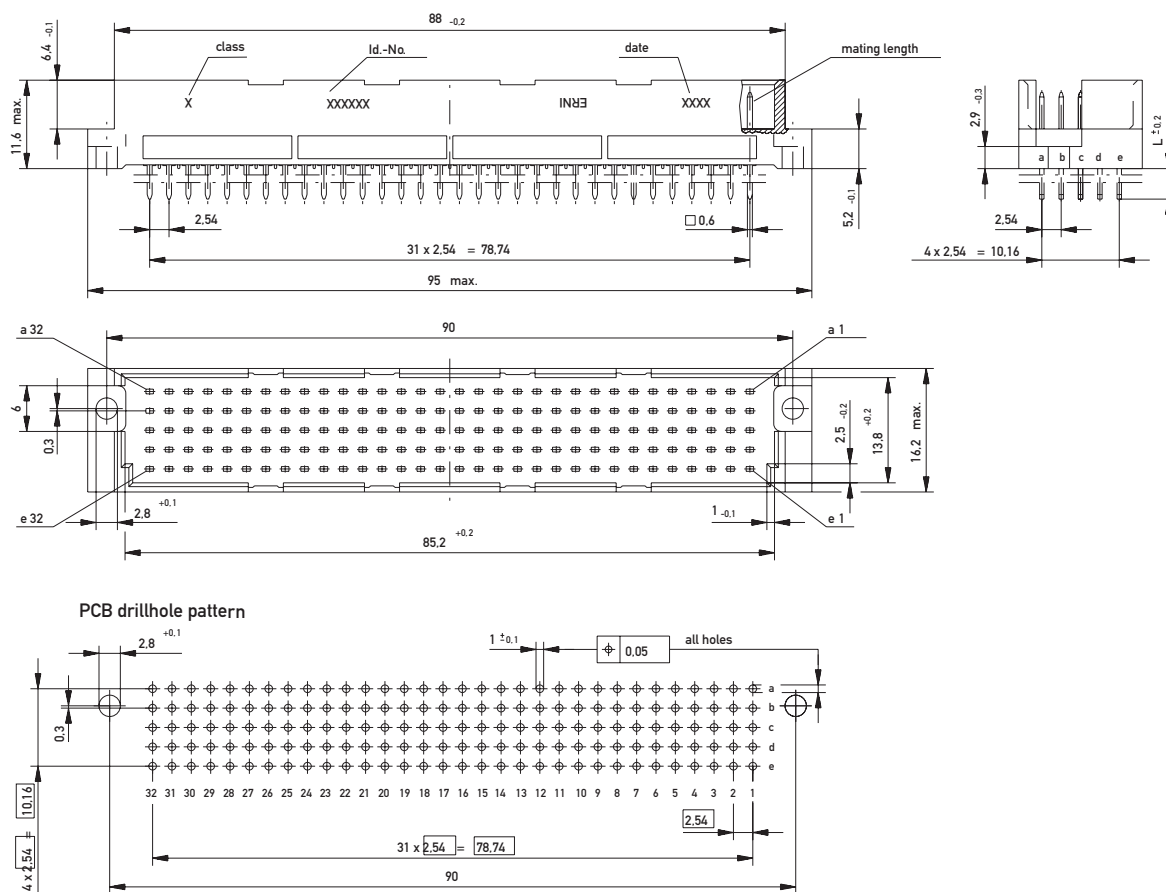
## Type TE Male



### Dimensional Drawing Pressfit



## Dimensional Drawing Solder

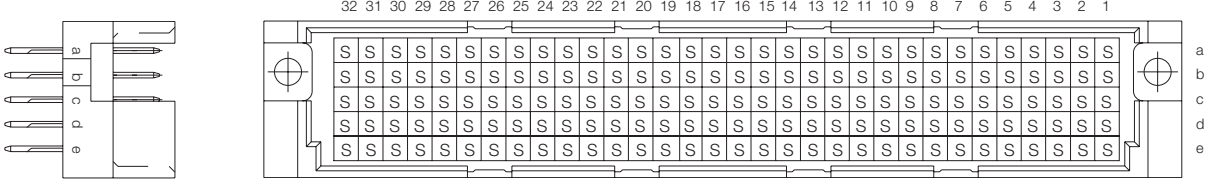
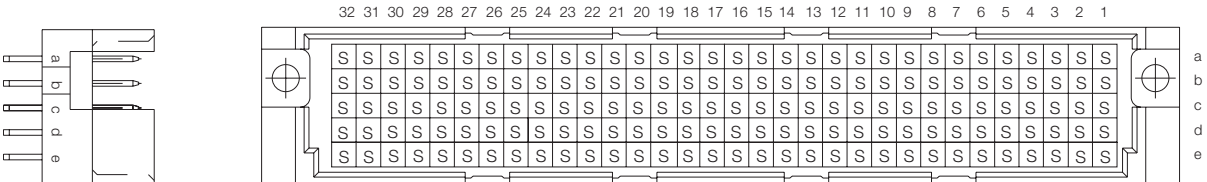


# DIN 41612 / IEC 60603-2 Connectors

## Type TE Male

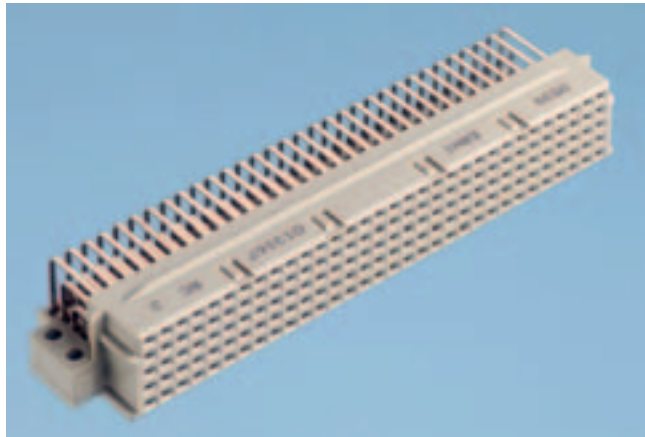


### Ordering Information

| No. of Pins                                                                          | Termination                  | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|--------------------------------------------------------------------------------------|------------------------------|--------------|----------------|-------|---------------|---------------|
|    |                              |              |                |       |               |               |
| 160                                                                                  | Pressfit                     | 6 mm         | 0.6 x 0.6 mm   | 1     | 2.5 mm        | <b>013160</b> |
| 160                                                                                  | Pressfit                     | 6 mm         | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>013161</b> |
| 160                                                                                  | Pressfit                     | 20 mm        | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>013164</b> |
| 160                                                                                  | Pressfit<br>w. Transfer Zone | 20 mm        | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>013155</b> |
|  |                              |              |                |       |               |               |
| 160                                                                                  | Solder                       | 4 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>013073</b> |
| 160                                                                                  | Solder                       | 4 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>013074</b> |
| 160                                                                                  | Solder                       | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>013071</b> |



## Type TE Female



The length of the mounting flanges provides improved "hold down" support for the connector during soldering process.

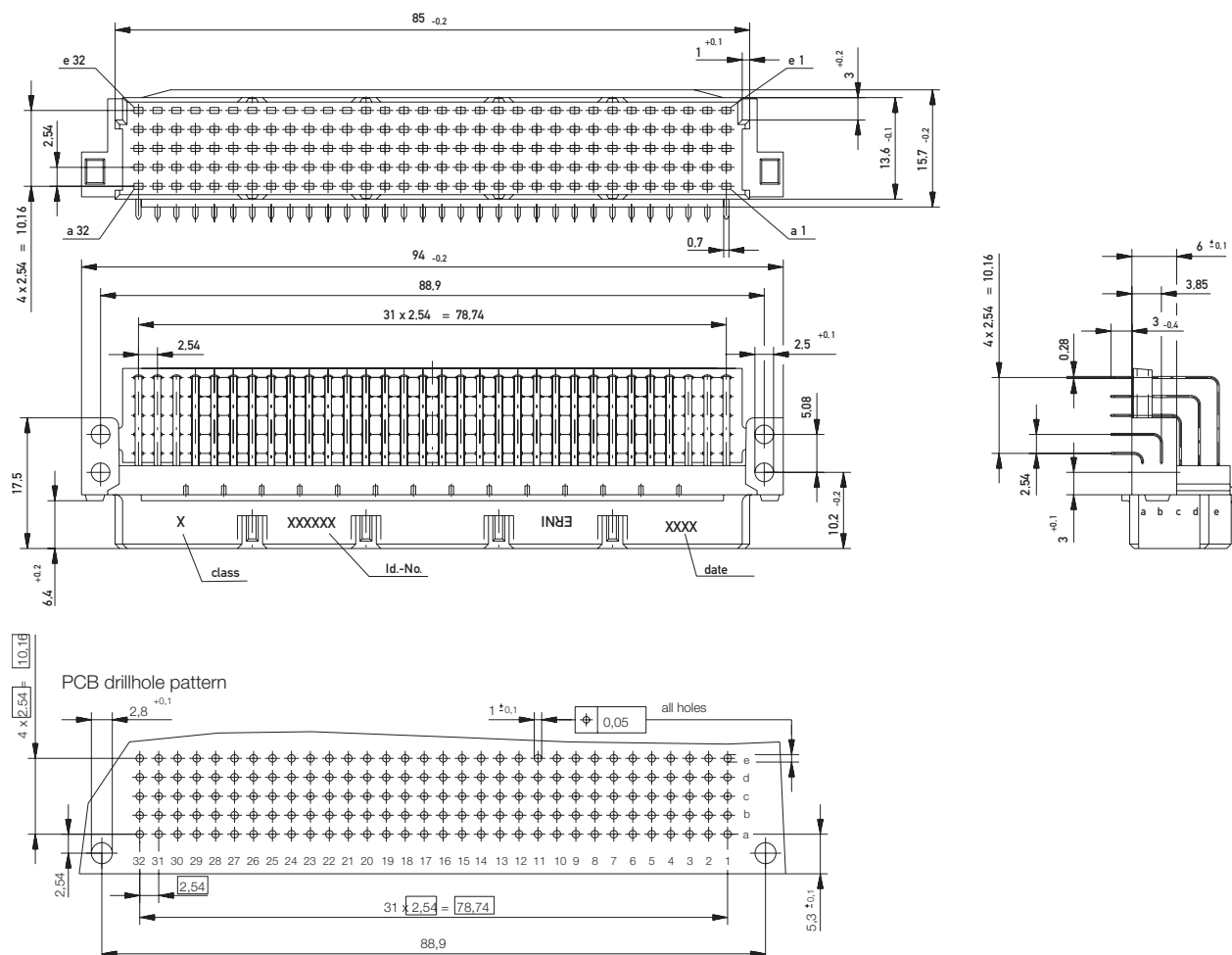
[illegible]

# DIN 41612 / IEC 60603-2 Connectors

## Type TE Female



### Dimensional Drawing Solder

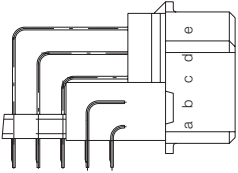
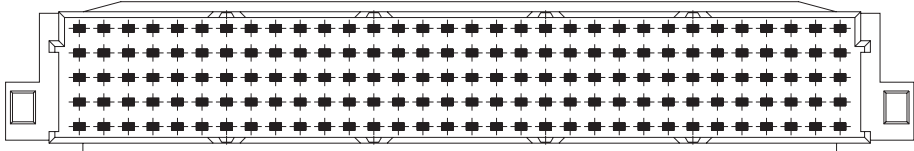


# DIN 41612 / IEC 60603-2 Connectors

## Type TE Female



### Ordering Information

| No. of Pins                                                                                                                                                                       | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|-------------|
| <div>   </div> |             |              |                |       |               |             |
| 160                                                                                                                                                                               | Pressfit    | 3 mm         | 0.28 x 0.7 mm  | 2     | 1 mm          | 013157      |
| 160                                                                                                                                                                               | Solder      | 3 mm         | 0.28 x 0.7 mm  | 1     | –             | 013166      |
| 160                                                                                                                                                                               | Solder      | 3 mm         | 0.28 x 0.7 mm  | 2     | –             | 013167      |

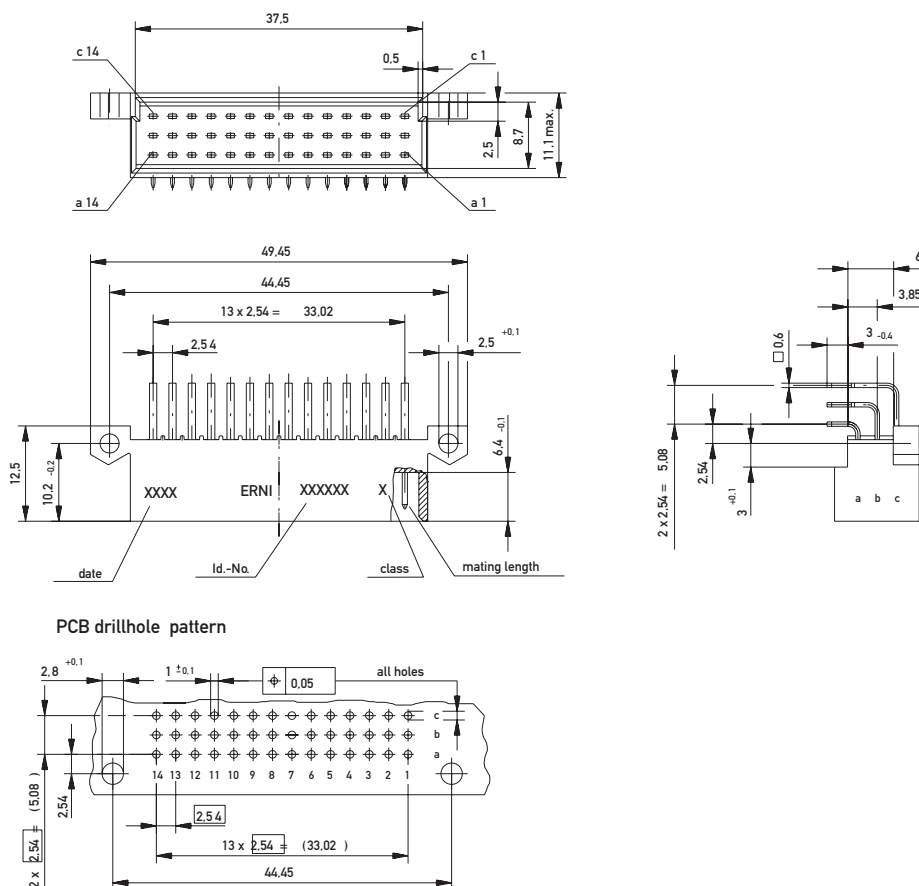
## DIN 41612 / IEC 60603-2 Connectors

### Eurocard Center Connector

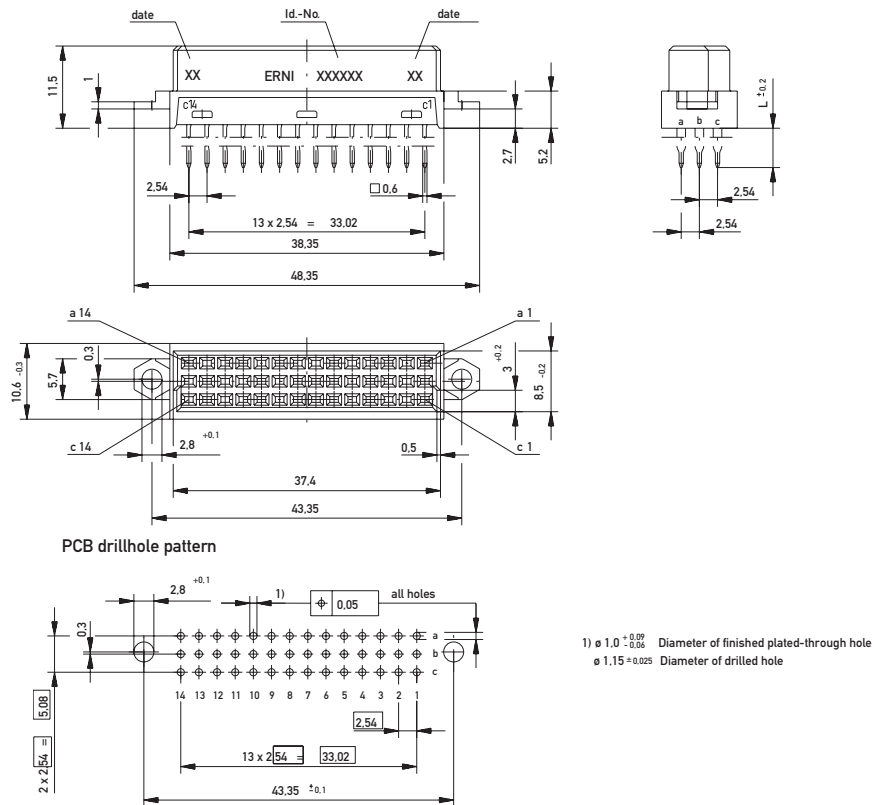


These Eurocard Center connectors fit precisely between two connectors mounted on a standard double Eurocard. The connector mounting flanges are standardized so that the Eurocard Center Connectors can be combined with sizes B, C, D, E, E160, M and H11 male connectors and with the size Q and R inverted female connectors according to DIN 41612/IEC 60603-2.

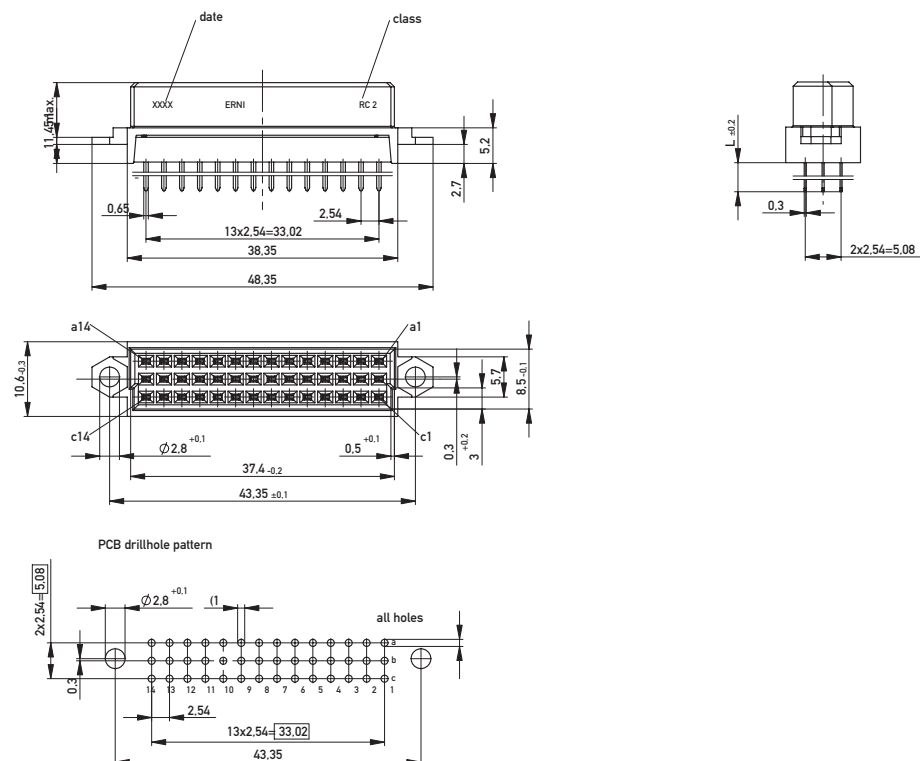
### Dimensional Drawing Male Solder



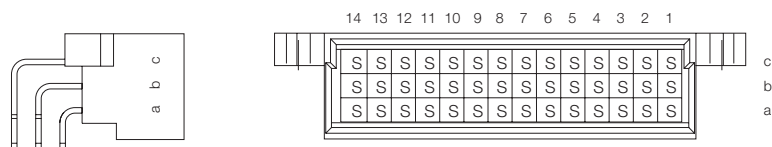
### Dimensional Drawing Female Pressfit



### Dimensional Drawing Female Solder

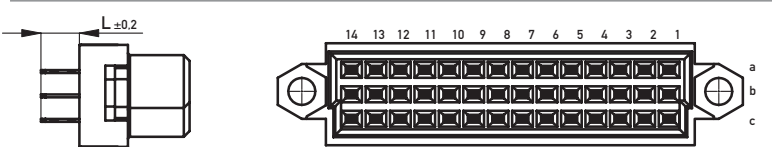


### Ordering Information

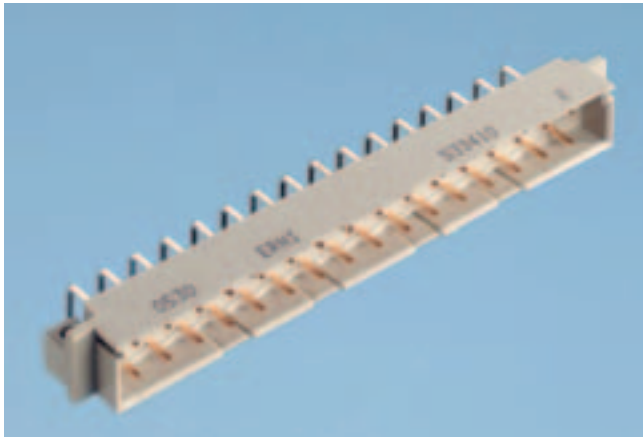
| No. of Pins                                                                       | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-----------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|---------------|
|  |             |              |                |       |               |               |
| 42                                                                                | Solder      | 3 mm         | 0.6 x 0.6 mm   | 1     | –             | <b>433590</b> |
| 42                                                                                | Solder      | 3 mm         | 0.6 x 0.6 mm   | 2     | –             | <b>433591</b> |

## Eurocard Center Connector Female

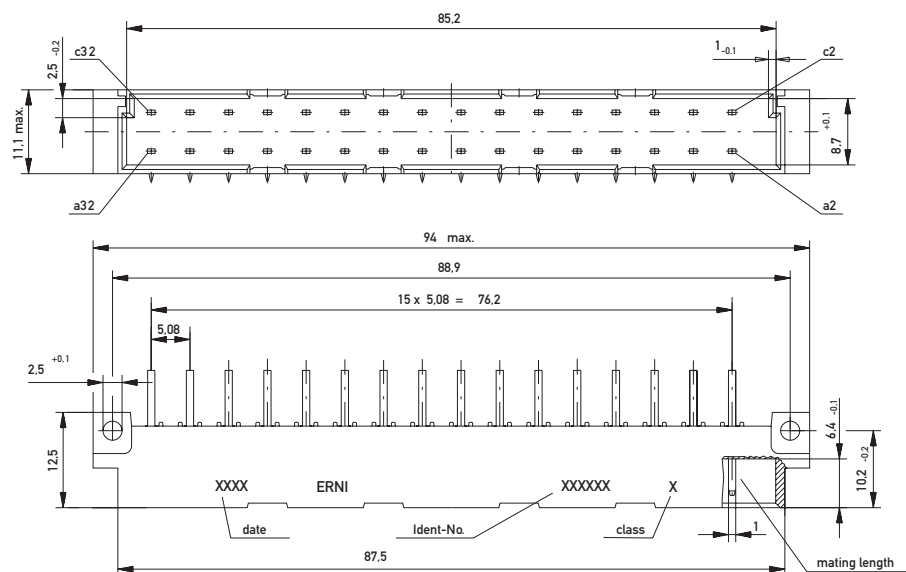
### Ordering Information

| No. of Pins                                                                         | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|---------------|
|  |             |              |                |       |               |               |
| 42                                                                                  | Pressfit    | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | <b>004289</b> |
| 42                                                                                  | Solder      | 4 mm         | 0.6 x 0.6 mm   | 2     |               | <b>354972</b> |

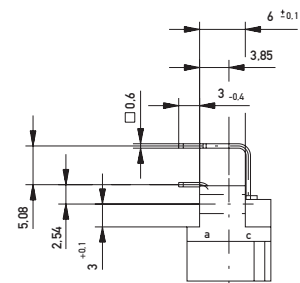
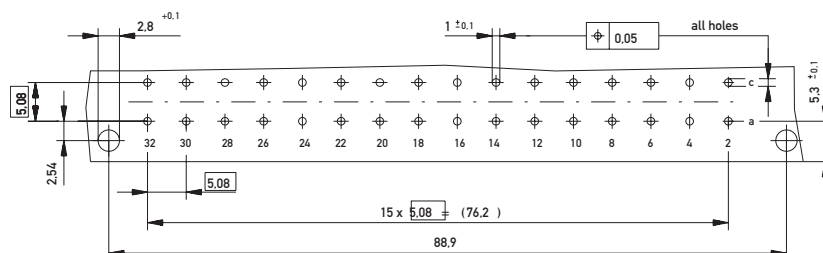
### Type D Male



## Dimensional Drawing Solder



### PCB drillhole pattern

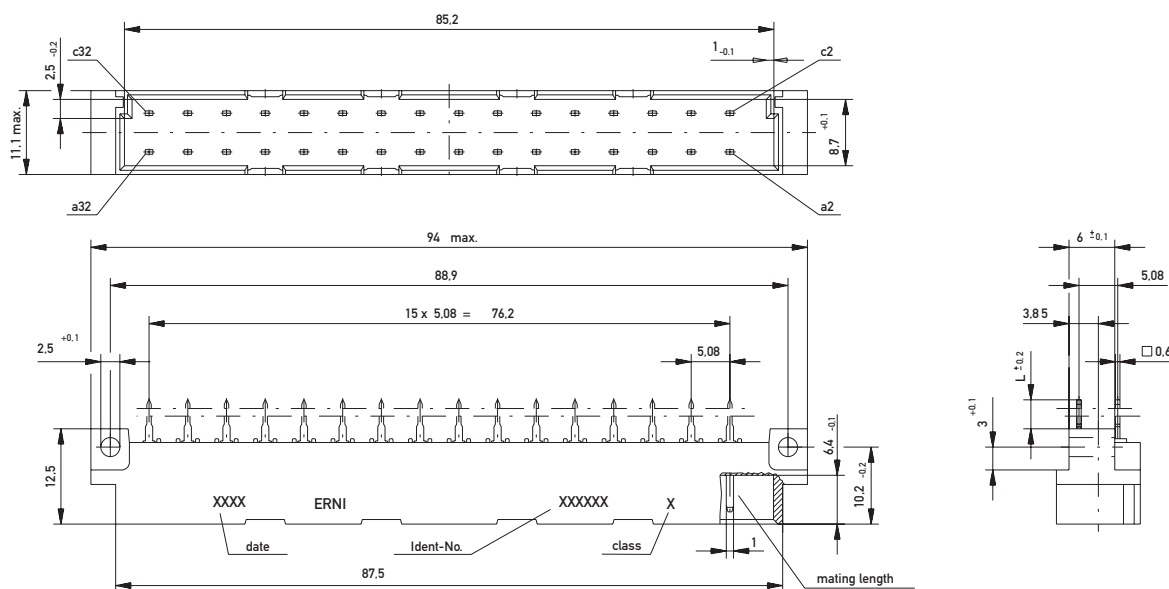


# DIN 41612 / IEC 60603-2 Connectors

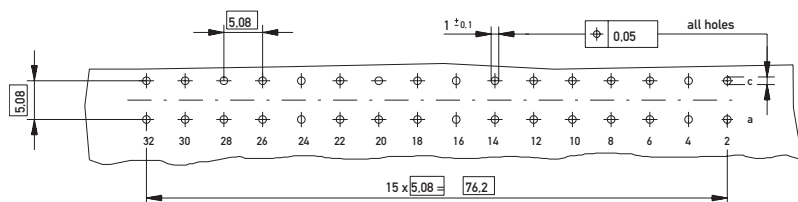
## Type D Male



### Dimensional Drawing Solder



### PCB drillhole pattern



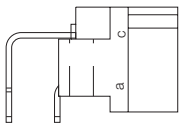
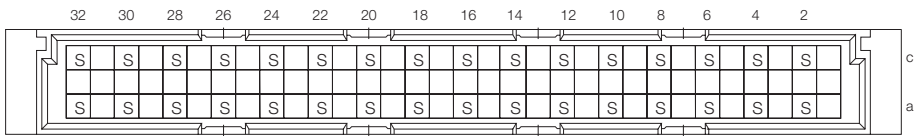
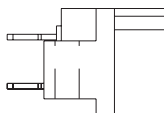
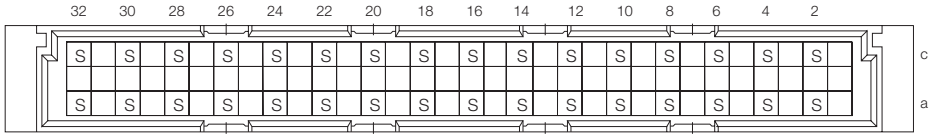


# DIN 41612 / IEC 60603-2 Connectors

## Type D Male



### Ordering Information

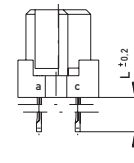
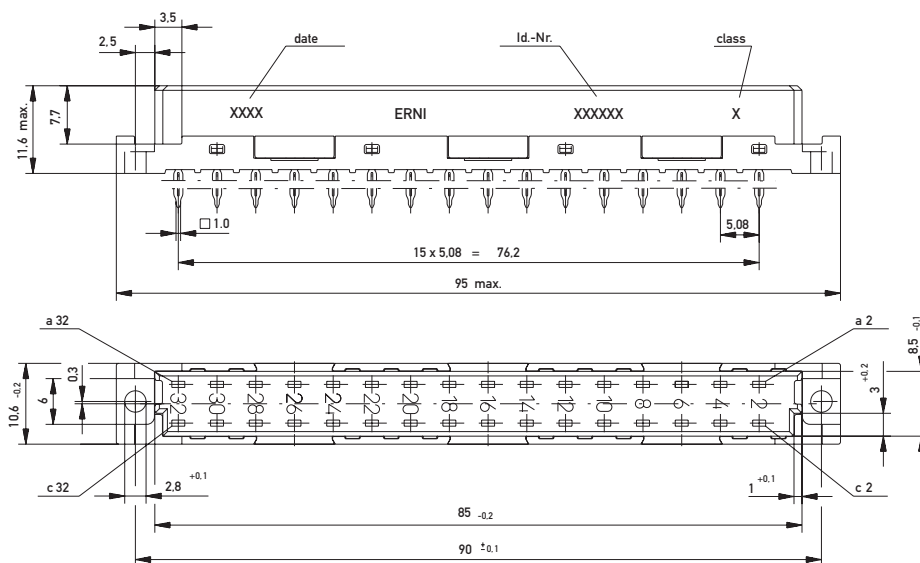
| No. of Pins                                                                       | Termination                                                                        | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|----------------|-------|---------------|---------------|
|  |  |              |                |       |               |               |
|                                                                                   | Solder                                                                             | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | <b>533210</b> |
| 32                                                                                | Solder                                                                             | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | <b>533410</b> |
|  |  |              |                |       |               |               |
|                                                                                   | Solder                                                                             | 3.8 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>594096</b> |

# DIN 41612 / IEC 60603-2 Connectors

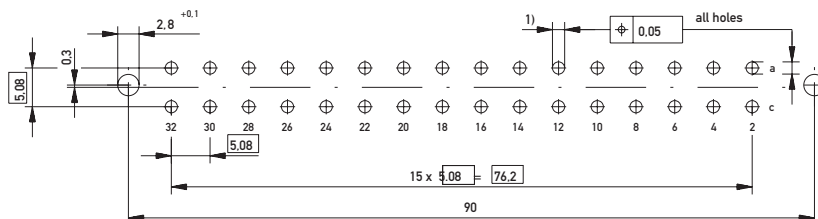
## Type D Female



### Dimensional Drawing Pressfit

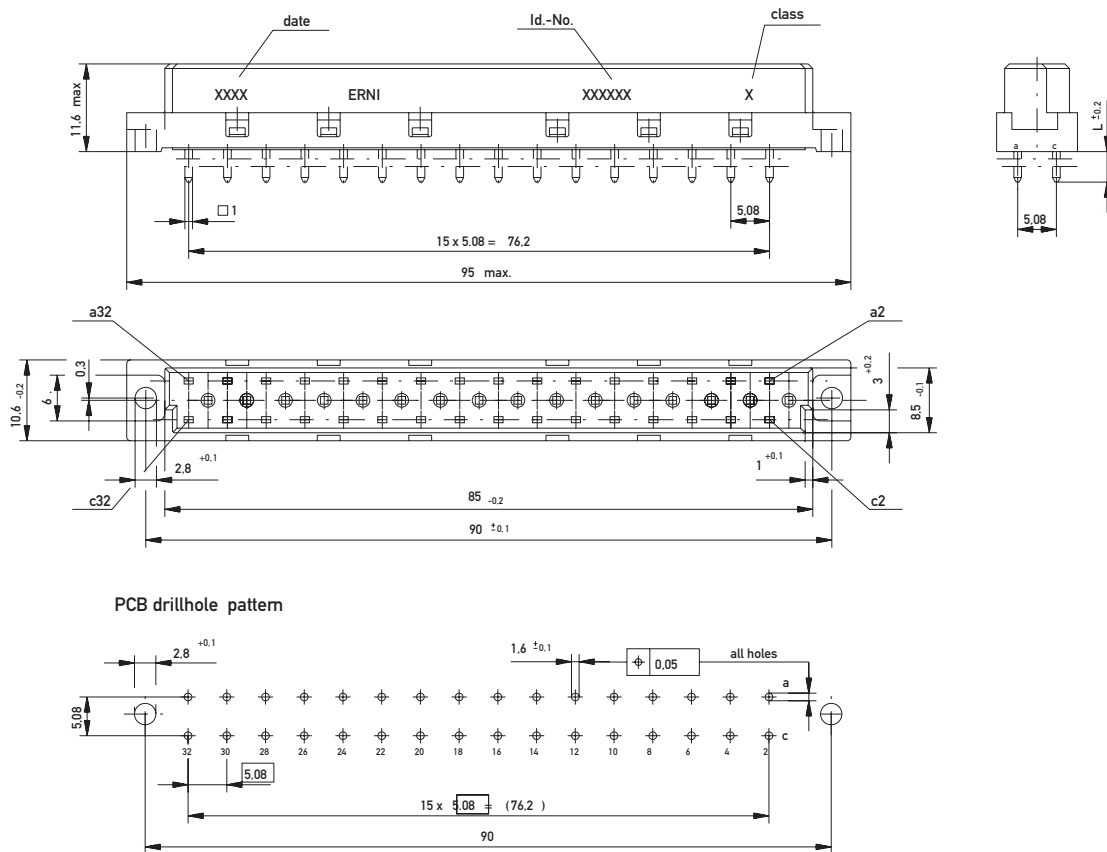


### PCB drillhole pattern



- 1)  $\varnothing 1.6^{+0.09}_{-0.06}$  Diameter of finished plated-through hole  
 $\varnothing 1.75^{-0.03}$  Diameter of drilled hole see drawing 114407

## Dimensional Drawing Solder

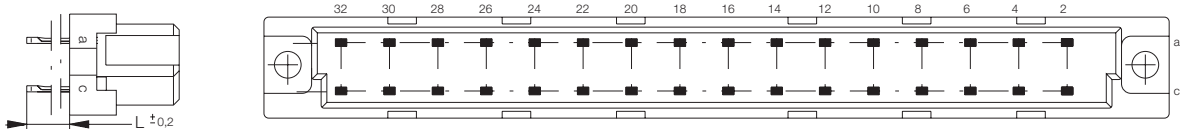


# DIN 41612 / IEC 60603-2 Connectors

## Type D Female



### Ordering Information

| No. of Pins                                                                        | Termination                   | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|------------------------------------------------------------------------------------|-------------------------------|--------------|----------------|-------|---------------|-------------|
|  |                               |              |                |       |               |             |
| 32                                                                                 | Pressfit                      | 4.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | 033427      |
| 32                                                                                 | Pressfit*                     | 6 mm         | 1 x 1 mm       | 1     | 2.5 mm        | 424803      |
| 32                                                                                 | Pressfit*                     | 6 mm         | 1 x 1 mm       | 2     | 2.5 mm        | 424804      |
| 32                                                                                 | Pressfit*<br>w/o Flange       | 6 mm         | 1 x 1 mm       | 1     | 2.5 mm        | 004427      |
| 32                                                                                 | Pressfit*                     | 13 mm        | 1 x 1 mm       | 1     | 2.5 mm        | 013025      |
| 32                                                                                 | Pressfit*                     | 26 mm        | 1 x 1 mm       | 1     | 2.5 mm        | 424797      |
| 32                                                                                 | Pressfit*                     | 26 mm        | 1 x 1 mm       | 2     | 2.5 mm        | 424798      |
| 32                                                                                 | Pressfit*<br>w. Transfer Zone | 26 mm        | 1 x 1 mm       | 2     | 2.5 mm        | 424801      |

\*For contact supporting press-in tool.

# DIN 41612 / IEC 60603-2 Connectors

## Type D Female

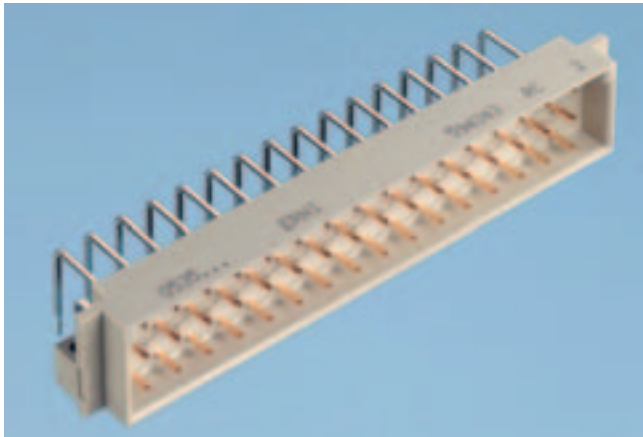


### Ordering Information

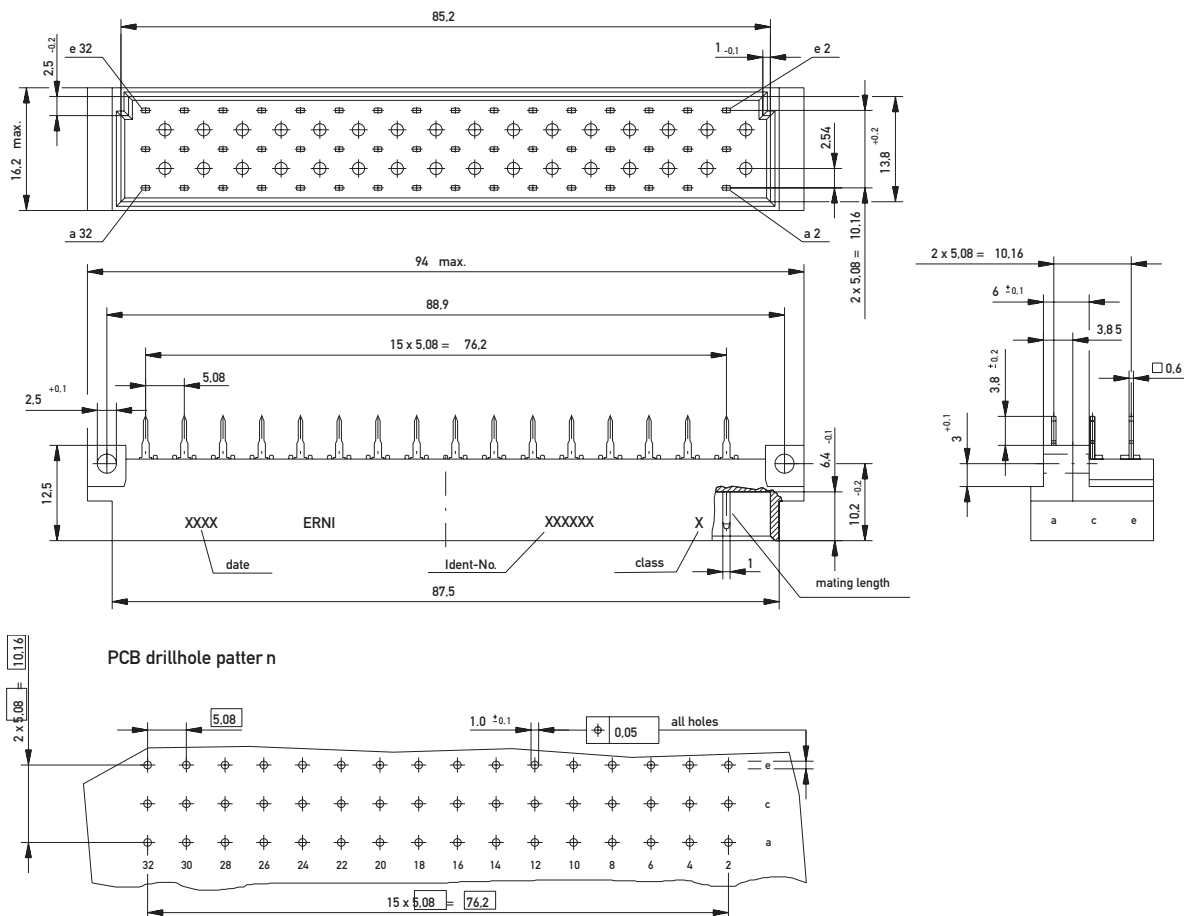
| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
|             |             |              |                |       |               |             |
| 32          | Solder      | 4 mm         | 1 x 1 mm       | 1     | —             | 594569      |
| 32          | Solder      | 4 mm         | 1 x 1 mm       | 2     | —             | 594570      |
| 32          | Solder      | 4.5 mm       | 0.6 x 0.6 mm   | 2     | —             | 033428      |
| 32          | Solder      | 4.5 mm       | 1.2 x 0.6 mm   | 2     | —             | 033579      |
| 32          | Solder      | 20 mm        | 1 x 1 mm       | 1     | —             | 594566      |
| 32          | Solder      | 20 mm        | 1 x 1 mm       | 2     | —             | 594567      |

# DIN 41612 / IEC 60603-2 Connectors

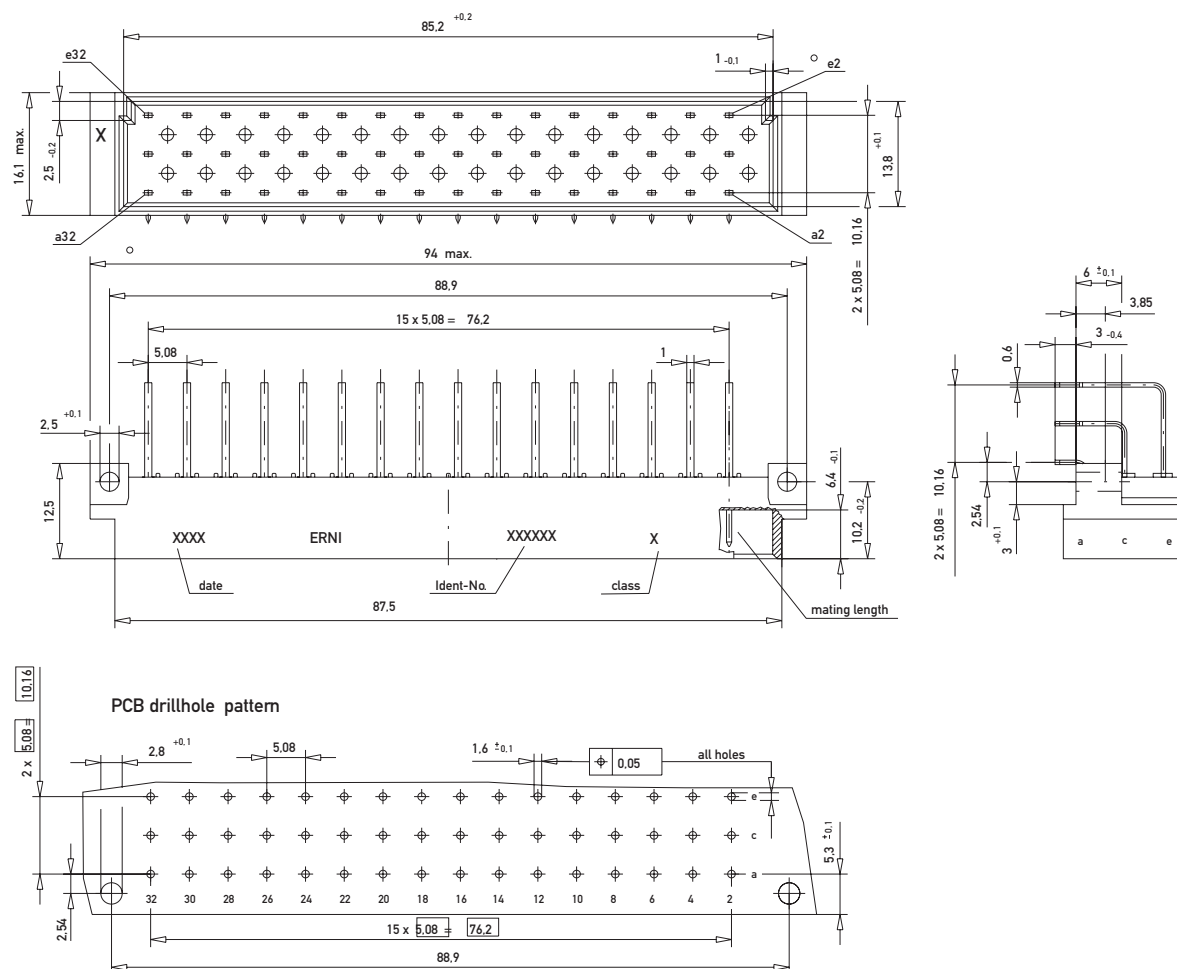
## Type E Male



### Dimensional Drawing Solder



### Dimensional Drawing Solder

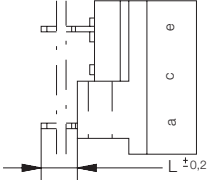
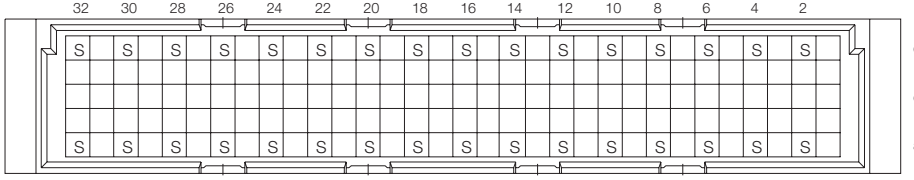
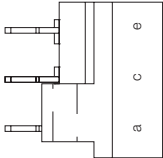
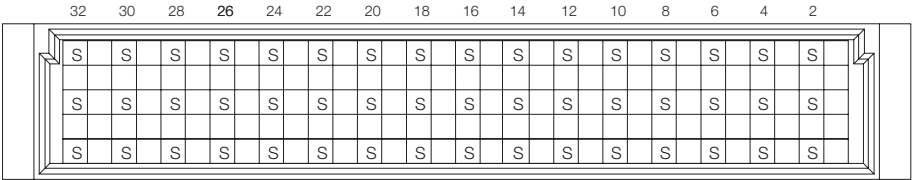
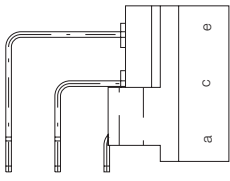
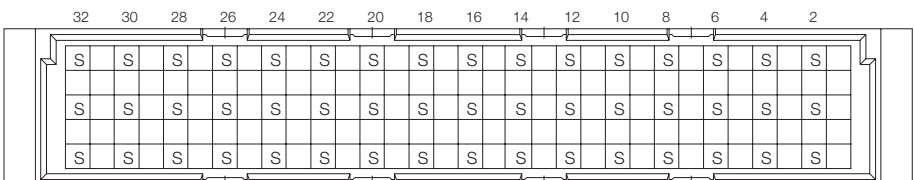


# DIN 41612 / IEC 60603-2 Connectors

## Type E Male



### Ordering Information

| No. of Pins                                                                         | Termination | Term. Length | Pin Dimensions                                                                       | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|-------------|--------------|--------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | Solder      | 3 mm         |    | 2     | —             | <b>013414</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
|    | Solder      | 3.8 mm       |    | 2     | —             | <b>063300</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
|  | Solder      | 3 mm         |  | 1     | —             | <b>594802</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
| 48                                                                                  | Solder      | 3 mm         | 1.0 x 0.6 mm                                                                         | 2     | —             | <b>594343</b> |

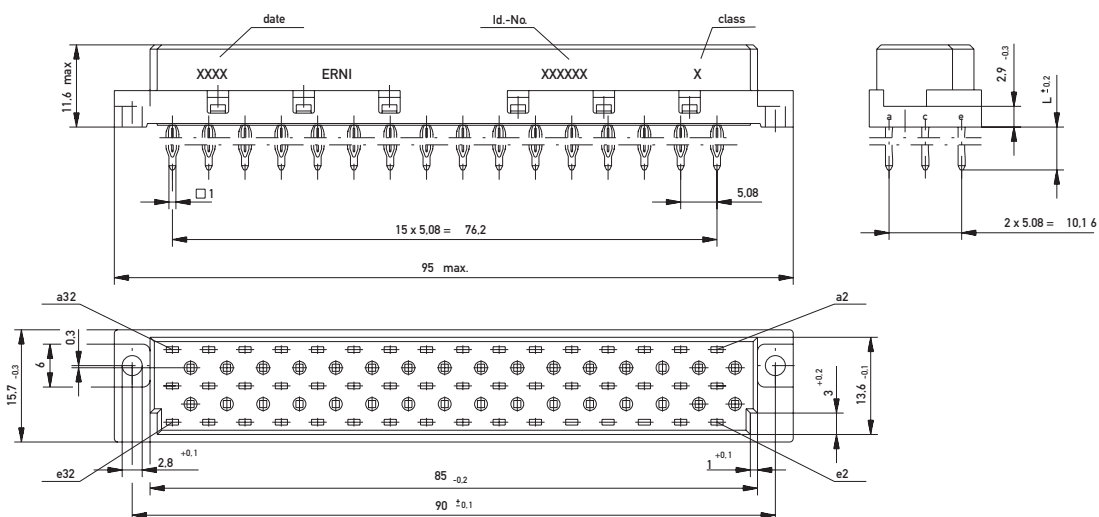


# DIN 41612 / IEC 60603-2 Connectors

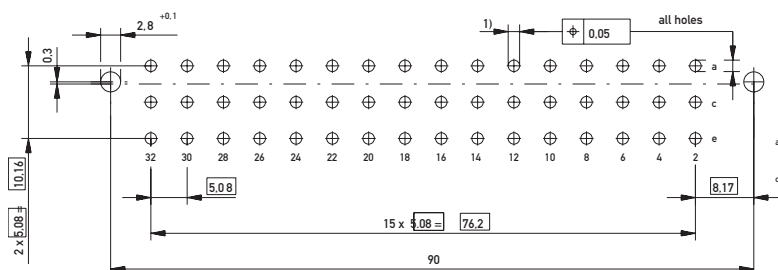
## Type E Female



### Dimensional Drawing Pressfit

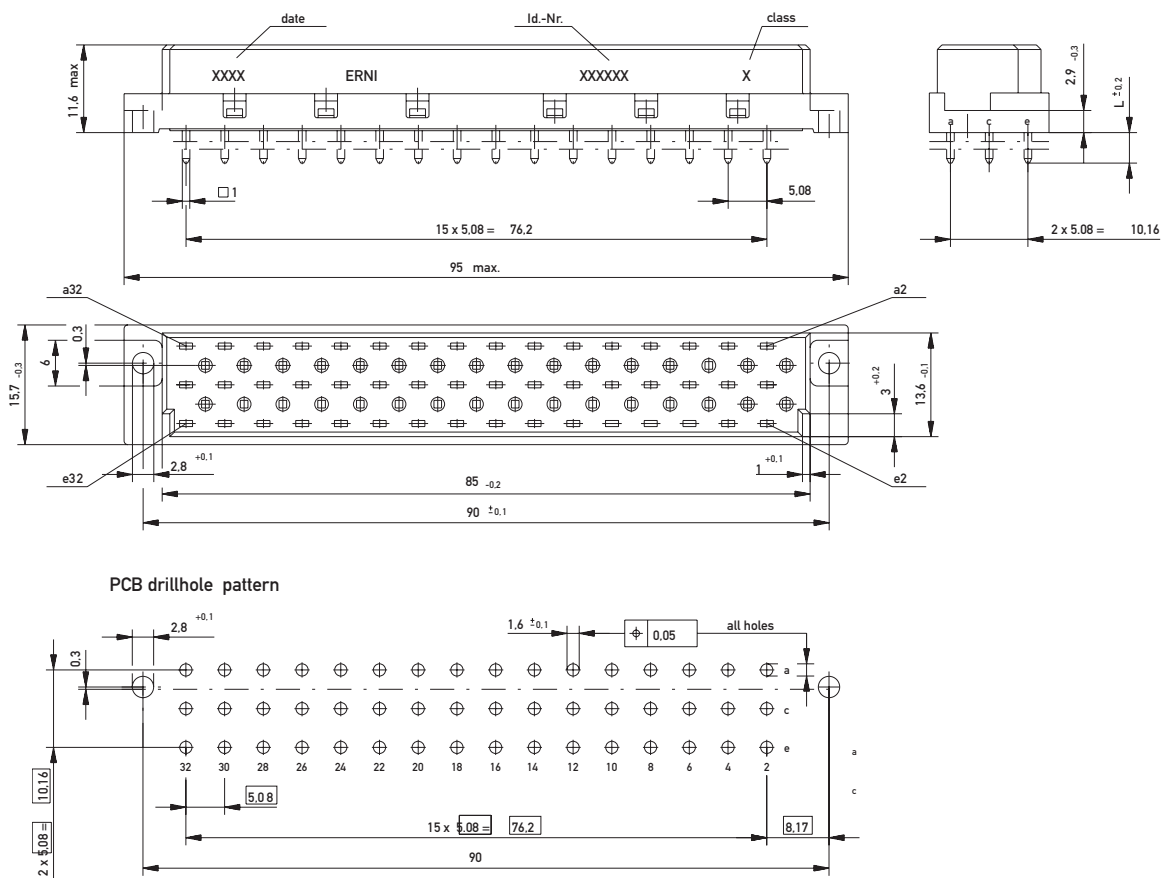


#### PCB drillhole pattern



- 1)  $\varnothing 1.6^{+0.09}_{-0.06}$  Diameter of finished plated-through hole  
 $\varnothing 1.75^{-0.03}$  Diameter of drilled hole see drawing 114407

### Dimensional Drawing Solder

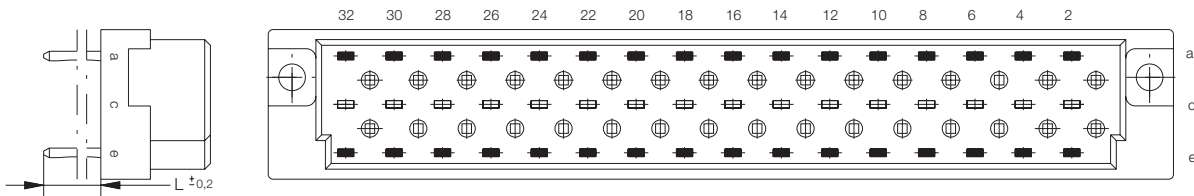
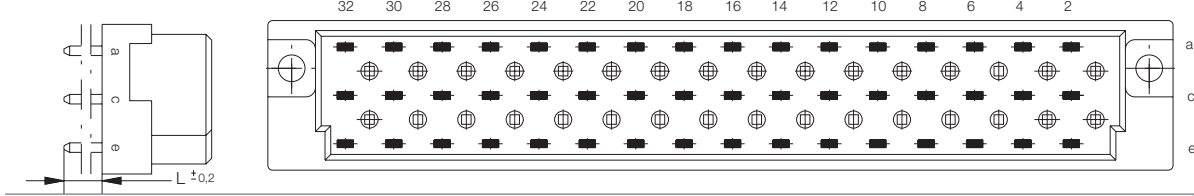


# DIN 41612 / IEC 60603-2 Connectors

## Type E Female

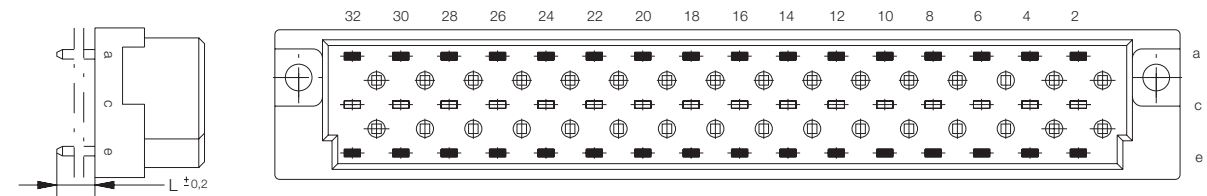
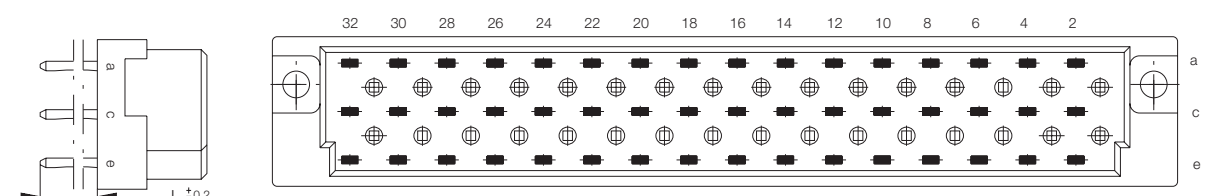


### Ordering Information

| No. of Pins                                                                         | Termination                   | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|-------------------------------|--------------|----------------|-------|---------------|---------------|
|   |                               |              |                |       |               |               |
| 32                                                                                  | Pressfit*                     | 6 mm         | 1 x 1 mm       | 2     | 2.5 mm        | <b>004177</b> |
|  |                               |              |                |       |               |               |
| 48                                                                                  | Pressfit                      | 4.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | <b>063465</b> |
| 48                                                                                  | Pressfit*                     | 6 mm         | 1 x 1 mm       | 1     | 2.5 mm        | <b>424812</b> |
| 48                                                                                  | Pressfit*                     | 6 mm         | 1 x 1 mm       | 2     | 2.5 mm        | <b>424813</b> |
| 48                                                                                  | Pressfit*                     | 13 mm        | 1 x 1 mm       | 1     | 2.5 mm        | <b>013026</b> |
| 48                                                                                  | Pressfit<br>w. Transfer Zone  | 13 mm        | 0.6 x 0.6 mm   | 2     | 2.5 mm        | <b>043064</b> |
| 48                                                                                  | Pressfit*                     | 26 mm        | 1 x 1 mm       | 1     | 2.5 mm        | <b>424806</b> |
| 48                                                                                  | Pressfit*                     | 26 mm        | 1 x 1 mm       | 2     | 2.5 mm        | <b>424807</b> |
| 48                                                                                  | Pressfit*<br>w. Transfer Zone | 26 mm        | 1 x 1 mm       | 2     | 2.5 mm        | <b>424810</b> |

\* For contact supporting press-in tool.

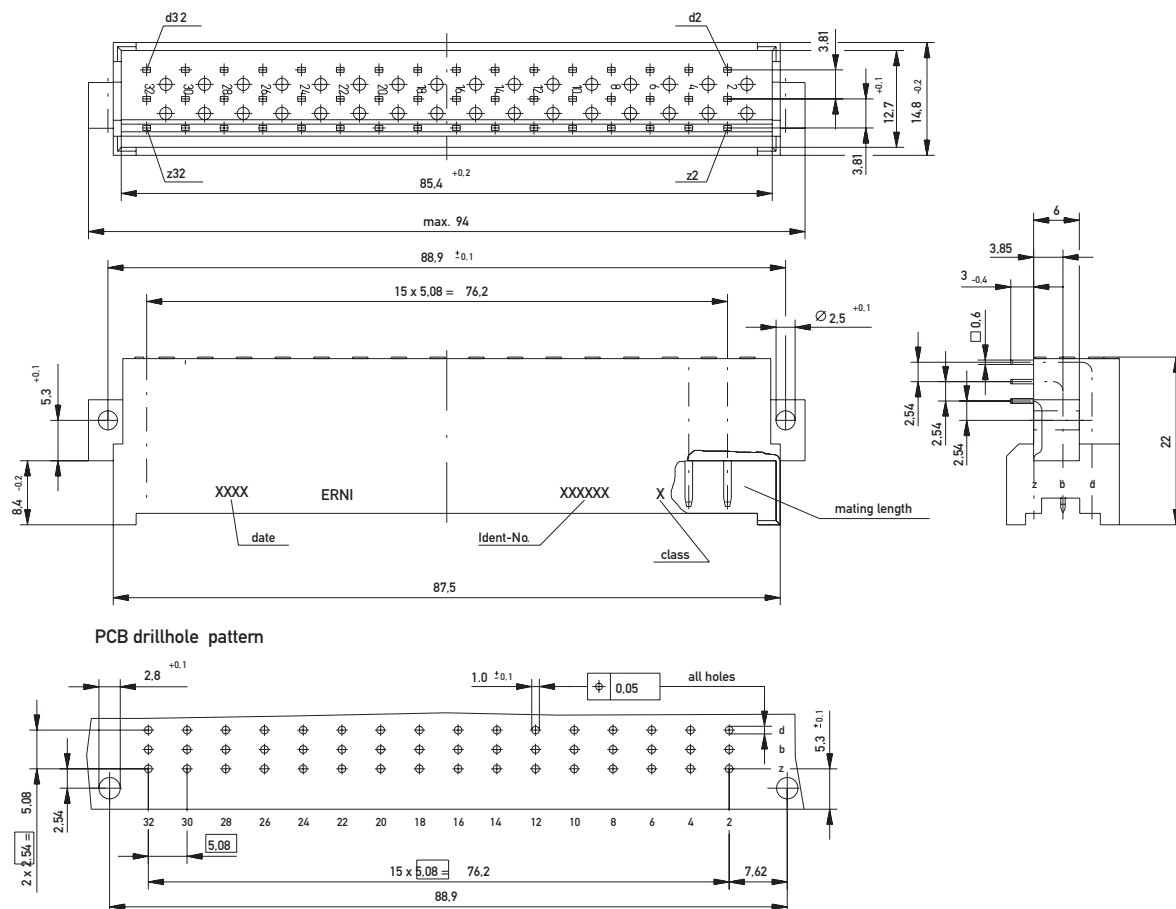
### Ordering Information

| No. of Pins                                                                        | Termination                | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|------------------------------------------------------------------------------------|----------------------------|--------------|----------------|-------|---------------|-------------|
|  |                            |              |                |       |               |             |
| 32                                                                                 | Solder                     | 4 mm         | 1 x 1 mm       | 2     | —             | 013653      |
|  |                            |              |                |       |               |             |
| 48                                                                                 | Solder                     | 4 mm         | 1 x 1 mm       | 1     | —             | 594578      |
| 48                                                                                 | Solder                     | 4 mm         | 1 x 1 mm       | 2     | —             | 594579      |
| 48                                                                                 | Solder                     | 4.5 mm       | 0.6 x 0.6 mm   | 2     | —             | 063048      |
| 48                                                                                 | Solder                     | 4.5 mm       | 1.2 x 0.6 mm   | 2     | —             | 063046      |
| 48                                                                                 | Solder                     | 20 mm        | 1 x 1 mm       | 1     | —             | 594575      |
| 48                                                                                 | Solder                     | 20 mm        | 1 x 1 mm       | 2     | —             | 594576      |
| 48                                                                                 | Solder<br>w. Transfer Zone | 26 mm        | 1 x 1 mm       | 2     | —             | 003382      |
| 48                                                                                 | Solder                     | 8 mm         | 0.6 x 2.0 mm   | 2     | —             | 063049      |

### Type F Male



## Dimensional Drawing Solder

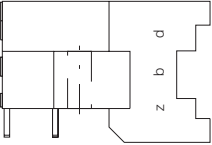
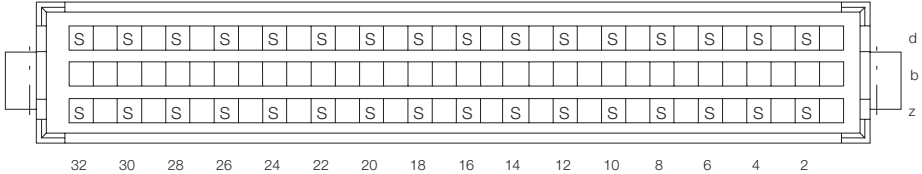
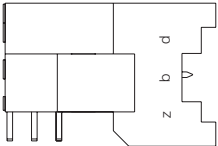
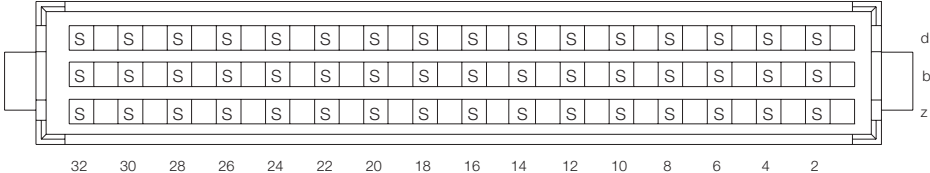


DIN 41612 / IEC 60603-2 Connectors

Type F Male



Ordering Information

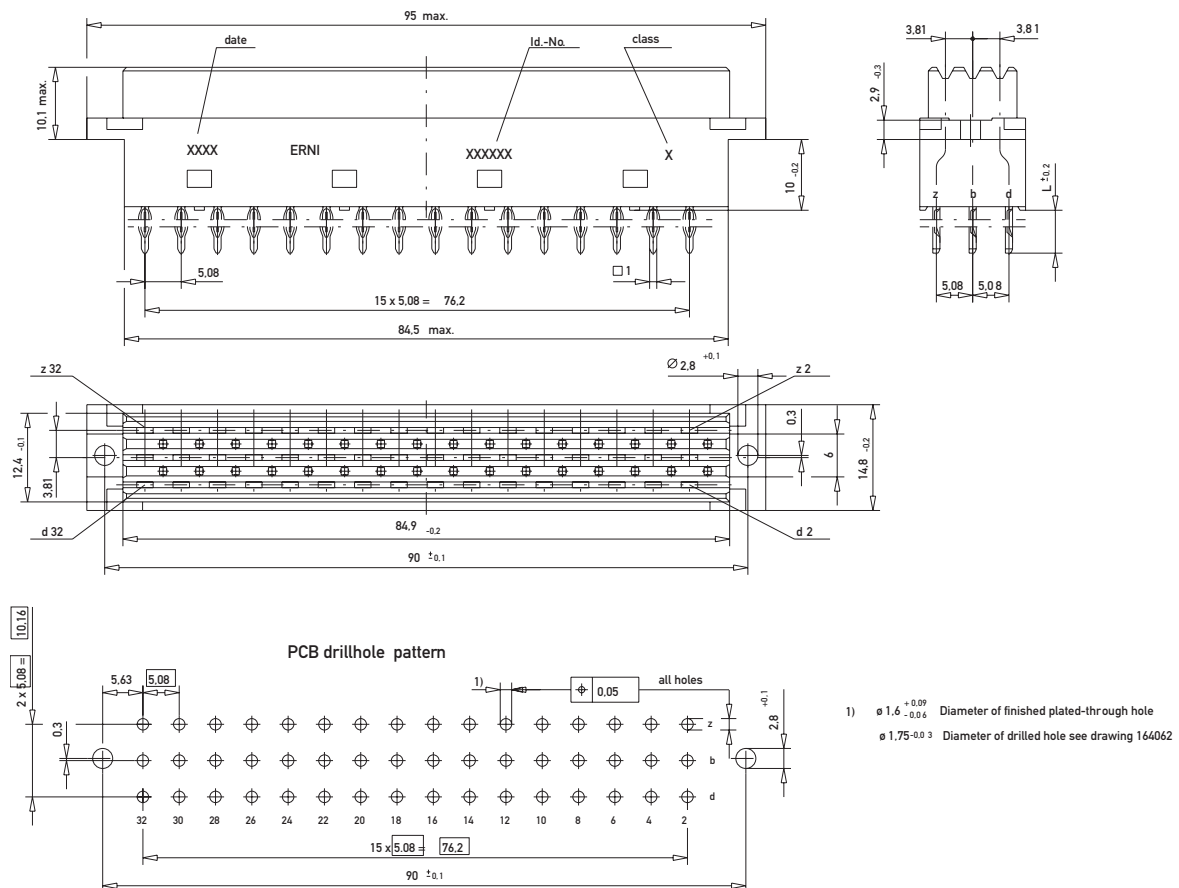
| No. of Pins                                                                                                                                                                         | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|-------------|
| <div>   </div>   |             |              |                |       |               |             |
| 32                                                                                                                                                                                  | Solder      | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | 303284      |
| 32                                                                                                                                                                                  | Solder      | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 303484      |
| <div>   </div> |             |              |                |       |               |             |
| 48                                                                                                                                                                                  | Solder      | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | 334203      |
| 48                                                                                                                                                                                  | Solder      | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 334403      |

# DIN 41612 / IEC 60603-2 Connectors

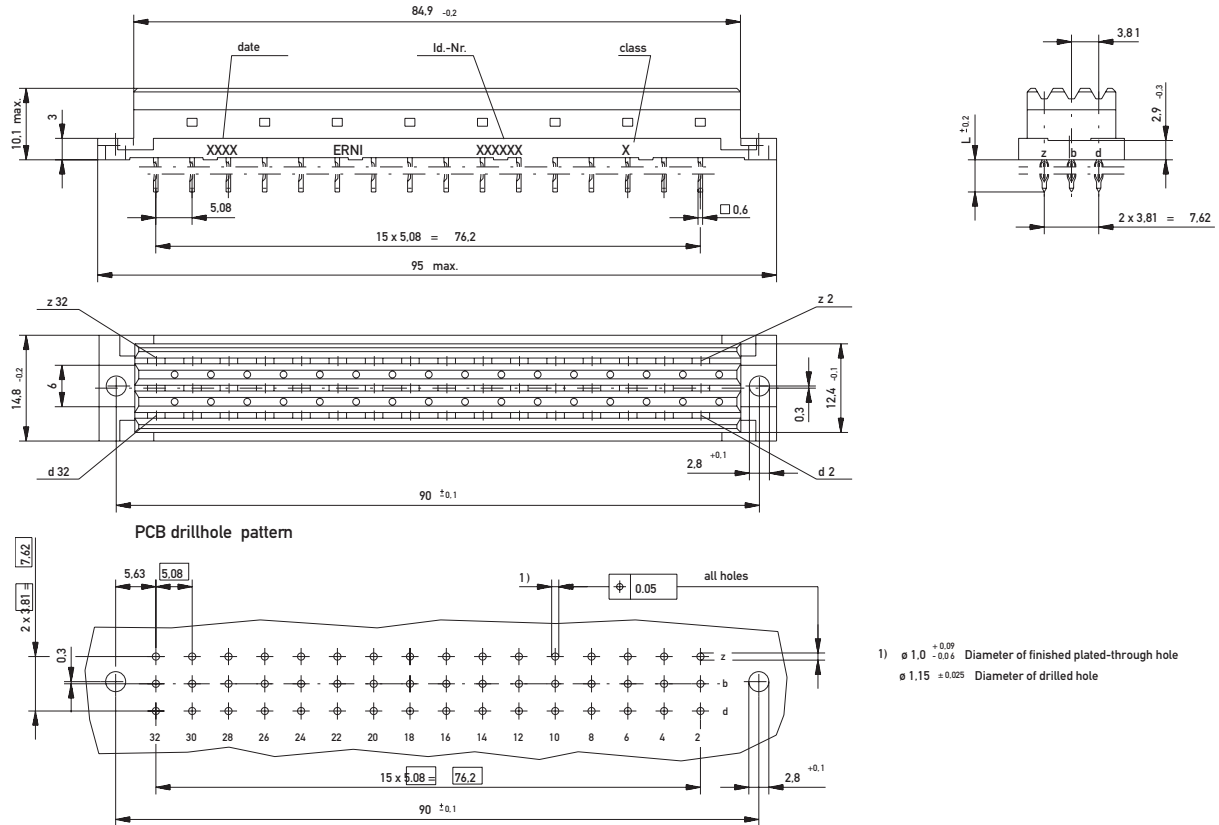
## Type F Female



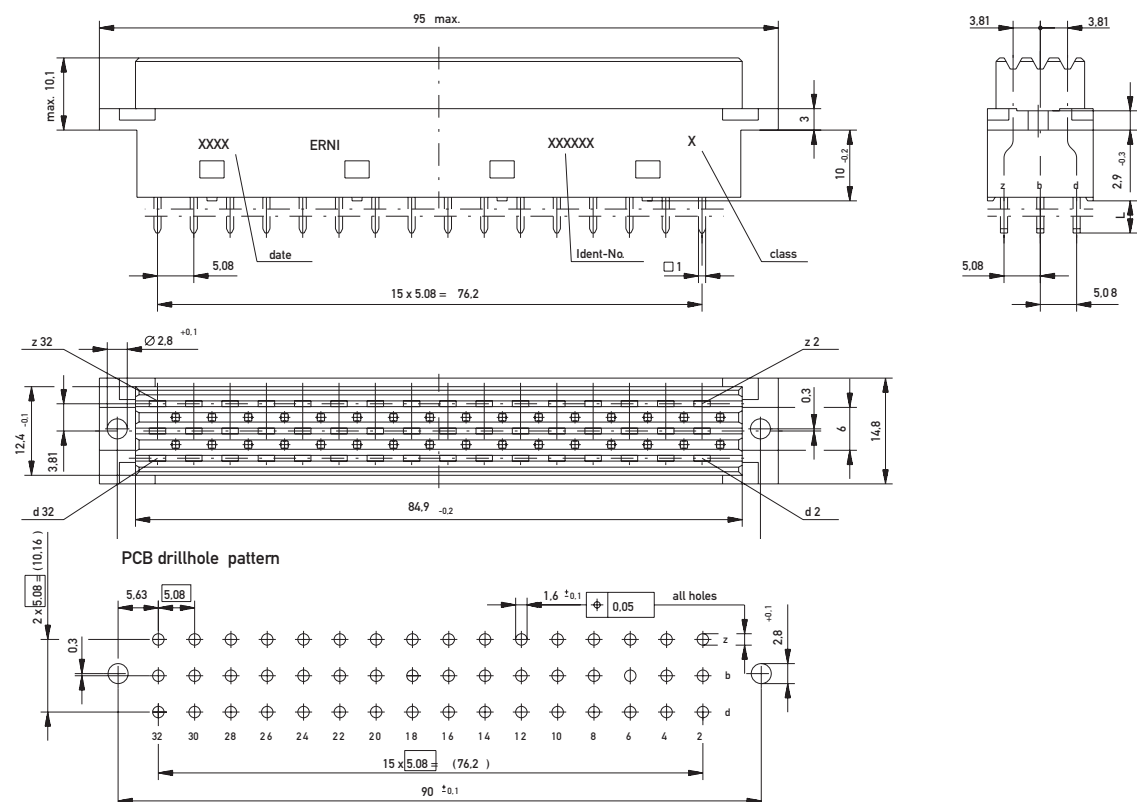
### Dimensional Drawing Pressfit Type F



### Dimensional Drawing Pressfit Type F flat

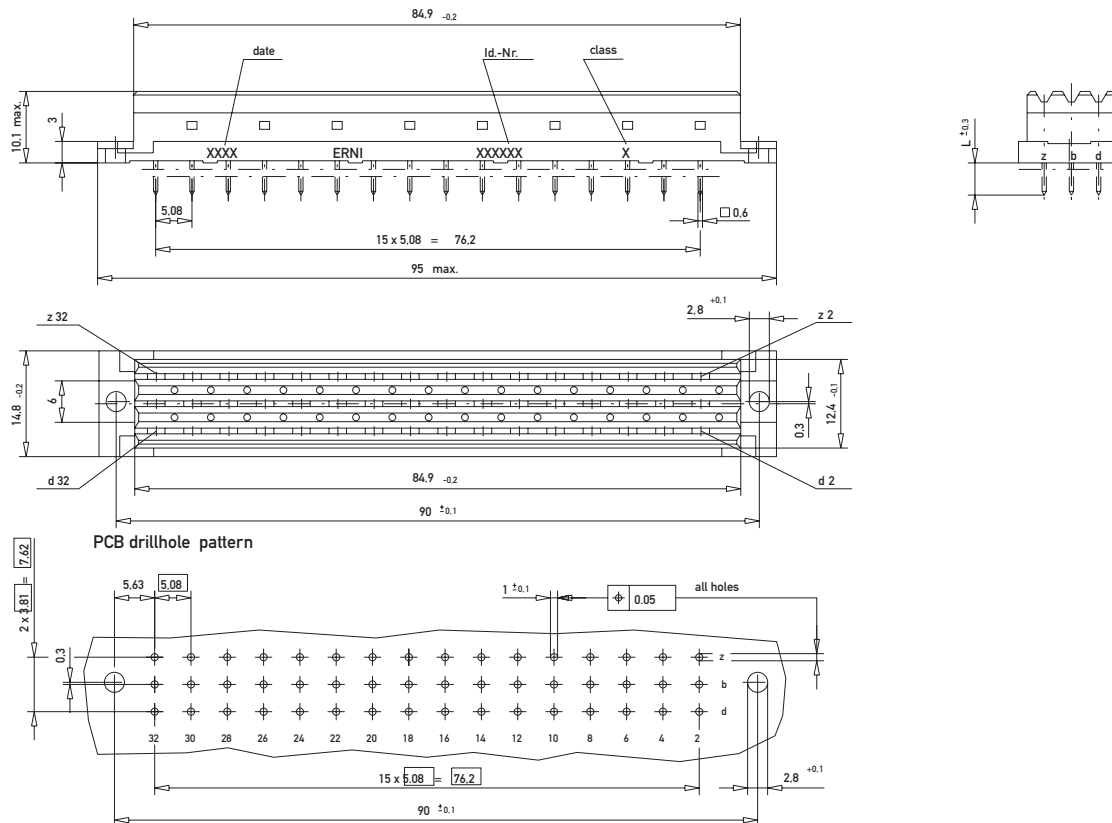


### Dimensional Drawing Solder Type F





### Dimensional Drawing Solder Type F flat

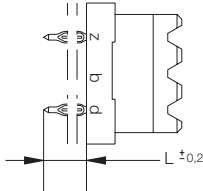
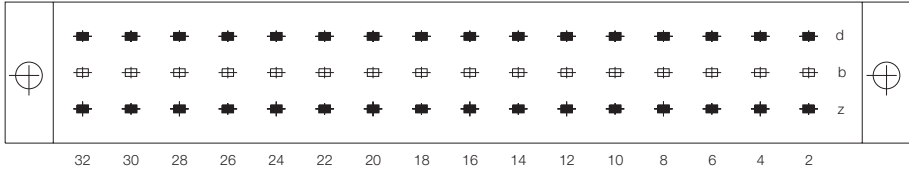
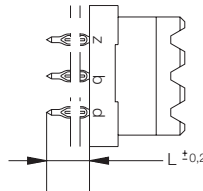
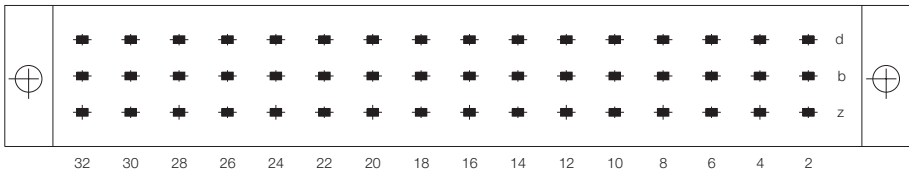
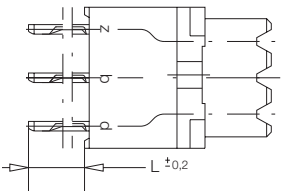
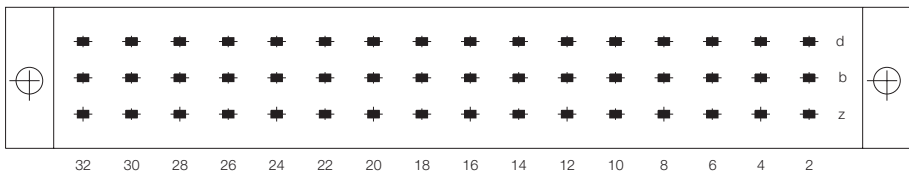


# DIN 41612 / IEC 60603-2 Connectors

## Type F Female



### Ordering Information

| No. of Pins                                                                         | Termination | Term. Length | Pin Dimensions                                                                       | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|-------------|--------------|--------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | Pressfit    | 4.5 mm       |    | 2     | 2 mm          | <b>063358</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
|   | Pressfit    | 4.5 mm       |    | 2     | 2 mm          | <b>054756</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
|  | Pressfit    | 6 mm         |  | 1     | 2.5 mm        | <b>013970</b> |
|                                                                                     | Pressfit    | 6 mm         |                                                                                      | 2     | 2.5 mm        | <b>594491</b> |
|                                                                                     | Pressfit    | 22 mm        |                                                                                      | 1     | 2.5 mm        | <b>593990</b> |
|                                                                                     | Pressfit    | 22 mm        |                                                                                      | 2     | 2.5 mm        | <b>593991</b> |

# DIN 41612 / IEC 60603-2 Connectors

## Type F Female



### Ordering Information

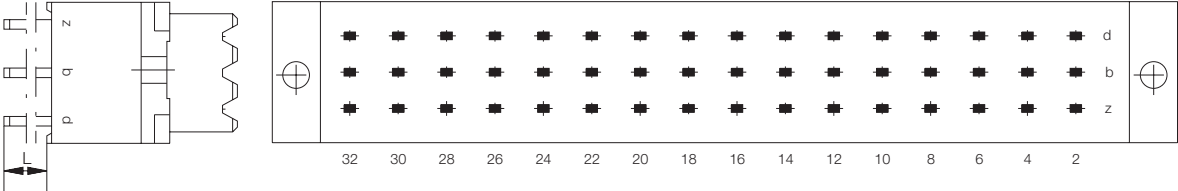
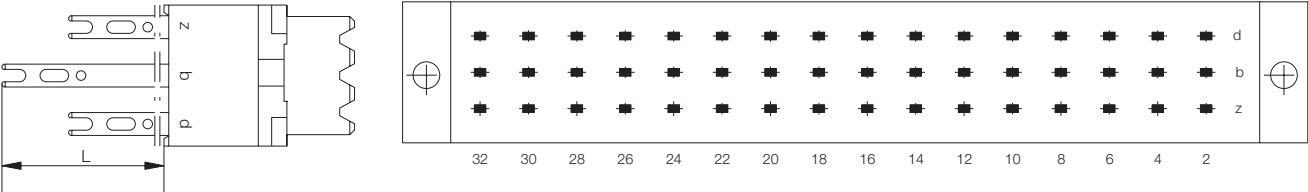
| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------|-------------|--------------|----------------|-------|---------------|---------------|
|             | Solder      | 4.5 mm       |                | 2     | —             | <b>063357</b> |
|             |             |              |                |       |               |               |
|             | Solder      | 4.5 mm       |                | 2     | —             | <b>314425</b> |
|             |             |              |                |       |               |               |
| 32          | Solder      | 22 mm        | 1 x 1 mm       | 2     | —             | <b>314404</b> |
|             | Solder      | 10 mm        |                | 1     | —             | <b>314447</b> |
|             |             |              |                |       |               |               |
|             | Solder      | 4.5 mm       |                | 2     | —             | <b>054755</b> |
|             |             |              |                |       |               |               |

# DIN 41612 / IEC 60603-2 Connectors

## Type F Female



### Ordering Information

| No. of Pins                                                                                       | Termination | Term. Length                | Pin Dimensions | Class | Pressfit Zone | Part Number |
|---------------------------------------------------------------------------------------------------|-------------|-----------------------------|----------------|-------|---------------|-------------|
| <div>  </div>   |             |                             |                |       |               |             |
| 48                                                                                                | Solder      | 4.5 mm                      | 1 x 1 mm       | 1     | —             | 344265      |
| 48                                                                                                | Solder      | 4.5 mm                      | 1 x 1 mm       | 2     | —             | 344465      |
| 48                                                                                                | Solder      | 22 mm                       | 1 x 1 mm       | 1     | —             | 344234      |
| 48                                                                                                | Solder      | 22 mm                       | 1 x 1 mm       | 2     | —             | 344434      |
| <div>  </div> |             |                             |                |       |               |             |
| 48                                                                                                | Solder      | z, d = 10.0 mm<br>b = 17 mm | 0.8 x 2.4 mm   | 1     | —             | 344451      |

## Type M Male

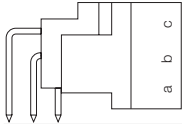
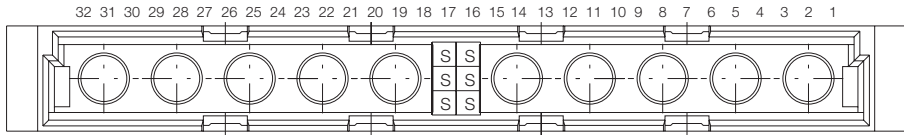
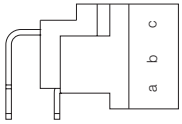
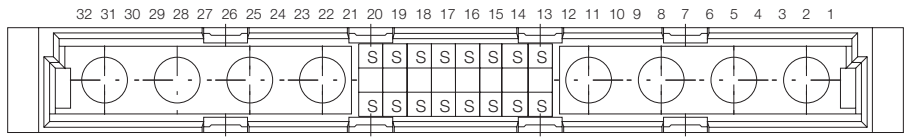
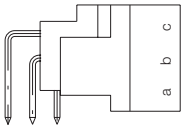
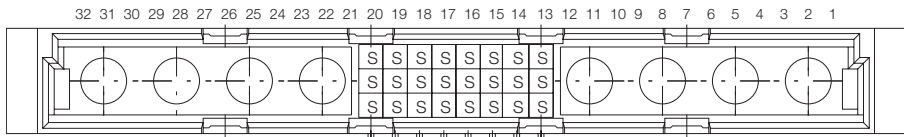
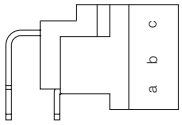
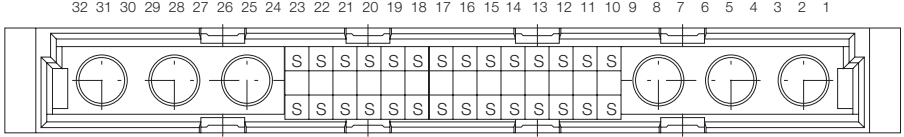
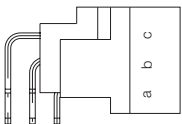
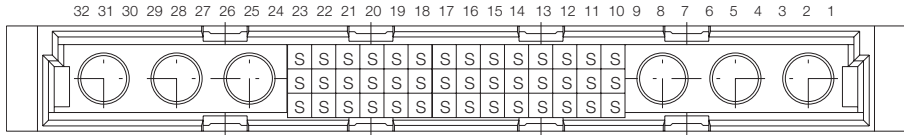


The versatility of mixing both signal and either high current or coax contacts increases the usage of this connector in telecommunication and data processing applications.

[illegible]

Technical drawing of a mechanical part, likely a piston, showing dimensions and tolerances. The drawing includes a top view and a side view. Key dimensions include a total length of 88.9, a width of 25 x 2.54 ± 0.05, and a height of 5.08. The top view shows a series of holes numbered 1 to 29, with a hole diameter of 0.05. The side view shows a radius of 2.8 and a fillet radius of 2.54. The drawing is labeled "all holes" and "5.3 ± 0.1".

### Ordering Information

| No. of Pins                                                                         | Termination | Term. Length | Pin Dimensions                                                                       | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|-------------|--------------|--------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | Solder      | 3 mm         |    | 1     | —             | <b>024201</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
|    | Solder      | 3 mm         |    | 1     | —             | <b>594165</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
| 16-8                                                                                | Solder      | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | —             | <b>594166</b> |
|  | Solder      | 3 mm         |  | 1     | —             | <b>593817</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
| 24-8                                                                                | Solder      | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | —             | <b>593818</b> |
|  | Solder      | 3 mm         |  | 1     | —             | <b>594162</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
| 28-6                                                                                | Solder      | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | —             | <b>594163</b> |
|  | Solder      | 3 mm         |  | 1     | —             | <b>593814</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
| 42-6                                                                                | Solder      | 3 mm         | 0.6 x 0.6 mm                                                                         | 2     | —             | <b>593815</b> |

# DIN 41612 / IEC 60603-2 Connectors

## Type M Male



### Ordering Information

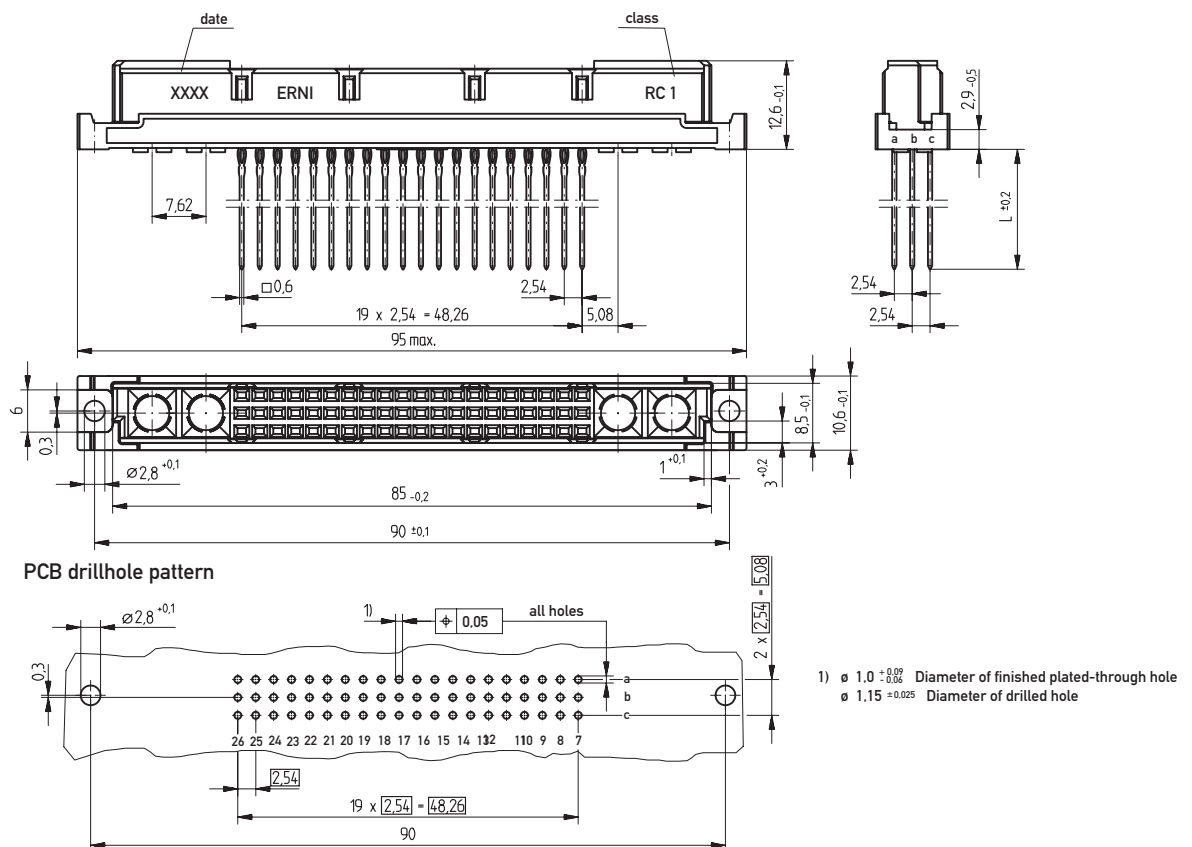
| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
|             |             |              |                |       |               |             |
| 40-4        | Solder      | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | 594159      |
| 40-4        | Solder      | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 594160      |
|             |             |              |                |       |               |             |
| 60-4        | Solder      | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | 593811      |
| 60-4        | Solder      | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 593812      |
|             |             |              |                |       |               |             |
| 52-2        | Solder      | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 594157      |
|             |             |              |                |       |               |             |
| 78-2        | Solder      | 3 mm         | 0.6 x 0.6 mm   | 1     | —             | 593808      |
| 78-2        | Solder      | 3 mm         | 0.6 x 0.6 mm   | 2     | —             | 593809      |

# DIN 41612 / IEC 60603-2 Connectors

## Type M Female

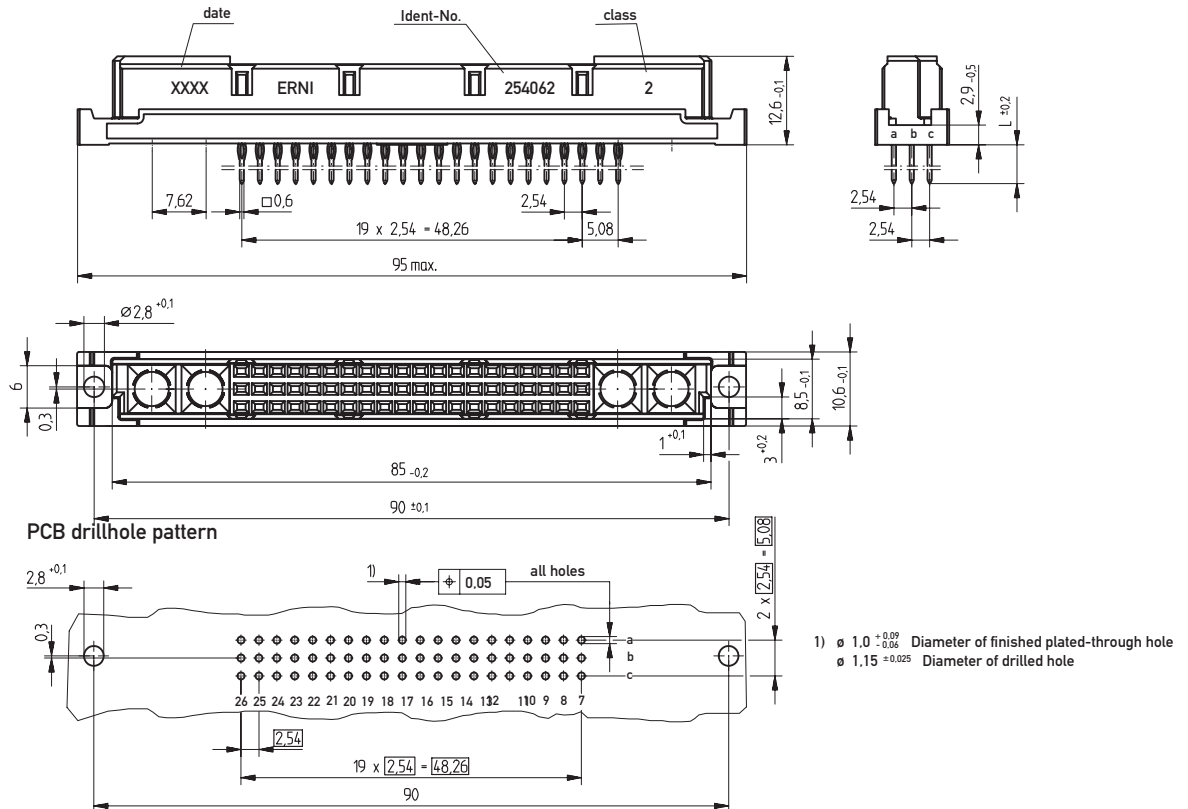


### Dimensional Drawing Pressfit

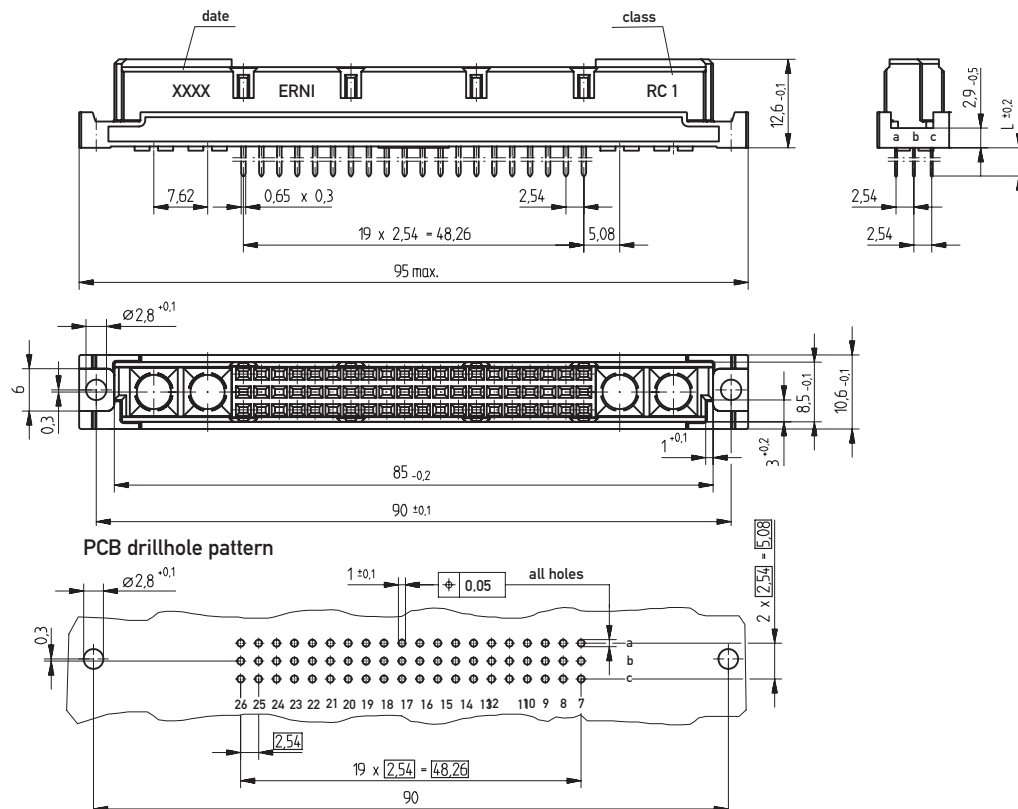




### Dimensional Drawing Pressfit Modified



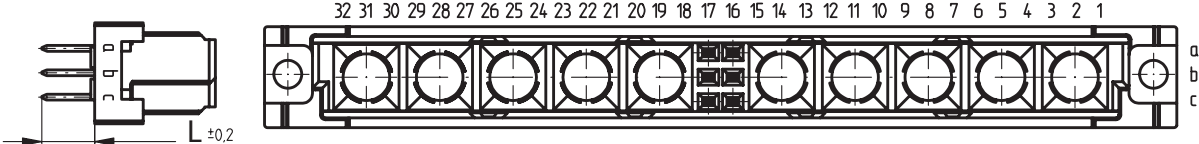
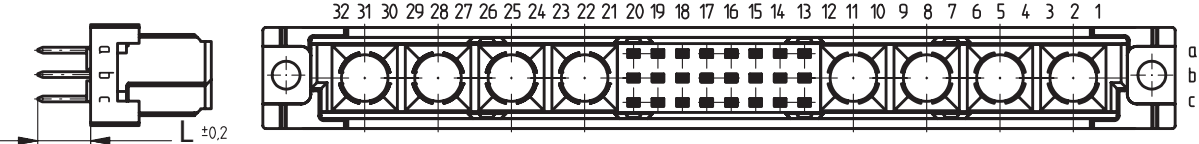
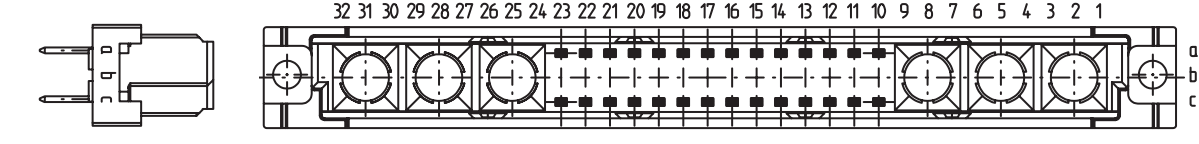
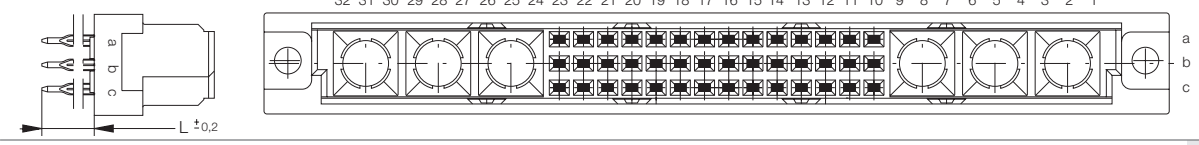
### Dimensional Drawing Solder



# DIN 41612 / IEC 60603-2 Connectors

## Type M Female

### Ordering Information

| No. of Pins                                                                          | Termination       | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|--------------------------------------------------------------------------------------|-------------------|--------------|----------------|-------|---------------|-------------|
|    |                   |              |                |       |               |             |
| 6-10                                                                                 | Pressfit          | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | 354252      |
| 6-10                                                                                 | Pressfit          | 17 mm        | 0.6 x 0.6 mm   | 2     | 3 mm          | 364366      |
| 6-10                                                                                 | Pressfit Modified | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | 354197      |
|   |                   |              |                |       |               |             |
| 24-8                                                                                 | Pressfit          | 5.5 mm       | 0.6 x 0.6 mm   | 1     | 3 mm          | 354246      |
| 24-8                                                                                 | Pressfit          | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | 354116      |
| 24-8                                                                                 | Pressfit          | 17 mm        | 0.6 x 0.6 mm   | 2     | 3 mm          | 354247      |
| 24-8                                                                                 | Pressfit Modified | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | 294743      |
|  |                   |              |                |       |               |             |
| 28-6                                                                                 | Pressfit          | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | 374849      |
|  |                   |              |                |       |               |             |
| 42-6                                                                                 | Pressfit          | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | 294740      |
| 42-6                                                                                 | Pressfit          | 17 mm        | 0.6 x 0.6 mm   | 2     | 3 mm          | 294732      |
| 42-6                                                                                 | Pressfit Modified | 5.5 mm       | 0.6 x 0.6 mm   | 2     | —             | 294736      |

# DIN 41612 / IEC 60603-2 Connectors

## Type M Female



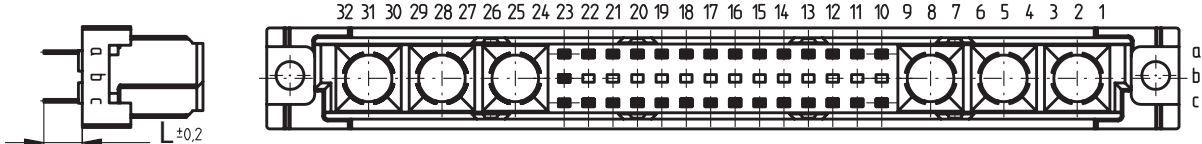
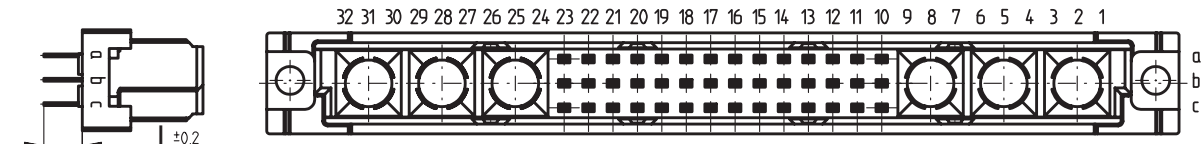
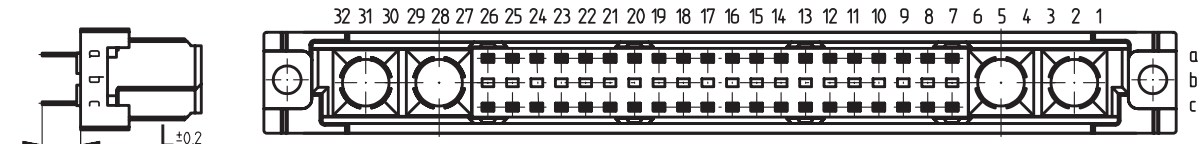
### Ordering Information

| No. of Pins | Termination       | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------|-------------------|--------------|----------------|-------|---------------|---------------|
|             | Pressfit          | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | <b>294737</b> |
|             |                   |              |                |       |               |               |
|             | Pressfit          | 5.5 mm       | 0.6 x 0.6 mm   | 1     | 3 mm          | <b>354139</b> |
|             |                   |              |                |       |               |               |
| 60-4        | Pressfit          | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | <b>294728</b> |
| 60-4        | Pressfit          | 17 mm        | 0.6 x 0.6 mm   | 1     | 3 mm          | <b>294710</b> |
| 60-4        | Pressfit Modified | 5.5 mm       | 0.6 x 0.6 mm   | 2     | —             | <b>254062</b> |
| 60-4        | Pressfit          | 17 mm        | 0.6 x 0.6 mm   | 2     | 3 mm          | <b>354140</b> |
|             | Pressfit          | 5.5 mm       | 0.6 x 0.6 mm   | 2     | 3 mm          | <b>294733</b> |
|             |                   |              |                |       |               |               |

### Ordering Information

| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|-------------|-------------|--------------|----------------|-------|---------------|---------------|
|             |             |              |                |       |               |               |
| 6-10        | Solder      | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | <b>294712</b> |
| 6-10        | Solder      | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | <b>354152</b> |
| 6-10        | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>354223</b> |
|             |             |              |                |       |               |               |
| 16-8        | Solder      | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | <b>354239</b> |
| 16-8        | Solder      | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | <b>354162</b> |
| 16-8        | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>354166</b> |
|             |             |              |                |       |               |               |
| 24-8        | Solder      | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | <b>354163</b> |
| 24-8        | Solder      | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | <b>294711</b> |
| 24-8        | Solder      | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | <b>354157</b> |
| 24-8        | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | <b>354219</b> |

### Ordering Information

| No. of Pins                                                                          | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|--------------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|-------------|
|    |             |              |                |       |               |             |
| 28-6                                                                                 | Solder      | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 354226      |
| 28-6                                                                                 | Solder      | 4 mm         | 0.6 x 0.6 mm   | 1     | —             | 354229      |
| 28-6                                                                                 | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 354164      |
|   |             |              |                |       |               |             |
| 42-6                                                                                 | Solder      | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | 354112      |
| 42-6                                                                                 | Solder      | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 354108      |
| 42-6                                                                                 | Solder      | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | 354215      |
| 42-6                                                                                 | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 354173      |
|  |             |              |                |       |               |             |
| 40-4                                                                                 | Solder      | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | 354240      |
| 40-4                                                                                 | Solder      | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 354161      |
| 40-4                                                                                 | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 354160      |

# DIN 41612 / IEC 60603-2 Connectors

## Type M Female



### Ordering Information

| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number |
|-------------|-------------|--------------|----------------|-------|---------------|-------------|
|             |             |              |                |       |               |             |
| 60-4        | Solder      | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | 354133      |
| 60-4        | Solder      | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 354111      |
| 60-4        | Solder      | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | 354156      |
| 60-4        | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 354165      |
|             |             |              |                |       |               |             |
| 52-2        | Solder      | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 354110      |
| 52-2        | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 354109      |
|             |             |              |                |       |               |             |
| 78-2        | Solder      | 4 mm         | 0.65 x 0.3 mm  | 1     | —             | 354158      |
| 78-2        | Solder      | 4 mm         | 0.65 x 0.3 mm  | 2     | —             | 354117      |
| 78-2        | Solder      | 13 mm        | 0.6 x 0.6 mm   | 1     | —             | 354155      |
| 78-2        | Solder      | 13 mm        | 0.6 x 0.6 mm   | 2     | —             | 294730      |

## Special Contacts, Electrical and Mechanical Specifications

| <b>Coaxial Contacts</b>               |                     | <b>Standard</b>                                                 |
|---------------------------------------|---------------------|-----------------------------------------------------------------|
| <b>Technical Specifications</b>       |                     |                                                                 |
| Temperature Range                     | DIN EN 60068-1      | -55/125 °C                                                      |
| Wave impedance                        |                     | 50 $\Omega$ and 75 $\Omega$                                     |
| Dielectric withstanding voltage 50 Hz | IEC 60512-2 Test 4a | 750 V                                                           |
| Insulation resistance                 | IEC 60512-2 Test 3a | $\geq 10^{10} \Omega$                                           |
| Volume resistance                     |                     |                                                                 |
| Inner conductor                       | DIN 41640-5 Test 2b | $\leq 6 \text{ m}\Omega$                                        |
| Outer conductor                       |                     | $\leq 3 \text{ m}\Omega$                                        |
| Frequency range                       |                     | max. 3 GHz                                                      |
| Reflection factor                     | DIN 47275-3         | max. 0.05 to 1 GHz<br>max. 0.07 to 4 GHz<br>max. 0.10 to 10 GHz |
| <b>Materials</b>                      |                     |                                                                 |
| Outer Conductor                       |                     | Cu Alloy                                                        |
| Female contact                        |                     | Cu Be hardened                                                  |
| Insulation part                       |                     | PTFE                                                            |
| Crimp Sleeve                          |                     | Cu                                                              |

### PERFORMANCE CLASSES

Class 1 Meets the requirements of DIN 41626. Internal conductor and external conductor gold-plated. Performance class 1  $\geq 500$  mating cycles.      Class 2 As per performance class 1 but performance class 2  $\geq 400$  mating cycles.

| <b>High Current Contacts</b>          |                     | <b>Standard</b>          |
|---------------------------------------|---------------------|--------------------------|
| <b>Technical Specifications</b>       |                     |                          |
| Temperature Range                     | DIN EN 60068-1      | -55/125 °C               |
| Current-Carrying Capacity             | DIN 41640-3 Test 5b | 30 A at 70° C            |
| Dielectric withstanding voltage 50 Hz | IEC 60512-2 Test 4a | 2500 V                   |
| Volume resistance                     | DIN 41640-5 Test 2b | $\leq 1 \text{ m}\Omega$ |
| <b>Materials</b>                      |                     |                          |
| Male Contact                          |                     | Cu Alloy                 |
| Female Contact                        |                     | Cu Be hardened           |

### PERFORMANCE CLASSES

Class 1 Meets the requirements of DIN 41626. Contacts are gold-plated. Performance class 1  $\geq 500$  mating cycles.      Class 2 As per performance class 1 but performance class 2  $\geq 400$  mating cycles.

## DIN 41612 / IEC 60603-2 Connectors

### Special Contacts for Type M Male and Female



These special contacts, available in both Coax and High Current are inserted into the empty cavities provided in the Type M connector. The special contacts must be ordered separately as they are typically crimped or soldered onto the cable before insertion into the connector housing.

The coax contacts are available in 50 and 75  $\Omega$  in both right angle and straight configurations. ERNI offers contacts that can be crimped or soldered to cable or even soldered directly onto the PC board.

The high current contacts are available for 10, 20 and 40 amps. They can be soldered directly to the board or soldered or crimped to cable. Again, they are offered in both right angle or straight. Special high current versions are also available to assemble into the board. The pressfit contacts are designed to be used with the modified female connectors and to sit flush on the board.

Both the coax and high current contacts are simply snapped into the housing. No special tooling is required for insertion with the exception of the pressfit high current contact. A pressfit tool is required to press the entire assembly with the power contact into the board. An extraction tool is available if it would become necessary to remove any one of the special contacts.

#### Coaxial Male Contacts For DIN Backplane Connectors

| Part-No.       | RATING | CLASS | DESCRIPTION                                   | CABLE                      |                                                                                       |
|----------------|--------|-------|-----------------------------------------------|----------------------------|---------------------------------------------------------------------------------------|
| <b>053400</b>  | 50 ohm | 1     | Straight, double braided                      | RG316 DB                   |    |
| <b>594213</b>  | 50 ohm | 1     | Straight                                      | RG174/U, RG188A/U, RG316/U |                                                                                       |
| <b>053408</b>  | 75 ohm | 1     | Straight                                      | RG179B/U, RG187A/U         |                                                                                       |
| <b>594215</b>  | 50 ohm | 1     | Right Angle                                   | RG174/U, RG188A/U, RG316/U |  |
| <b>064755</b>  | 50 ohm | 2     | Right Angle for .125" panel                   | RG174/U, RG188A/U, RG316/U |                                                                                       |
| <b>064757</b>  | 50 ohm | 1     | Right Angle, thick back-plane, double braided | RG316 DB                   |                                                                                       |
| <b>064312*</b> | 50 ohm | 1     | Straight, 3 leg (sits flush on PCB)           | PCB                        |                                                                                       |

\* To be used with Modified Female Connector Housings Type M.

#### Coaxial Female Contacts For DIN Daughter Card Connectors

| Part-No.      | RATING | CLASS | DESCRIPTION              | CABLE                      |                                                                                       |
|---------------|--------|-------|--------------------------|----------------------------|---------------------------------------------------------------------------------------|
| <b>053395</b> | 50 ohm | 1     | Straight, double braided | RG316 DB                   |  |
| <b>594207</b> | 50 ohm | 1     | Straight                 | RG174/U, RG188A/U, RG316/U |                                                                                       |
| <b>053410</b> | 75 ohm | 1     | Straight                 | RG179B/U, RG187A/U         |                                                                                       |
| <b>594209</b> | 50 ohm | 1     | Right Angle              | RG174/U, RG188A/U, RG316/U |  |
| <b>053412</b> | 70 ohm | 1     | Right Angle              | RG179B/U, RG 187A/U        |                                                                                       |
| <b>594211</b> | 50 ohm | 1     | Right Angle, 5 leg       | PCB                        |  |
| <b>123211</b> | 75 ohm | 1     | Right Angle, 5 leg       | PCB                        |                                                                                       |



## DIN 41612 / IEC 60603-2 Connectors

### Special Contacts for Type M Male and Female



#### High Current Female Contacts For DIN Backplane Connectors

| Part-No.      | RATING | CLASS | DESCRIPTION                      | CABLE     |  |
|---------------|--------|-------|----------------------------------|-----------|--|
| <b>594172</b> | 10 amp | 1     | Solder                           | Awg 16-20 |  |
| <b>594174</b> | 20 amp | 1     | Solder                           | Awg 12-16 |  |
| <b>594176</b> | 40 amp | 1     | Solder                           | Awg 8-12  |  |
| <b>594178</b> | 10 amp | 1     | Crimp                            | Awg 16-20 |  |
| <b>594180</b> | 20 amp | 1     | Crimp                            | Awg 12-16 |  |
| <b>594182</b> | 40 amp | 1     | Crimp                            | Awg 8-12  |  |
| <b>913637</b> | 40 amp | 2     | Straight, 1 leg, 5.5 mm diameter | PCB       |  |

#### Pressfit High Current Contacts For DIN Backplane Connectors

| Part-No.       | RATING | CLASS | Description        | Plated PCB Hole Diameter | Drilled PCB Hole Diameter |
|----------------|--------|-------|--------------------|--------------------------|---------------------------|
| <b>034190</b>  | 20 amp | 2     | Straight, FD       | 3.0 +.04 / - .06         | 3.1 + 0 / - .03           |
| <b>044639*</b> | 40 amp | 2     | Straight, Pressfit | 3.5 +.04 / - .06         | 3.6 + 0 / - .03           |

\* To be used with Modified Female Connector Housings Type M.

#### High Current Male Contacts For DIN Daughter Card Connectors

| Part-No.      | RATING | CLASS | DESCRIPTION                        | CABLE     |  |
|---------------|--------|-------|------------------------------------|-----------|--|
| <b>594221</b> | 10 amp | 1     | Solder                             | Awg 16-20 |  |
| <b>594223</b> | 20 amp | 1     | Solder                             | Awg 12-16 |  |
| <b>594225</b> | 40 amp | 1     | Solder                             | Awg 8-12  |  |
| <b>594227</b> | 10 amp | 1     | Crimp                              | Awg 16-20 |  |
| <b>594229</b> | 20 amp | 1     | Crimp                              | Awg 12-16 |  |
| <b>594231</b> | 40 amp | 1     | Crimp                              | Awg 8-12  |  |
| <b>594170</b> | 10 amp | 1     | Right Angle, 1 leg                 | PCB       |  |
| <b>594168</b> | 40 amp | 1     | Right Angle, 4 leg, .200" sq. FTPT | PCB       |  |
| <b>913716</b> | 40 amp | 2     | Right Angle, 4 leg, EMLB           | PCB       |  |

Additional High Current contacts in Performance Class 2 on request

## DIN 41612 / IEC 60603-2 Connectors

### Special Contacts for Type M Male and Female



## Tooling

### High Current Contacts

Hand tool for crimp contacts  
Contact Locator

Part-No. **594184**

Part-No. **914004**



### Coaxial Contacts

Hand tools for crimp contacts  
Insert for crimping tools

Part-No. **594219**

Part-No. **594220**



### Extraction Tool For Coaxial And High Current Contacts

For replacing special contacts in  
male or female connectors  
Replacement inserts for press-out tool

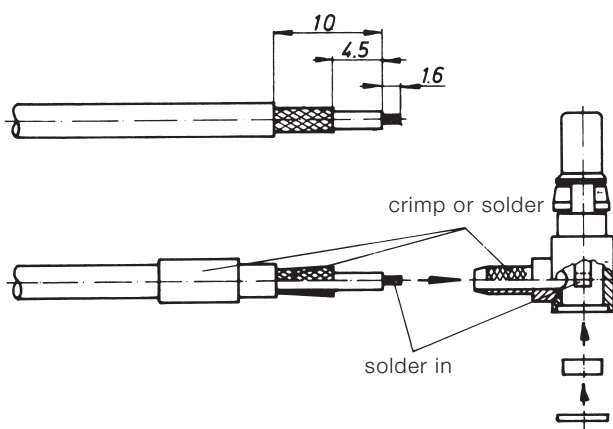
Part-No. **594233**

Part-No. **433222**

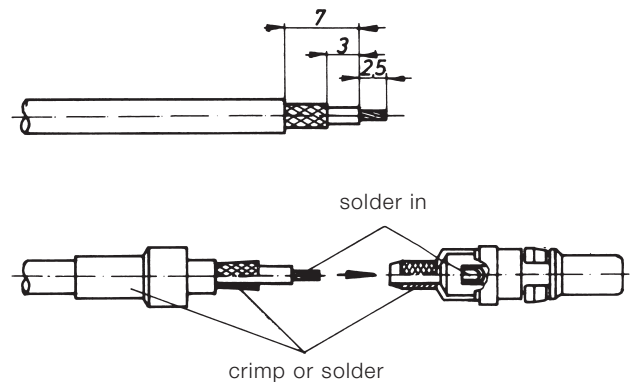


## Assembly Instructions For Cable Connections

For Angled Coaxial Contact Assembly



For Straight Coaxial Contact Assembly

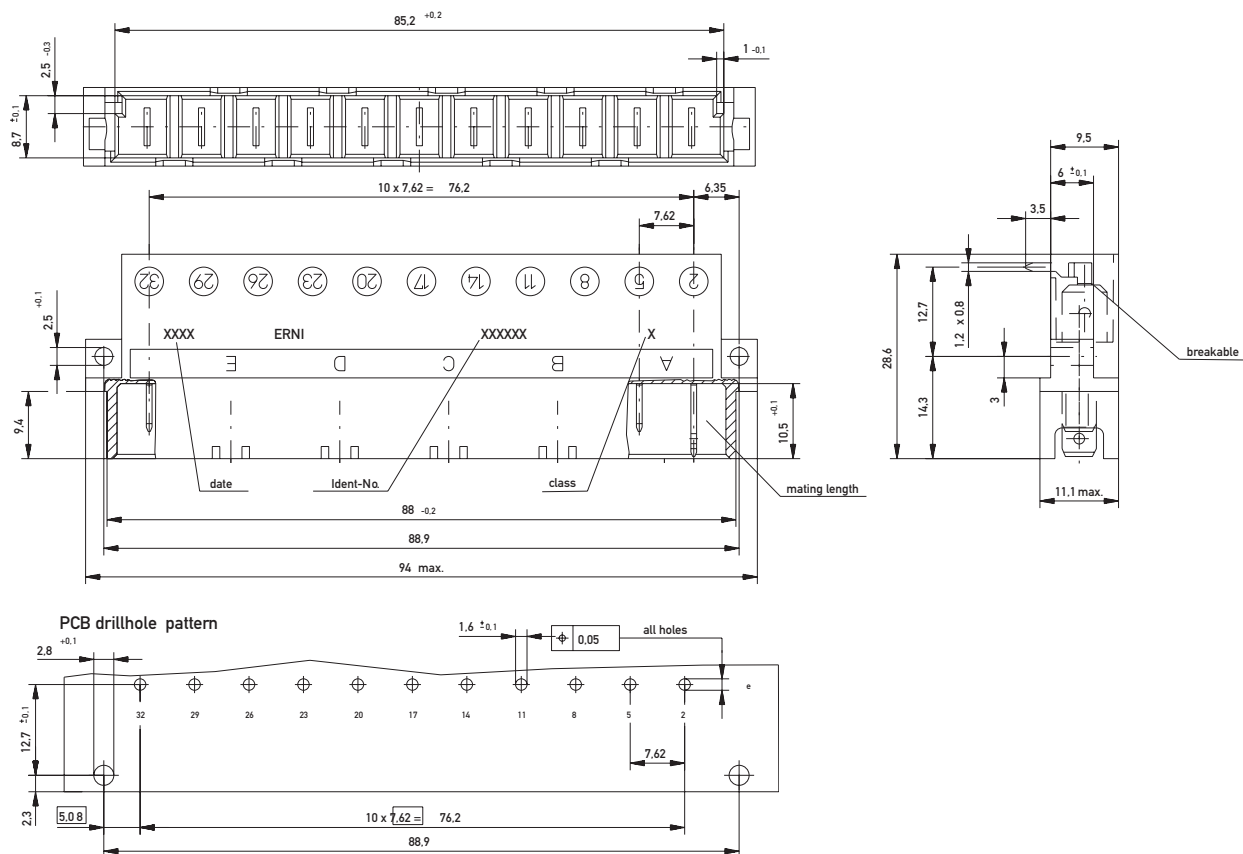


# DIN 41612 / IEC 60603-2 Connectors

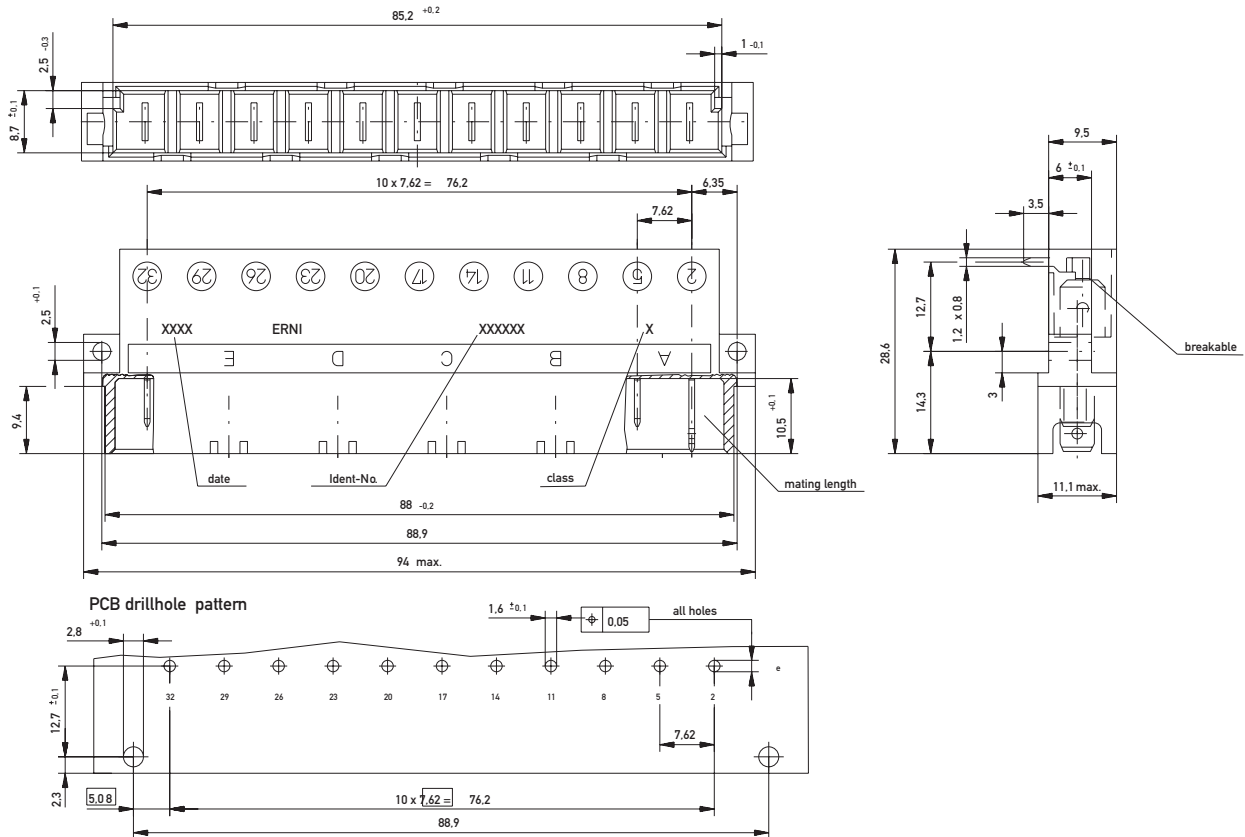
## Type H11



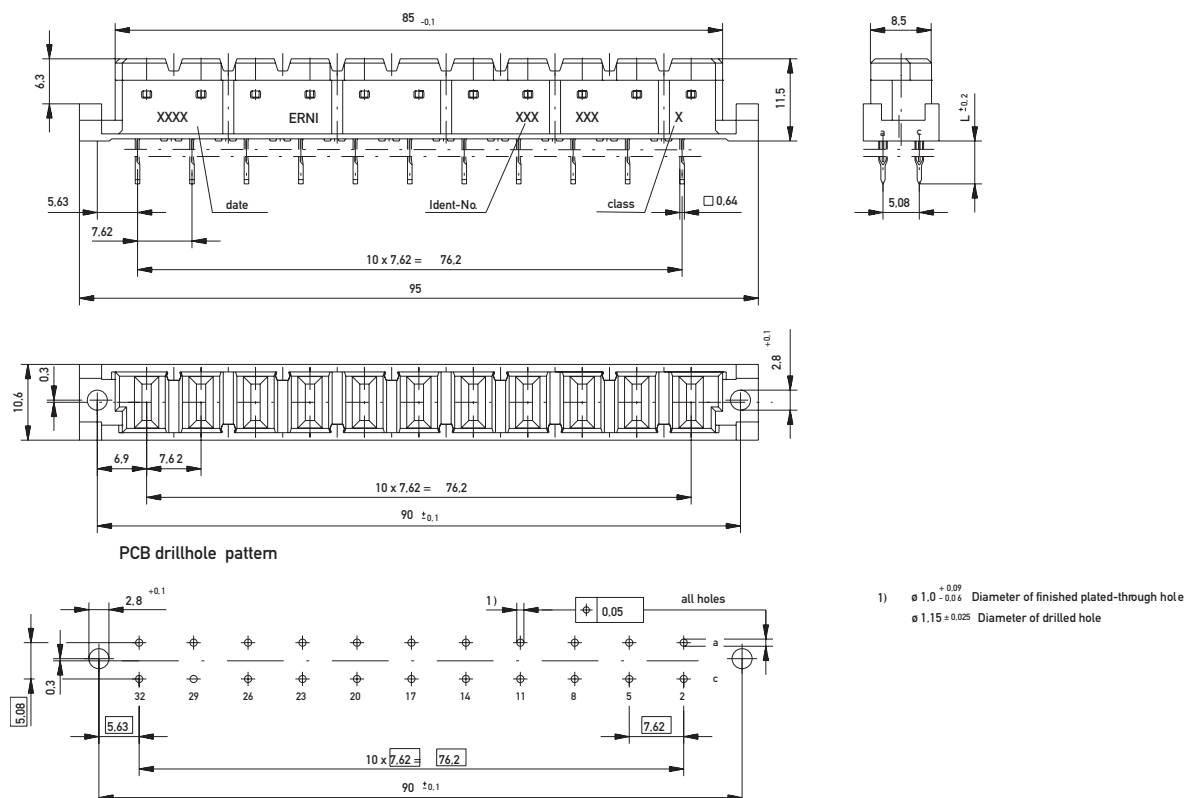
### Dimensional Drawing Solder Male



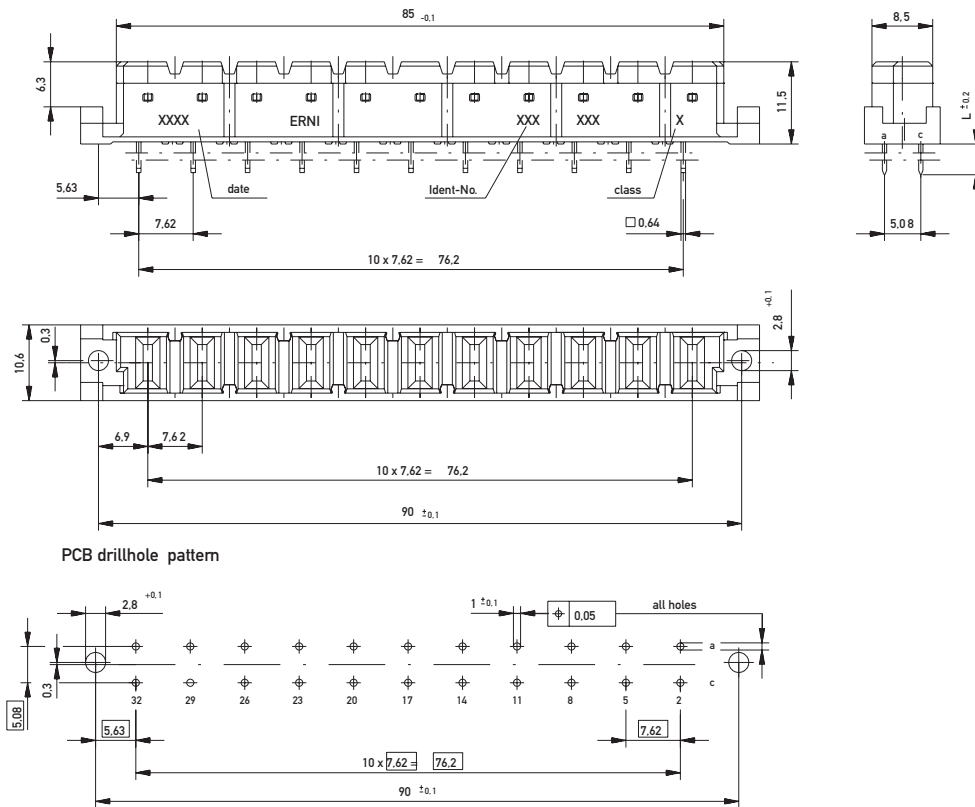
## Dimensional Drawing Faston Male



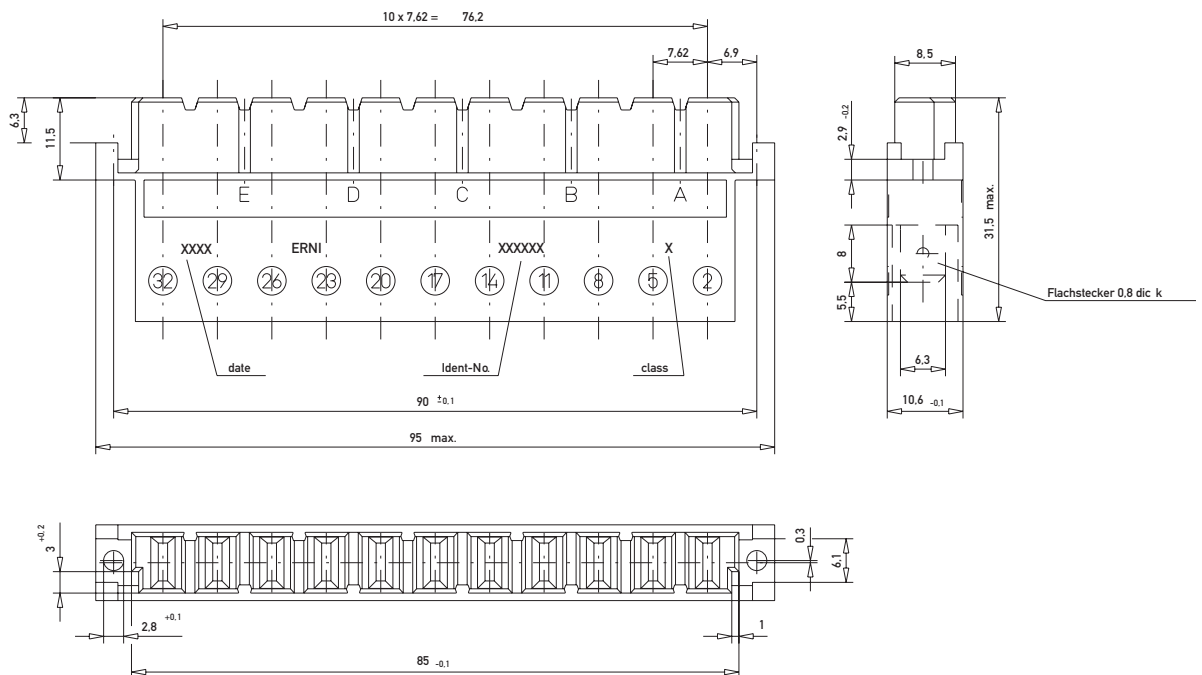
### Dimensional Drawing Pressfit Female



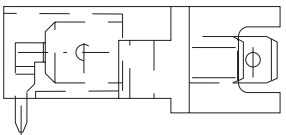
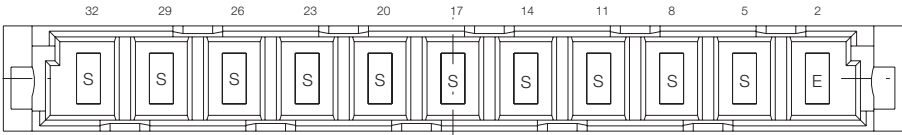
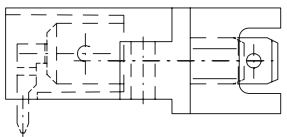
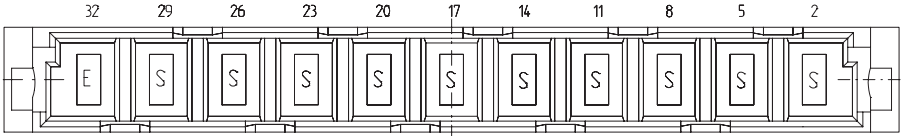
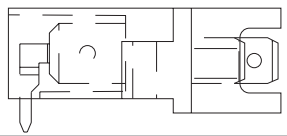
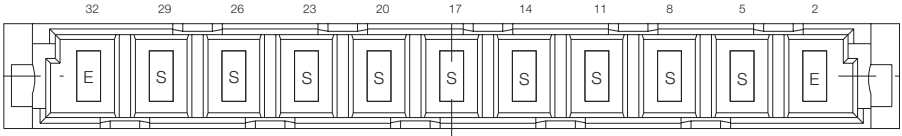
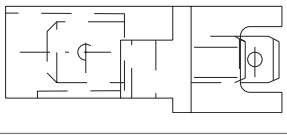
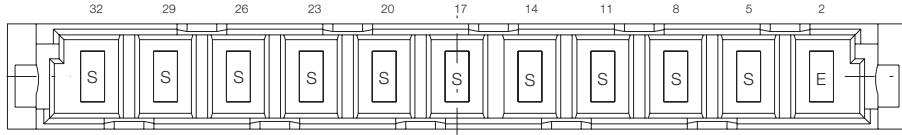
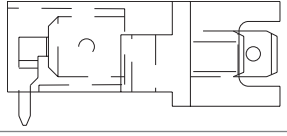
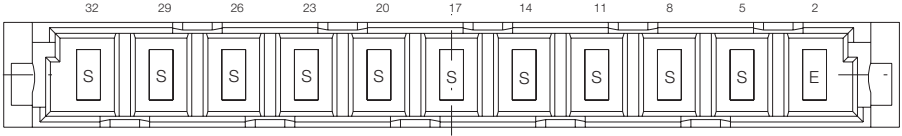
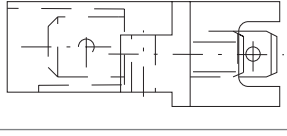
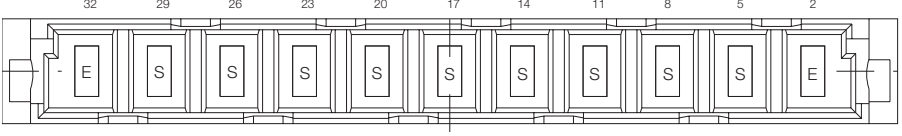
### Dimensional Drawing Solder Female



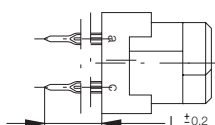
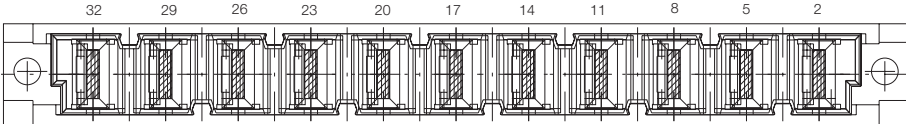
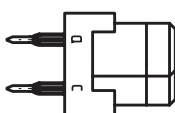
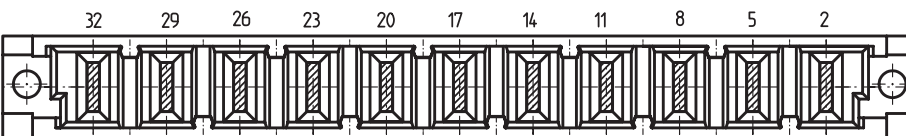
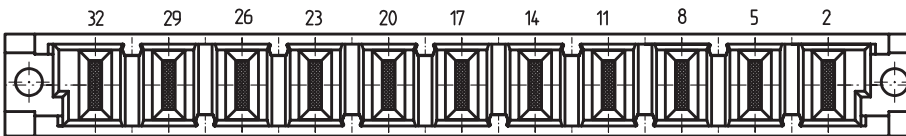
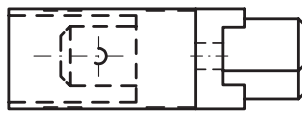
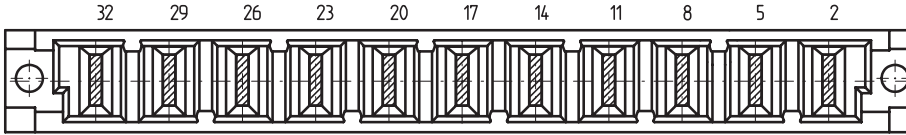
### Dimensional Drawing Faston Female



### Ordering Information

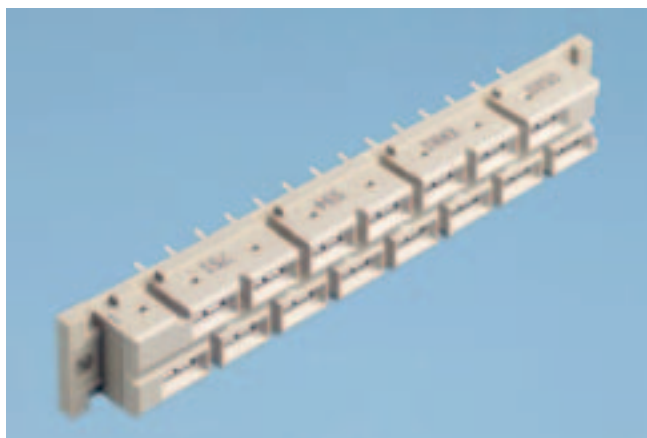
| No. of Pins                                                                                                                                                              | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|---------------|
|       |             |              |                |       |               |               |
| 11                                                                                                                                                                       | Solder      | 3.5 mm       | 1.2 x 0.8 mm   | 1     | —             | <b>233232</b> |
|       |             |              |                |       |               |               |
| 11                                                                                                                                                                       | Solder      | 3.5 mm       | 1.2 x 0.8 mm   | 1     | —             | <b>233230</b> |
|    |             |              |                |       |               |               |
| 11                                                                                                                                                                       | Solder      | 3.5 mm       | 1.2 x 0.8 mm   | 1     | —             | <b>233235</b> |
|   |             |              |                |       |               |               |
| 11                                                                                                                                                                       | Faston      | 8 mm         | 6.3 x 0.8 mm   | 1     | —             | <b>233233</b> |
|   |             |              |                |       |               |               |
| 11                                                                                                                                                                       | Faston      | 8 mm         | 6.3 x 0.8 mm   | 1     | —             | <b>233226</b> |
|   |             |              |                |       |               |               |
| 11                                                                                                                                                                       | Faston      | 8 mm         | 6.3 x 0.8 mm   | 1     | —             | <b>233234</b> |

### Ordering Information

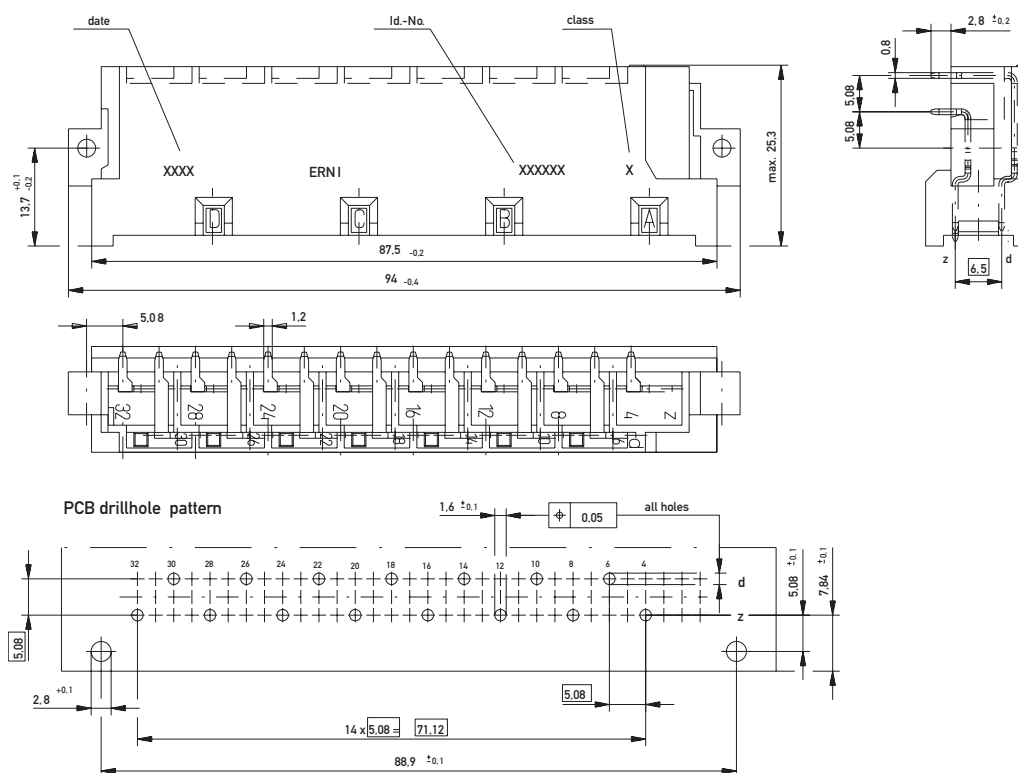
| No. of Pins                                                                         | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number                                                                          |
|-------------------------------------------------------------------------------------|-------------|--------------|----------------|-------|---------------|--------------------------------------------------------------------------------------|
|    | Pressfit    | 4 mm         | 0.6 x 0.6 mm   | 1     | 2.5 mm        |    |
|                                                                                     |             |              |                |       |               |                                                                                      |
| 11                                                                                  | Pressfit    | 4 mm         | 0.6 x 0.6 mm   | 1     | 2.5 mm        | 913738                                                                               |
|    | Pressfit    | 6 mm         | 0.6 x 0.6 mm   | 1     | 2.5 mm        |    |
|                                                                                     |             |              |                |       |               |                                                                                      |
| 11                                                                                  | Pressfit    | 6 mm         | 0.6 x 0.6 mm   | 1     | 2.5 mm        | 424655                                                                               |
|  | Solder      | 4.3 mm       | 0.6 x 0.6 mm   | 1     | —             |   |
|                                                                                     |             |              |                |       |               |                                                                                      |
| 11                                                                                  | Solder      | 4.3 mm       | 0.6 x 0.6 mm   | 1     | —             | 424654                                                                               |
|  | Faston      | 8 mm         | 6.3 x 0.8 mm   | 1     | —             |  |
|                                                                                     |             |              |                |       |               |                                                                                      |
| 11                                                                                  | Faston      | 8 mm         | 6.3 x 0.8 mm   | 1     | —             | 243246                                                                               |

# DIN 41612 / IEC 60603-2 Connectors

## Type H15

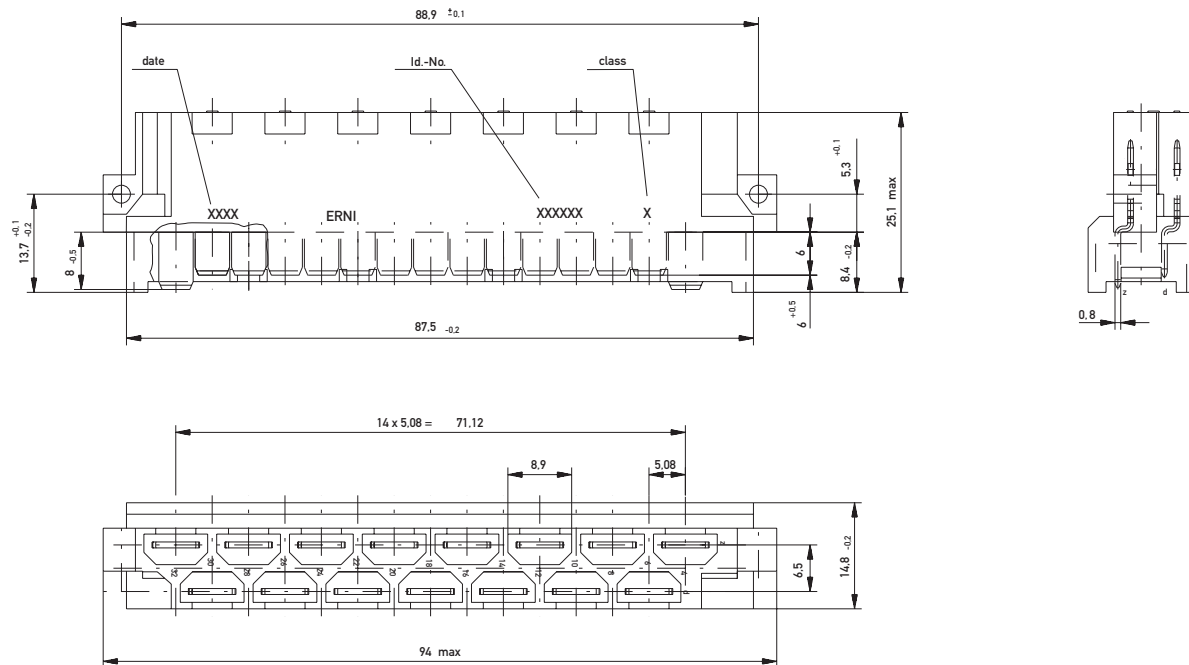


### Dimensional Drawing Solder Male

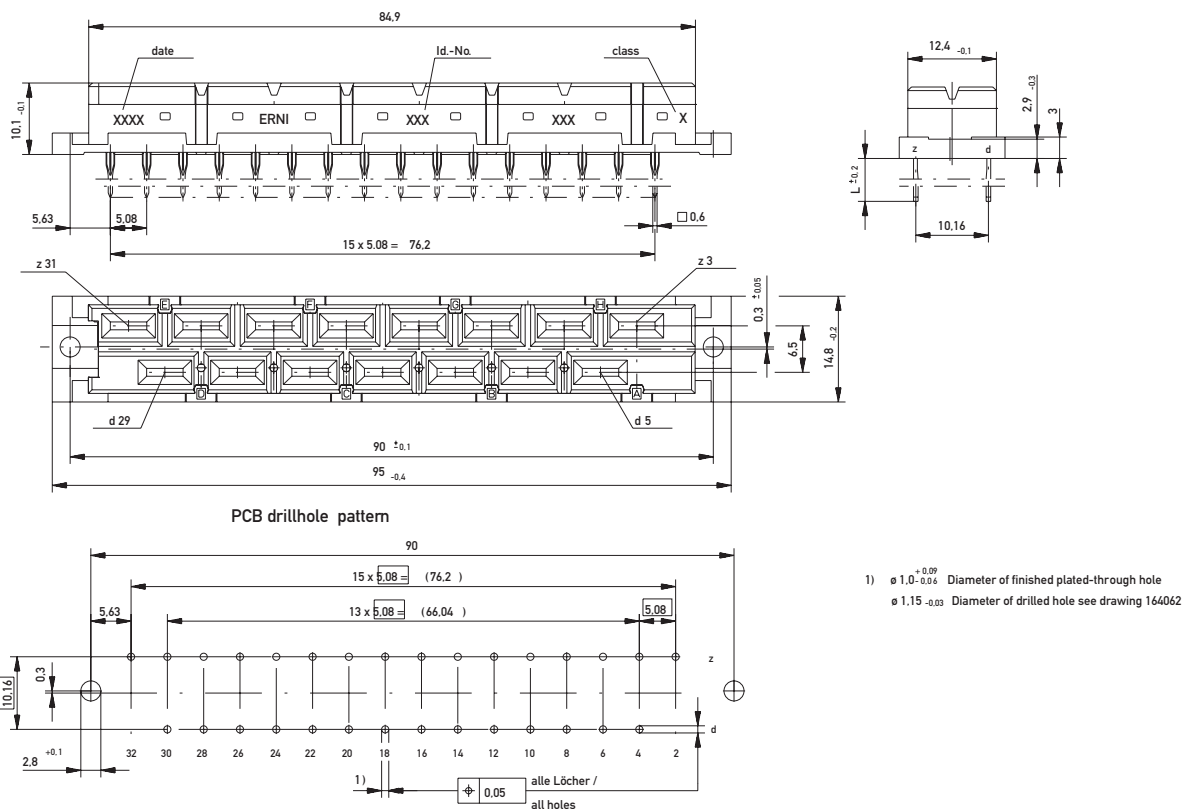




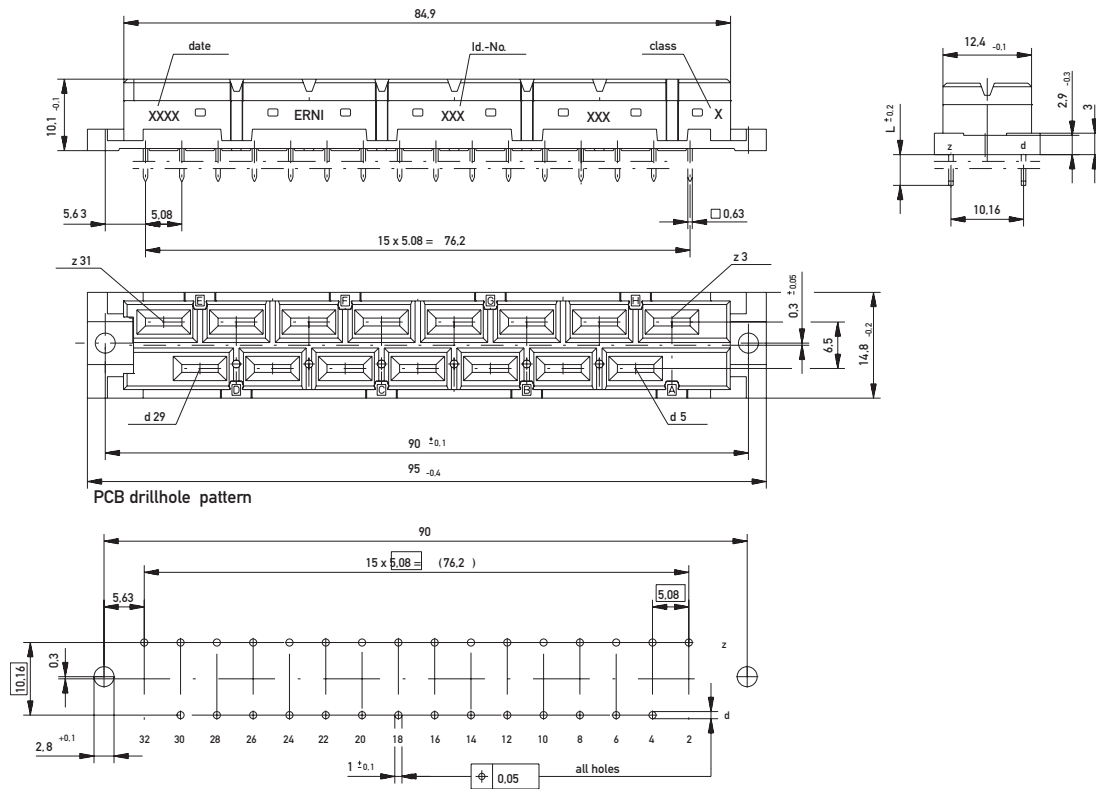
### Dimensional Drawing Faston Male



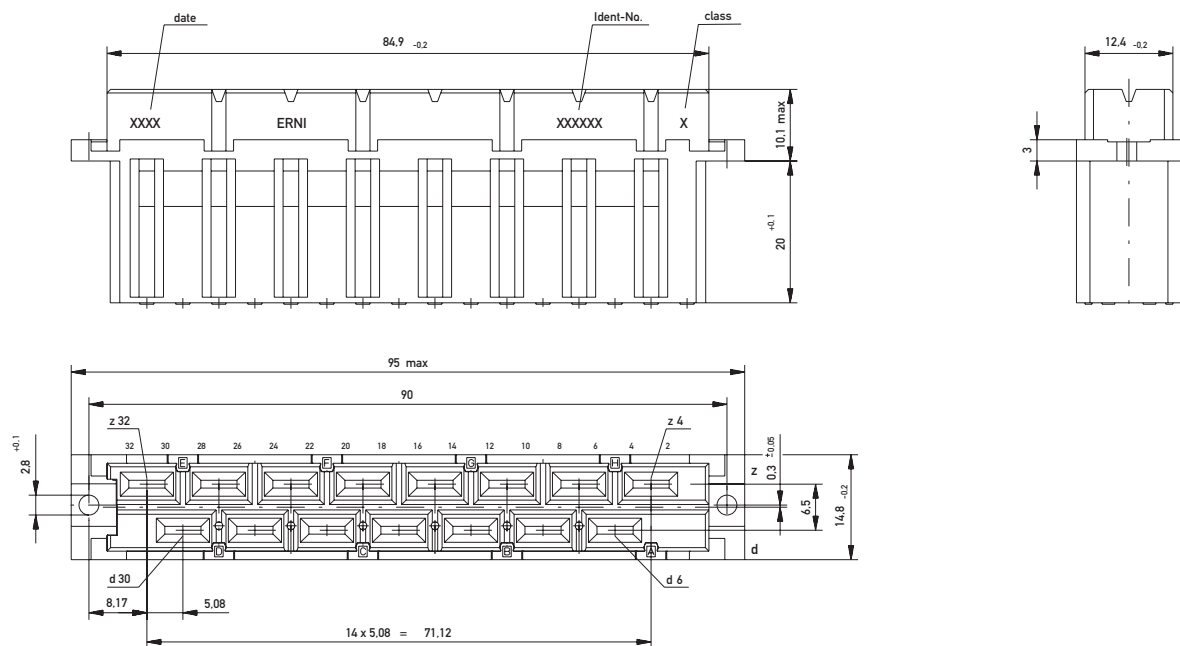
### Dimensional Drawing Pressfit Female



### Dimensional Drawing Solder Female



### Dimensional Drawing Faston Female

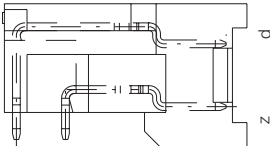
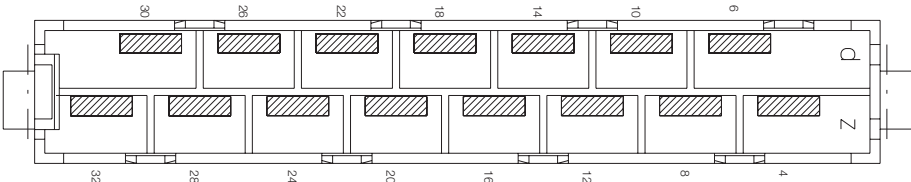
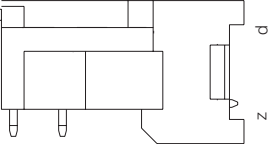
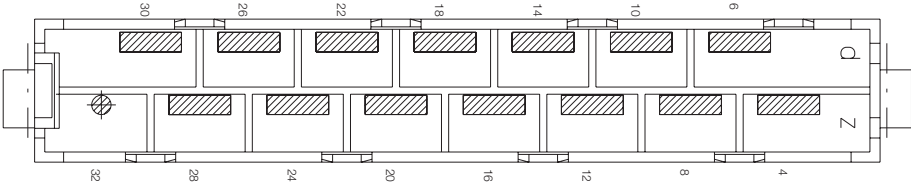
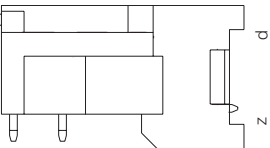
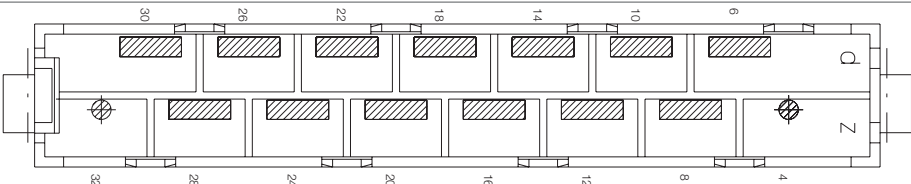


# DIN 41612 / IEC 60603-2 Connectors

## Type H15 Male



### Ordering Information

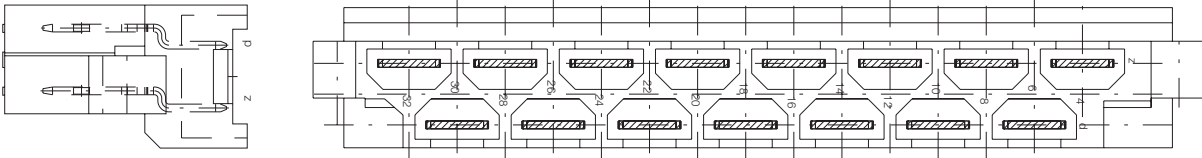
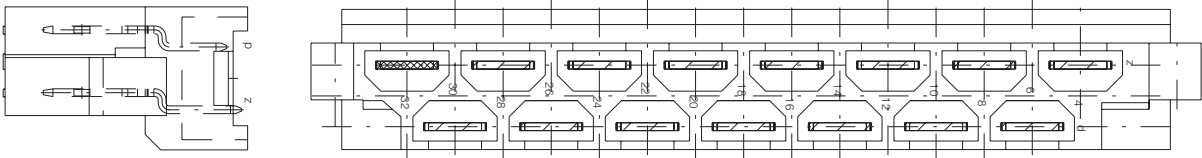
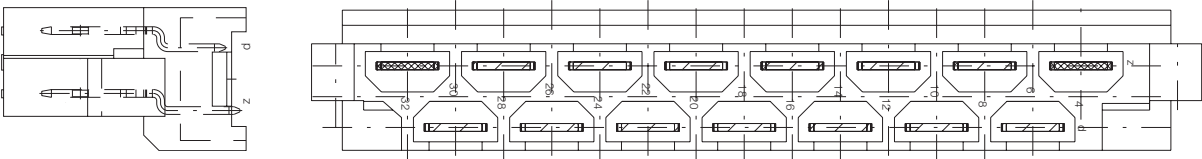
| No. of Pins                                                                         | Termination | Term. Length | Pin Dimensions                                                                       | Class | Pressfit Zone | Part Number |
|-------------------------------------------------------------------------------------|-------------|--------------|--------------------------------------------------------------------------------------|-------|---------------|-------------|
|    | Solder      | 2.8mm        |    | 1     | 1             | 413638      |
|                                                                                     |             |              |                                                                                      |       |               |             |
|                                                                                     |             |              |                                                                                      |       |               |             |
|    | Solder      | 2.8mm        |    | 1     | 1             | 414575      |
|                                                                                     |             |              |                                                                                      |       |               |             |
|                                                                                     |             |              |                                                                                      |       |               |             |
|  | Solder      | 2.8mm        |  | 1     | 1             | 413169      |
|                                                                                     |             |              |                                                                                      |       |               |             |
|                                                                                     |             |              |                                                                                      |       |               |             |

# DIN 41612 / IEC 60603-2 Connectors

## Type H15 Male



### Ordering Information

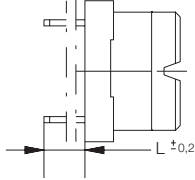
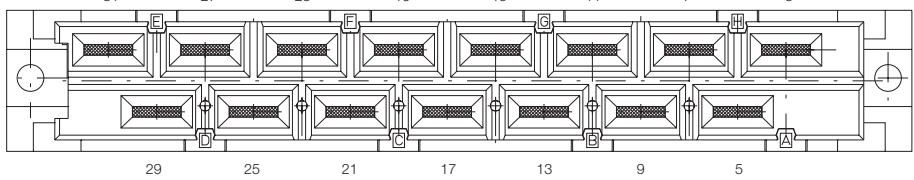
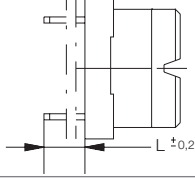
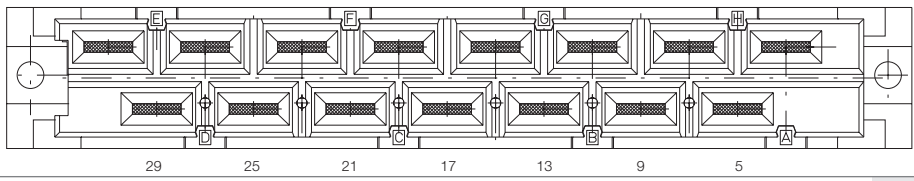
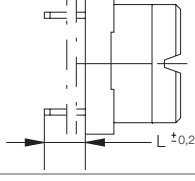
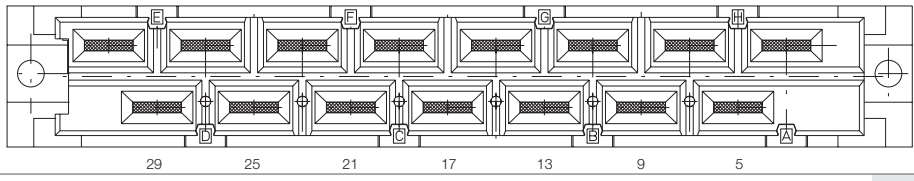
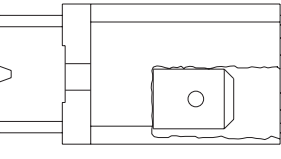
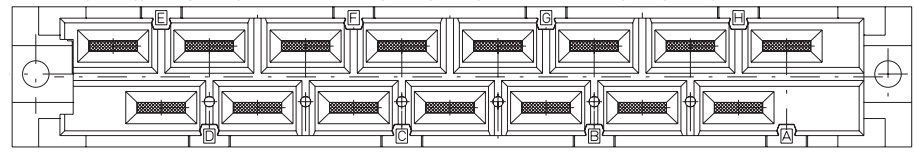
| No. of Pins | Termination | Term. Length | Pin Dimensions | Class | Pressfit Zone | Part Number                                                                          |
|-------------|-------------|--------------|----------------|-------|---------------|--------------------------------------------------------------------------------------|
| 15          | Faston      | 8 mm         | 6.3 x 0.8 mm   | 1     | —             |    |
|             |             |              |                |       |               | 413637                                                                               |
| 15          | Faston      | 8 mm         | 6.3 x 0.8 mm   | 1     | —             |    |
|             |             |              |                |       |               | 414574                                                                               |
| 15          | Faston      | 8 mm         | 6.3 x 0.8 mm   | 1     | —             |  |
|             |             |              |                |       |               | 413168                                                                               |

# DIN 41612 / IEC 60603-2 Connectors

## Type H15 Female



### Ordering Information

| No. of Pins                                                                         | Termination | Term. Length | Pin Dimensions                                                                       | Class | Pressfit Zone | Part Number   |
|-------------------------------------------------------------------------------------|-------------|--------------|--------------------------------------------------------------------------------------|-------|---------------|---------------|
|    | Pressfit    | 6 mm         |    | 1     | 2.5 mm        | <b>594752</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
|    | Solder      | 4.3 mm       |    | 1     | —             | <b>594750</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
|  | Solder      | 4.3 mm       |  | 1     | —             | <b>594751</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |
|  | Faston      |              |  | 1     | —             | <b>413170</b> |
|                                                                                     |             |              |                                                                                      |       |               |               |

# DIN 41612 / IEC 60603-2 Connectors

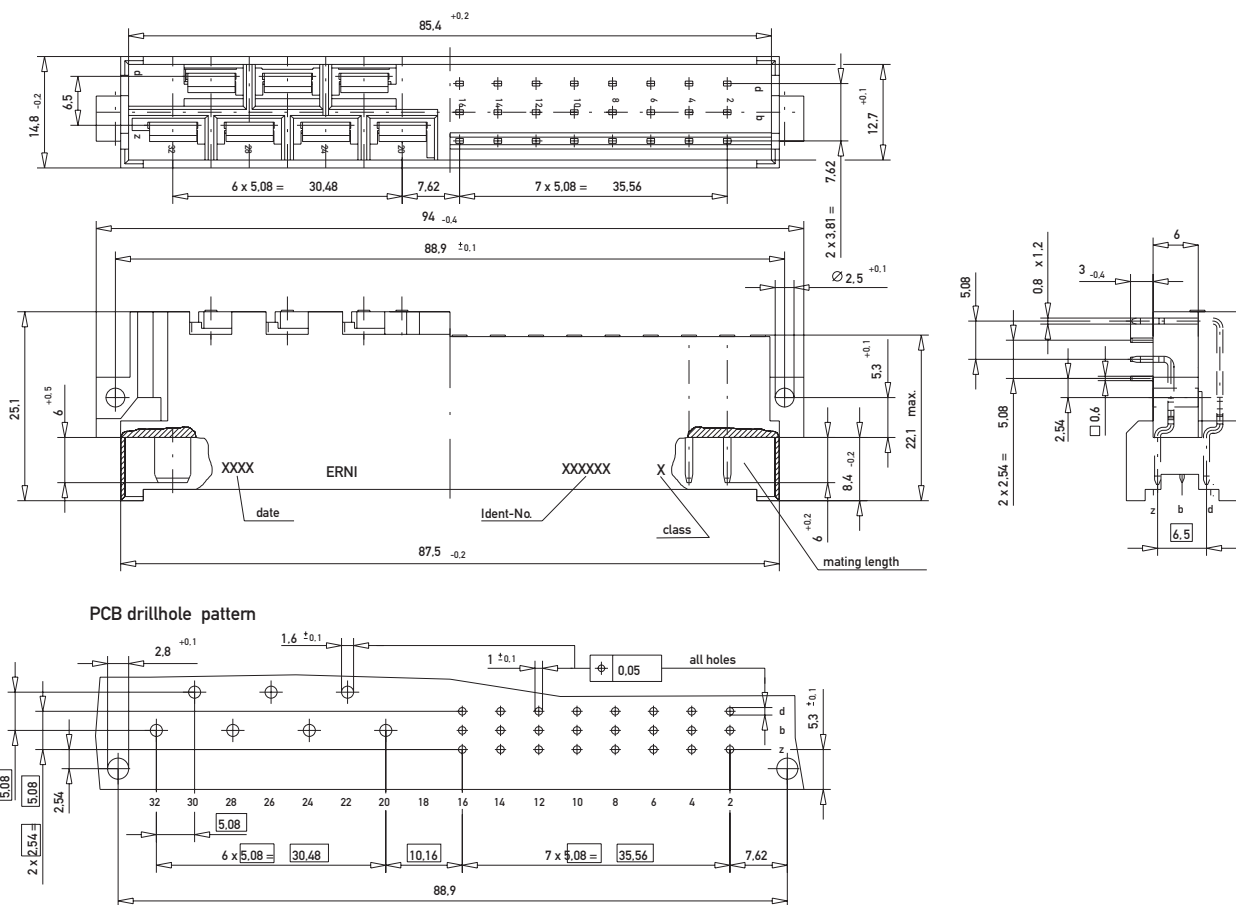
## Type H7/F24



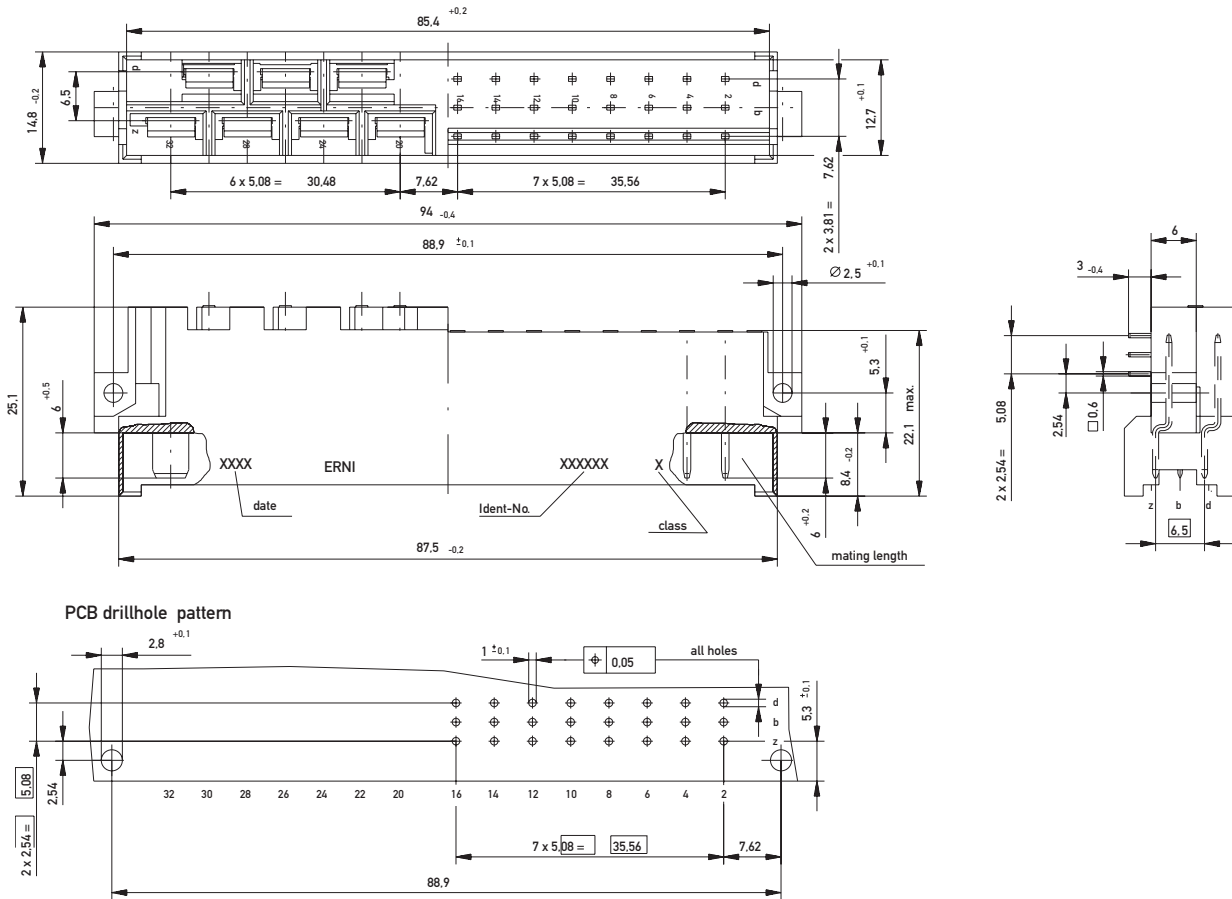
Size H7/F24 connectors have integral coding using coding pins. The male connectors have drill centering recesses which require the complete hole to be drilled for coding pin loading. The coding pins from the male connectors can then be inserted into the complementary holes predrilled in the female connectors.

The 7 high-current contacts of H7/F24 connectors are hard silver plated and their electrical and mechanical performance conforms to performance level 1. The 24 signal contacts are conform to standard size F. The contacts are gold plated in accordance to their performance levels, the terminals are tin-plated.

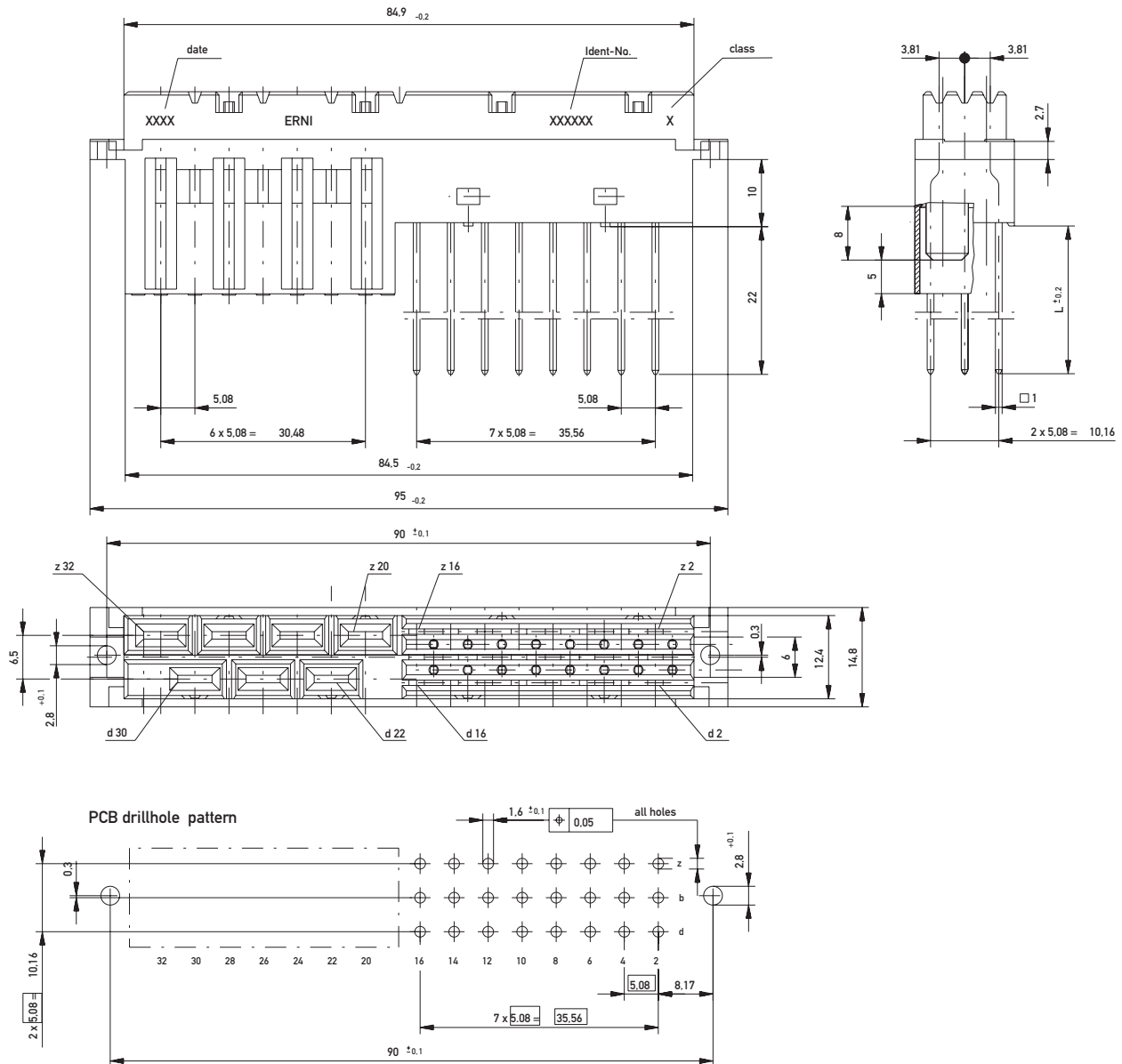
### Dimensional Drawing Solder Male



### Dimensional Drawing Faston/Solder Male



### Dimensional Drawing Solder Female





# DIN 41612 / IEC 60603-2 Connectors

## Type H7/F24 Male



### Ordering Information

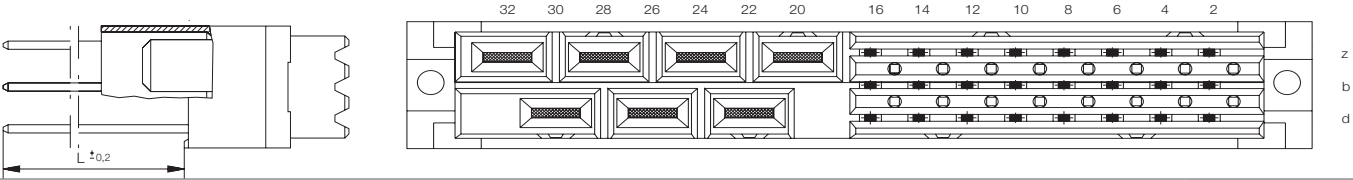
| No. of Pins | Termination   | Term. Length | Pin Dimensions                      | Class | Pressfit Zone | Part Number   |
|-------------|---------------|--------------|-------------------------------------|-------|---------------|---------------|
| 7-24        | Solder        | 3 mm         | H: 0.8 x 1.2 mm;<br>F: 0.6 x 0.6 mm | 1     | —             | <b>413640</b> |
|             |               |              |                                     | 2     | —             | <b>593254</b> |
| 7-24        | Solder        | 3 mm         | H: 0.8 x 1.2 mm;<br>F: 0.6 x 0.6 mm | 1     | —             | <b>413172</b> |
|             |               |              |                                     | 2     | —             | <b>593250</b> |
| 7-24        | Faston/Solder | 3 mm         | H: 6.3 x 0.8 mm;<br>F: 0.6 x 0.6 mm | 2     | —             | <b>593252</b> |
|             |               |              |                                     | 1     | —             | <b>413171</b> |
| 7-24        | Faston/Solder | 3 mm         | H: 6.3 x 0.8 mm;<br>F: 0.6 x 0.6 mm | 2     | —             | <b>593248</b> |

# DIN 41612 / IEC 60603-2 Connectors

## Type H7/F24 Female



### Ordering Information

| No. of Pins                                                                                     | Termination   | Term. Length | Pin Dimensions                  | Class | Pressfit Zone | Part Number |
|-------------------------------------------------------------------------------------------------|---------------|--------------|---------------------------------|-------|---------------|-------------|
| <div>  </div> |               |              |                                 |       |               |             |
| 7-24                                                                                            | Faston/Solder | 22 mm        | H: 6.3 x 0.8 mm;<br>F: 1 x 1 mm | 1     | –             | 413173      |
| 7-24                                                                                            | Faston/Solder | 22 mm        | H: 6.3 x 0.8 mm;<br>F: 1 x 1 mm | 2     | –             | 593256      |

## Insulation Displacement Connector (IDC)



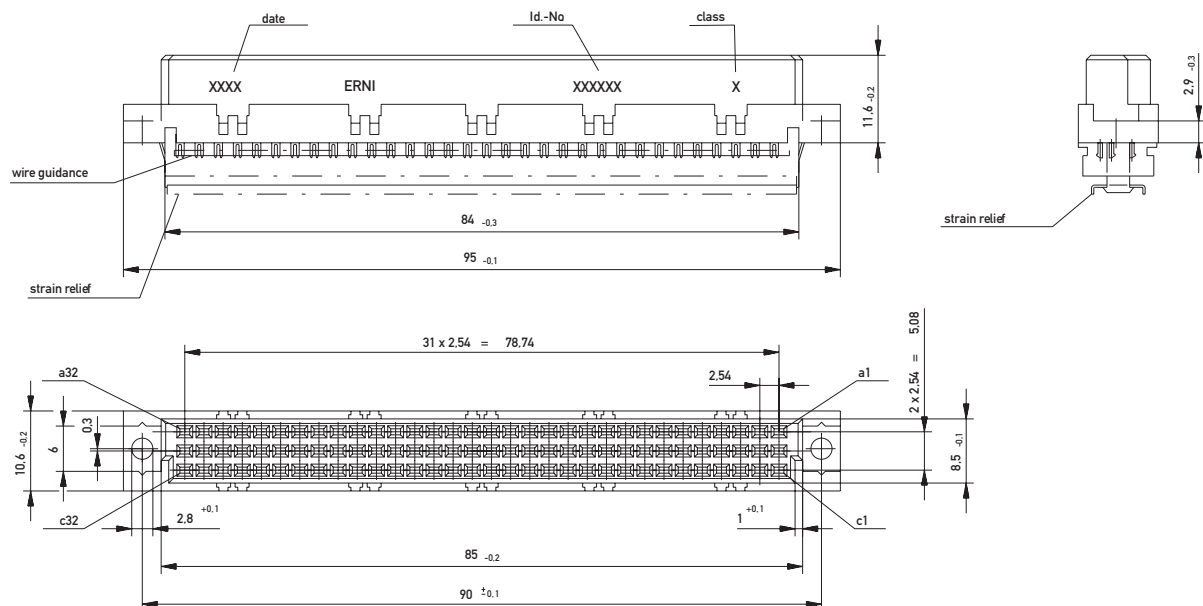
ERNI insulation displacement connectors similar to DIN 41612/IEC 60603-2 are suitable for assembling flat ribbon cables.

The female connectors are available for the standard pin numbers 64 and 96.

- Female connectors size C, 64-pin, rows a c.
- Female connectors size C, 96-pin, rows a b c.

The flat ribbon cable fixed to the cable guide is pressed onto the insulation displacement contacts of the female connector using an easy to use tool (pliers or hand lever press). A reliable connection is made through a double insulation displacement contact. The pointed ends puncture the insulation material of the flat cable and make contact with the conductors at high pressure.

## Dimensional Drawing

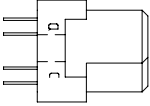
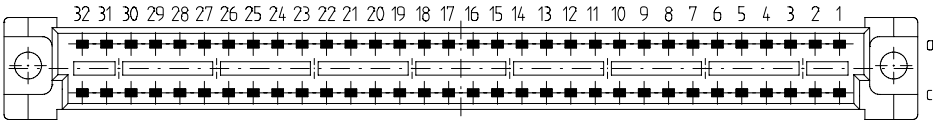
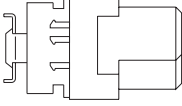
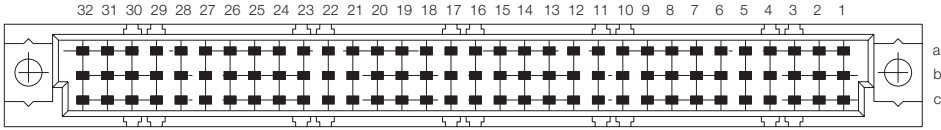


# DIN 41612 / IEC 60603-2 Connectors

## Insulation Displacement Connector (IDC)



### Ordering Information

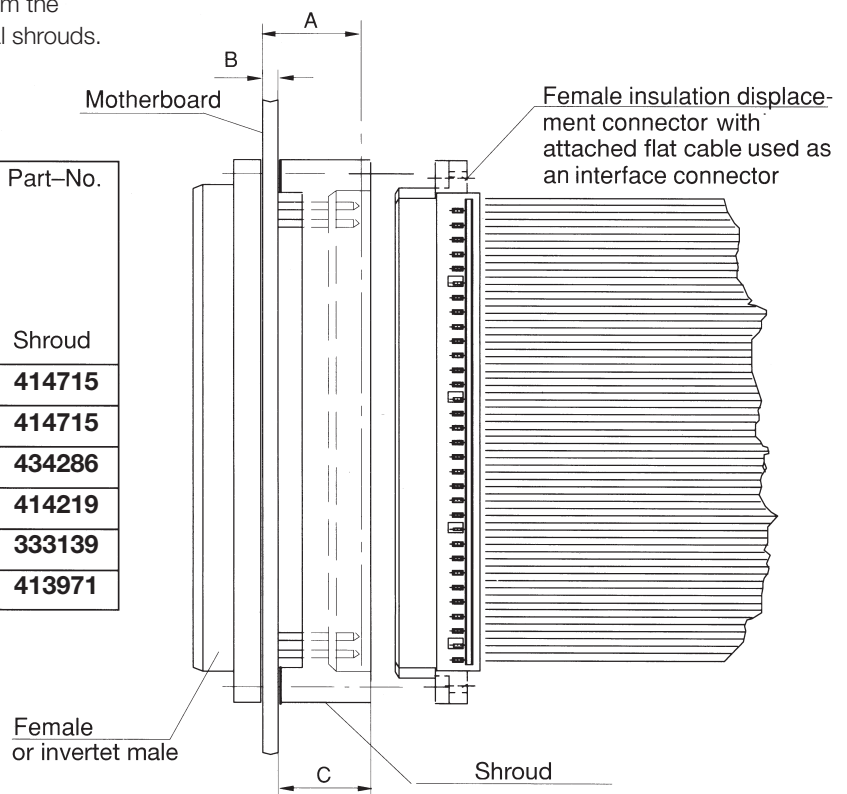
| No. of Pins                                                                       | Termination | Term. Length | Pin Dimensions                                                                     | Class | Pressfit Zone | Part Number |
|-----------------------------------------------------------------------------------|-------------|--------------|------------------------------------------------------------------------------------|-------|---------------|-------------|
|  | IDC         | —            |  | 2     | —             | 594470      |
|                                                                                   |             |              |                                                                                    |       |               |             |
|  | IDC         | —            |  | 1     | —             | 123905      |
|                                                                                   |             |              |                                                                                    |       |               |             |

### Application example for DIN-IDC connectors

For the use of female connectors with insulation displacement contacts as interface connectors from the wiring side of the rack ERNI has developed special shrouds. These Shrouds are available in various heights.

(All dimensions in mm)

| Connector Type | Contact length | PCB thickness | Shroud height | Part-No.      |
|----------------|----------------|---------------|---------------|---------------|
|                | A              | B             | C             | Shroud        |
| C,<br>R        | 13             | 1,6           | 12,5          | <b>414715</b> |
|                | 13             | 2,4           | 12,5          | <b>414715</b> |
|                | 13             | 3,2           | 11,4          | <b>434286</b> |
|                | 17             | 2,4           | 16,0          | <b>414219</b> |
|                | 17             | 3,2           | 15,2          | <b>333139</b> |
|                | 20             | 3,2           | 18,2          | <b>413971</b> |



The female insulation displacement connector can be screwed to the shroud with a cheese-head tapping screw B2.2 x 9.5 DIN 7971.

## DIN 41612 / IEC 60603-2 Connectors

### Insulation Displacement Connector (IDC)

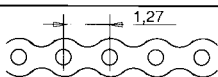
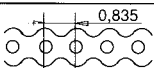


#### Ordering details tools

| Description                        | Fig. no. | Part no. |
|------------------------------------|----------|----------|
| Assembly tool with adjustable stop | 1        | 473188   |

| Description                                             | Fig. no. | Part no. |
|---------------------------------------------------------|----------|----------|
| Hand lever press                                        | 2        | 473200   |
| Pliers with various accessories. Complete set in a case | 3        | 424623   |

#### Ordering details for flat ribbon cables and accessories

| Number of pins                                                                                | Descriptions for flat ribbon cables        | Length of a cable reel | Part. no. for 1 meter |
|-----------------------------------------------------------------------------------------------|--------------------------------------------|------------------------|-----------------------|
| 64-pin<br> | grey with a red identification wire AWG 30 | 61m                    | 414068                |
|                                                                                               | color coded AWG 30                         | 61m                    | 414082                |
| 96-pin<br> | grey with a red identification wire AWG 30 | 61m                    | 913049                |

| Description                                                                                                 | Remarks                              | Part.no. |
|-------------------------------------------------------------------------------------------------------------|--------------------------------------|----------|
| Tension relief clamp<br> | for a 96-row female connector size C | 033055   |



#### General

Where the termination of interconnecting cables is required, crimp snap-in termination represents an efficient wiring method.

Crimp snap-in contacts are connected to the wires by use of suitable crimping tools. The contacts are supplied either singly or suspended from a strip.

Contacts efficiently assembled in this manner snap into the crimp snap-in mouldings provided, thus forming ready equipped connectors.

Crimp snap-in connectors are particularly suitable for flexible wiring with varying numbers of pins.

Hand tools or automatic crimping machines are available for crimping.

#### Main features

- Available housing sizes
  - size C with 96 contact cavities, rows abc
  - size C/2 with 48 contact cavities, rows abc
  - size E 160 with 160 contact cavities, rows abcde
  - Special and mixed designs
- Cantilever female contacts for constant contact resistance
- Approved female contact design in the mating zone
- Assembly with standard tools
- Suitable for the ERNI interface connector system (connector housings for DIN connectors on front panel and wiring sides)
- Suitable for wire of AWG 28 – 20  
Wire cross section 0.08 – 0.56 mm<sup>2</sup>
- Contacts can be detached from the female connector moulding with a simple extraction tool.

## DIN 41612 / IEC 60603-2 Connectors

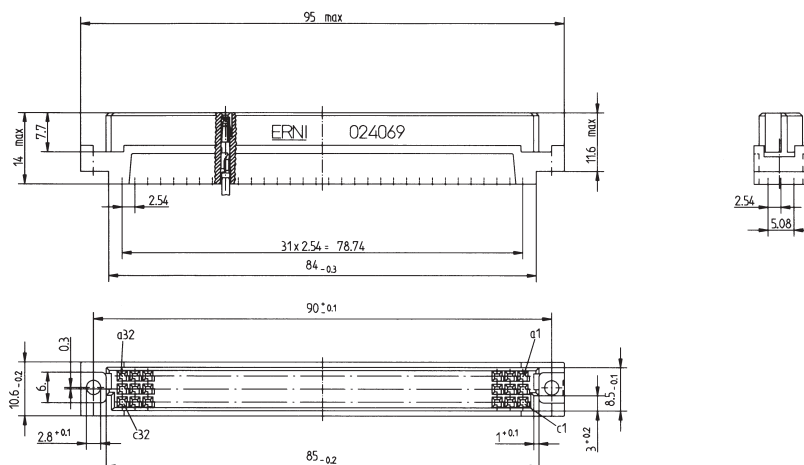
### Crimp snap-in Connectors (CST)



#### Female connector housing size C, 96 contact cavities

Mating and installation conditions as per DIN 41612/IEC 60603-2

#### Dimensional drawings

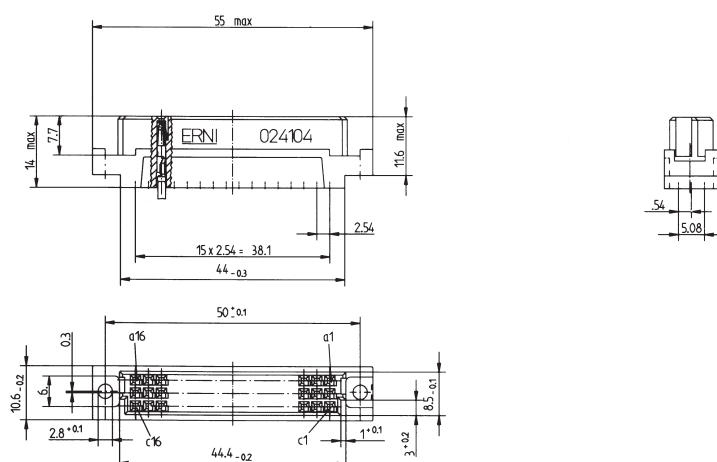


#### Ordering details

| Description             | Part no.      |
|-------------------------|---------------|
| Empty housing size C-96 | <b>024069</b> |

#### Female connector housing size C/2, 48 contact cavities

#### Dimensional drawings



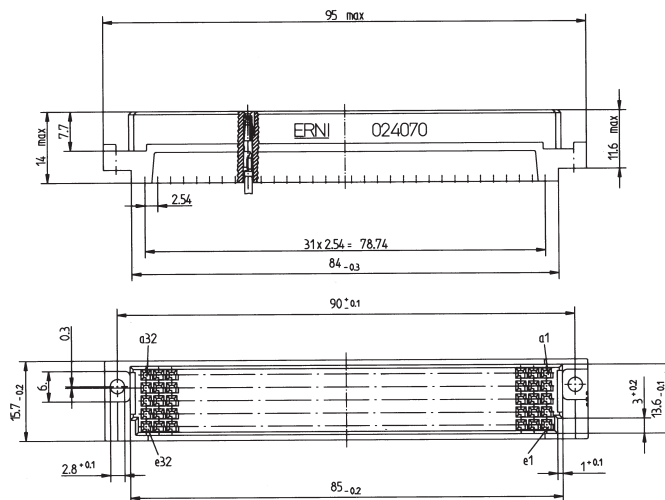
#### Ordering details

| Description               | Part no.      |
|---------------------------|---------------|
| Empty housing size C/2-48 | <b>024104</b> |



### Female connector housing size E 160, 160 contact cavities

#### Dimensional drawings



#### Ordering details

| Description                 | Part no.      |
|-----------------------------|---------------|
| Empty housing size E160–160 | <b>024070</b> |

#### Application example for customized version



Interesting solutions arise in the application of crimp contacts.

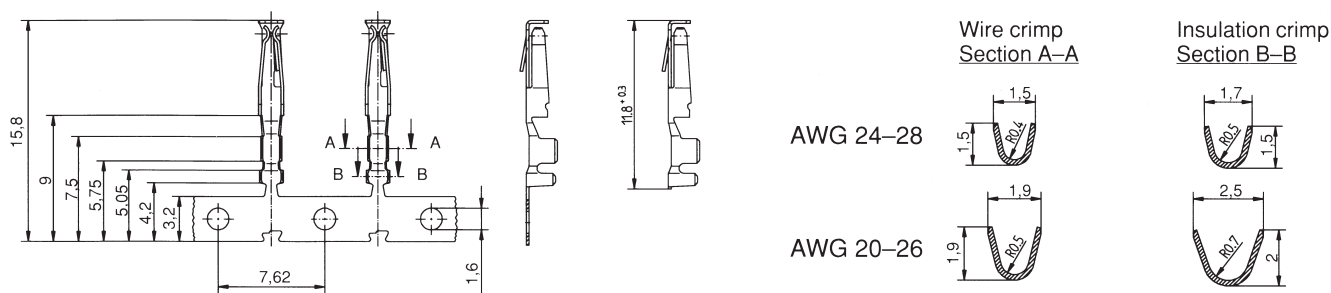
We have developed a 70-pin female connector housing together with a well-known manufacturer of programmable controllers.

We wish to use this example to illustrate that we are constantly developing components in cooperation with our customers.

Perhaps your company also has applications which you may wish to discuss with one of our field sales engineers.

### Crimp contacts for female connector housings

#### Dimensional drawings



#### Ordering details

| Description    | Wire cross section |                 | Perform.<br>level | Part. no. and size              |                              |                               |
|----------------|--------------------|-----------------|-------------------|---------------------------------|------------------------------|-------------------------------|
|                | AWG                | mm <sup>2</sup> |                   | Contact reel<br>10.000 contacts | Contact reel<br>500 contacts | Loose contacts<br>100 per bag |
| Crimp contacts | 24-28              | 0,22-0,08       | 207               | <b>234065</b>                   | <b>234066</b>                | <b>234067</b>                 |
|                | 20-26              | 0,56-0,14       | 207               | <b>234062</b>                   | <b>234063</b>                | <b>234064</b>                 |

Crimp contacts from ERNI are characterized by their precision.

The two opposite spring legs guarantee a constant contact.

Precise positioning of the contacts in the female connector housing is achieved by using of the box-type design in the front zone of the contact.

A spring-loaded barb on the side locks the contacts in the female connector housing.

This locking can be undone easily with a small tool.



## DIN 41612 / IEC 60603-2 Connectors

### Crimp snap-in Connectors (CST)



#### Assembly tools for DIN crimp connectors

#### Technical data and ordering details



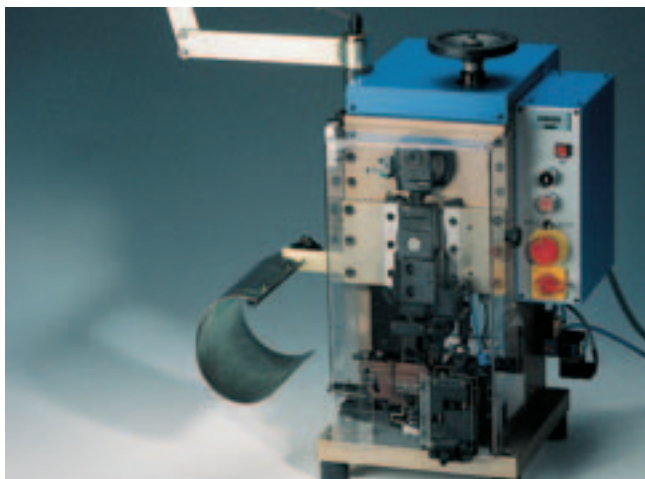
| Hand tool for<br>loose contacts<br><br>AWG 20 – 28<br>0,56 – 0,08 mm <sup>2</sup> | Part no.      |
|-----------------------------------------------------------------------------------|---------------|
|                                                                                   | <b>014374</b> |



| Hand tool for contact reels<br>with 500 contacts including<br>reel holder and adjustable<br>feed | Part no.      |
|--------------------------------------------------------------------------------------------------|---------------|
|                                                                                                  | <b>014375</b> |



| Disassembly tool<br>for all AWG ranges | Part no.      |
|----------------------------------------|---------------|
|                                        | <b>471555</b> |

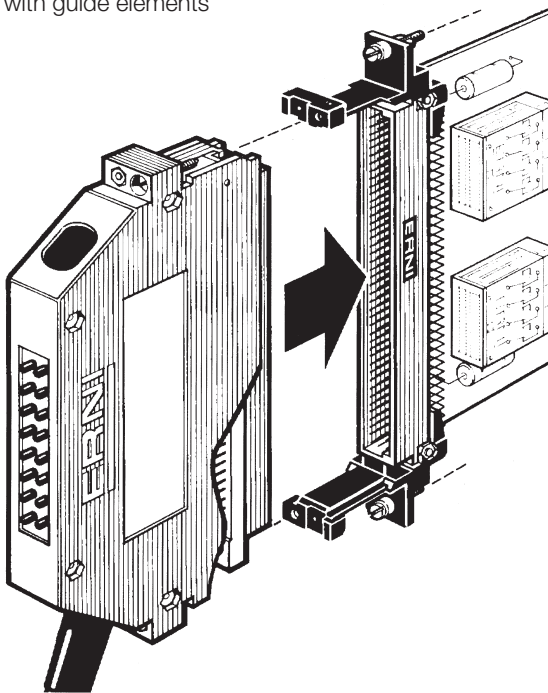


|                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------|
| Crimp presses are available for the automated crimping.<br>Please refer to our ERNI-team when purchasing this press. |
|----------------------------------------------------------------------------------------------------------------------|

#### The interface connector system from ERNI for the front panel and wiring sides

##### Front panel

with guide elements

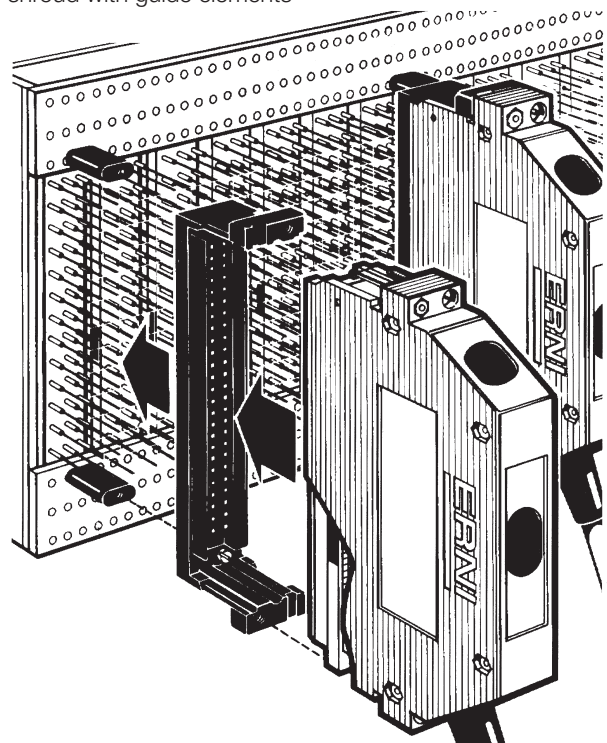


The female connector housings of size C, C/2 and E 160 fit into the cable connector housings of series KSG 173 and KSG 193.

For installation on the front of the rack there are guide elements for mounting in the front panel and guide elements which can be mounted on the rack without a front panel.

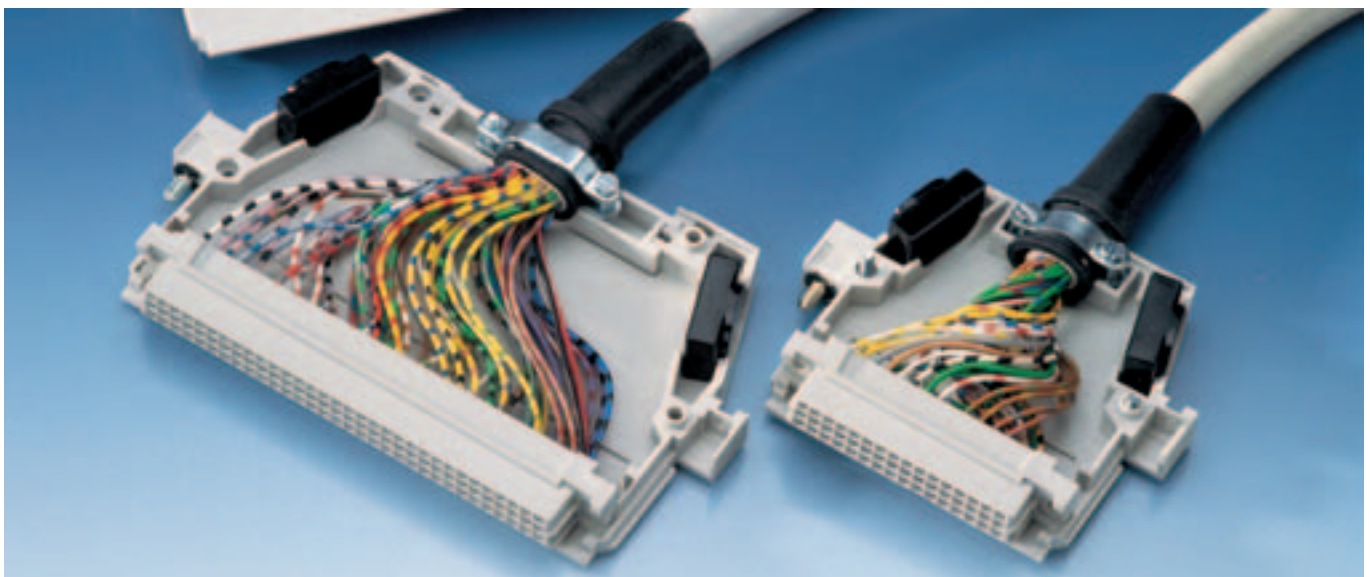
##### Wiring side

shroud with guide elements



Interface connection is possible from the wiring side with guide elements and shroud.

Do ask for our technical documentation or contact one of our offices or field sales engineers.

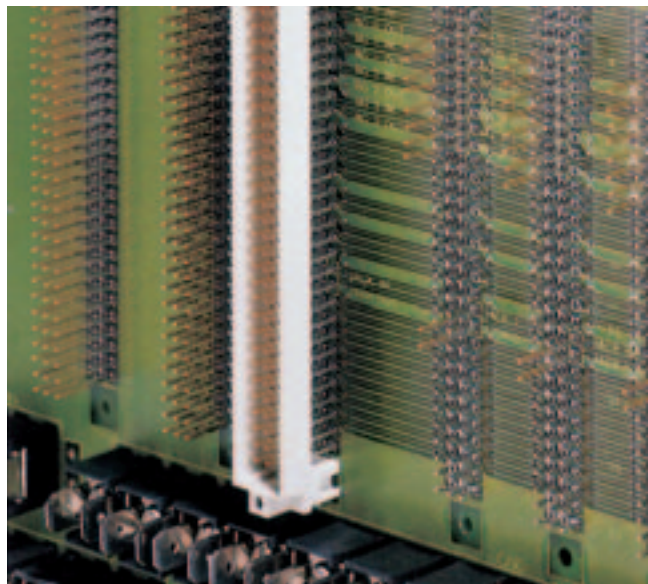




### Shroud

for mounting on PC Boards

with connectors size C, R, CD 128, RD 128, E 160, TE 160



Interface on the wiring side of a control system with the aid of interface connectors play an important role in signal transfer. One of the many advantages of the press-fit technique ist that the interface connection to the wiring side can be made easily. This connection to the wiring side of a PC Board loaded with press-fit connectors can be accomplished by simply mounting shrouds to the rear (wiring) side. ERNI has developed shrouds with varying heights for the C, R, CD 128, RD 128, E 160 and TE 160 sizes.

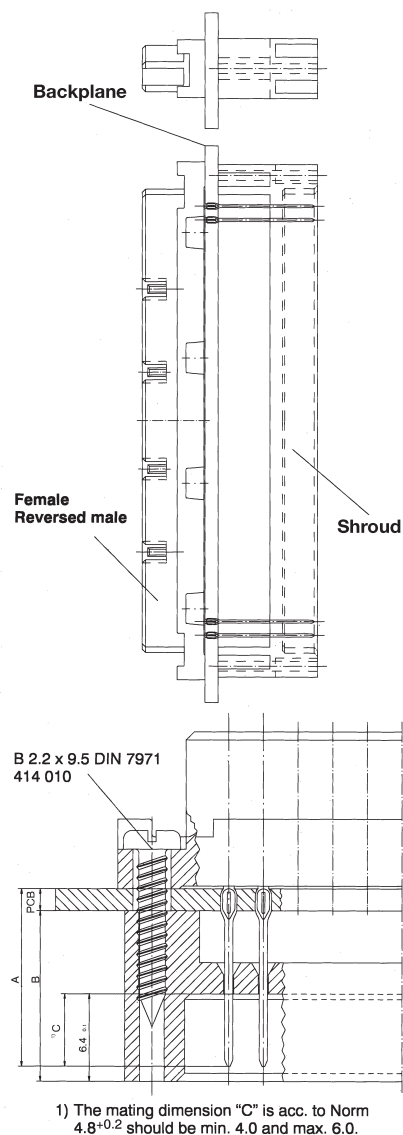
For more information on the ERNI shrouds, please contact your field sales engineers.

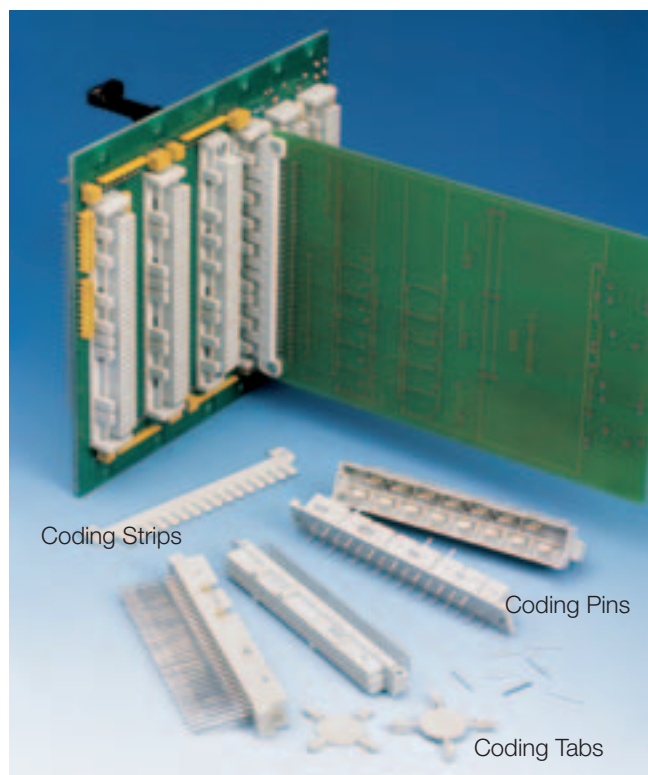
### Ordering Information

(All dimensions in mm)

| PCB thickness | Mating area | Total height | Contact length | Part-No. Shroud |                  |              |                  |
|---------------|-------------|--------------|----------------|-----------------|------------------|--------------|------------------|
|               |             |              |                | E 160<br>TE 160 | CD 128<br>RD 128 | C 96<br>R 96 | C/2-48<br>R/2-48 |
| LP            | C           | B            | A              |                 |                  |              |                  |
| 2.4           | 6.0         | 11.0         | 13             | 064729          | 064728           | 433215       | 034798           |
| 3.2           | 5.2         |              |                |                 |                  |              |                  |
| 2.4           | 5.6         | 11.4         | 13             | 064586          | 064584           | 434286       | 034797           |
| 3.2           | 4.8         |              |                |                 |                  |              |                  |
| 1.6           | 6.0         | 11.8         | 13             | 064708          | 064713           | 013275       | 034702           |
| 2.4           | 5.2         |              |                |                 |                  |              |                  |
| 3.2           | 4.4         |              |                |                 |                  |              |                  |
| 1.6           | 5.3         | 12.5         | 13             | 064585          | 064583           | 414715       | 034799           |
| 2.4           | 4.5         |              |                |                 |                  |              |                  |
| 1.6           | 4.2         | 13.6         | 13             | 064709          | 064714           | 014145       | 034796           |
| 2.4           | 5.8         | 15.2         | 17             | 064710          | 064715           | 333139       | 034800           |
| 3.2           | 5.0         |              |                |                 |                  |              |                  |
| 1.6           | 5.8         | 16.0         | 17             | 064711          | 064716           | 414219       | 034801           |
| 2.4           | 5.0         |              |                |                 |                  |              |                  |
| 3.2           | 4.2         |              |                |                 |                  |              |                  |
| 2.4           | 5.8         | 18.2         | 20             | 064712          | 064717           | 413971       | 034802           |
| 3.2           | 5.0         |              |                |                 |                  |              |                  |

Please consider sufficient overlapping length.





### General

In order to ensure proper coding of a DIN 41612 connector and thus protect the valuable components within an electronic device, ERNI offers a variety of coding systems.

- Coding with Coding **Strips**

Separate coding strips are attached directly to each connector half with no additional modular space required in the 19" rack system.

- Integrated Coding with Coding **Tabs**

The coding tabs are plugged into side slots on the female connector while corresponding notch areas on the male connector are removed with coding pliers.

- Integrated Coding with Coding **Pins**

The coding pins are inserted into the predrilled holes on the female connector and drill holes are required on the recess hole points on the male connector at the corresponding locations.

### Determining the number of coding possibilities

To maintain connector integrity, the maximum recommended number of coding possibilities is based on using only 1/2 the total available coding slots. For example, in the case of using the coding strips where there are 16 available coding tabs per strip, no more than 8 of the tabs should be removed.

Under this system, the following table Shows the number of coding possibilities for each of the three coding systems.

| Connector Style           | Coding Strips                                    |       |       | Coding Tabs       | Coding Pins       |
|---------------------------|--------------------------------------------------|-------|-------|-------------------|-------------------|
|                           | Female and Inverse Male Connectors <sup>1)</sup> |       |       |                   |                   |
|                           | F                                                | FL    | UE    | Female Connectors | Female Connectors |
| B/3, C/3, Q/3, R/3        | –                                                | –     | –     | 6                 | –                 |
| B/2, C/2, Q/2, R/2        | –                                                | –     | –     | 20                | –                 |
| B                         | 12870                                            | 12870 | 12870 | 70                | –                 |
| C                         | 12870                                            | 12870 | 12870 | 70                | –                 |
| D                         | 12870                                            | 12870 | 12870 | 20                | 12870             |
| E                         | 12870                                            | 12870 | 12870 | –                 | >12870            |
| F                         | –                                                | –     | –     | –                 | >12870            |
| H11                       | 12870                                            | 12870 | –     | 252               | –                 |
| H15                       | –                                                | –     | –     | 70                | 20                |
| H7/F24                    | –                                                | –     | –     | –                 | 70                |
| M                         | 12870                                            | 12870 | 12870 | 70                | –                 |
| P                         | –                                                | –     | –     | 70                | –                 |
| Q, R                      | 12870                                            | 12870 | 12870 | 70                | –                 |
| CD128, RD128, E160, TE160 | 12870                                            | 12870 | 12870 | 70                | –                 |

<sup>1)</sup> Male connectors and inverse female connectors require coding bar "M"

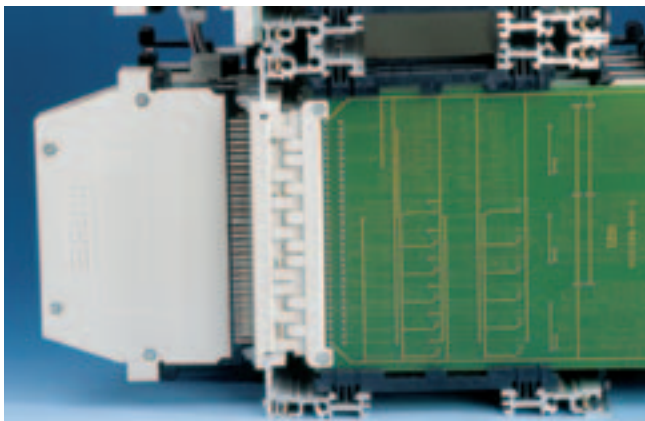
### Coding Strips

#### Coding Strip style F

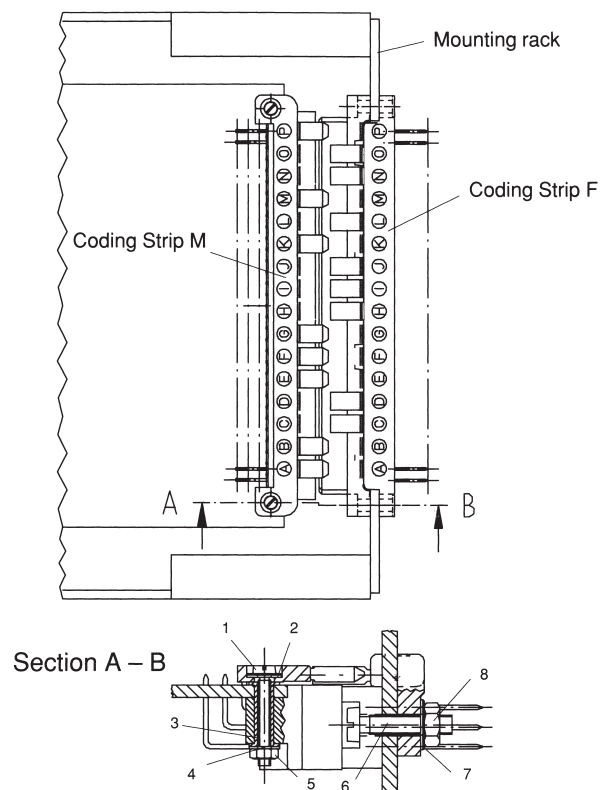
Female connectors B, C, D, E, H11, M, CD128, E160

Inverse Male connectors Q, R, RD128, TE160

For use with female connectors or inverse male connectors as per DIN 41612 in a 19" rack mounting scheme.



Coding Strip F mounted in a 19" sub-rack.



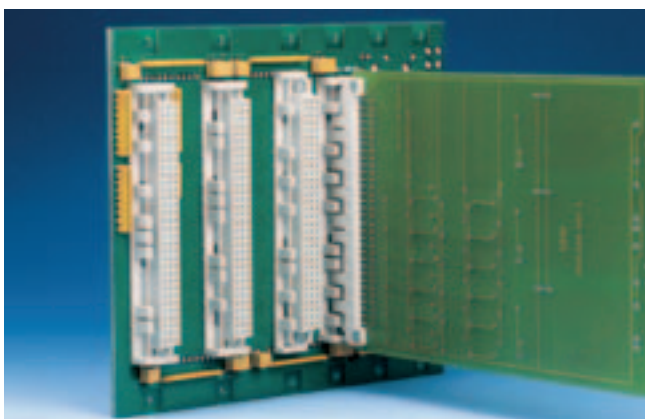
See table on page 197 for reference.

#### Coding Strip style FL

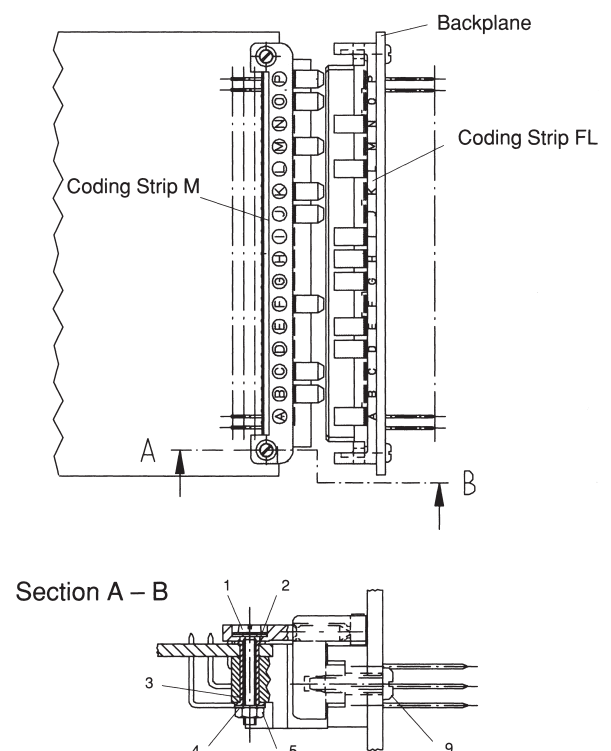
Female connectors B, C, D, E, H11, M, CD128, E160

Inverse Male connectors Q, R, RD128, TE160

For use with female connectors or inverse male connectors as per DIN 41612 in a backplane mounting scheme.



Coding Strip FL mounted on a backplane.

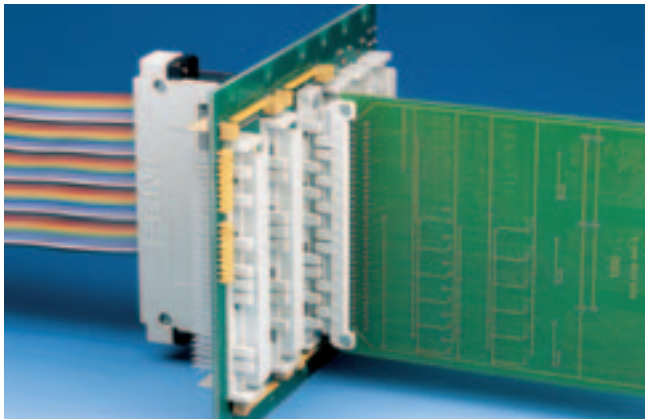


See table on page 197 for reference.

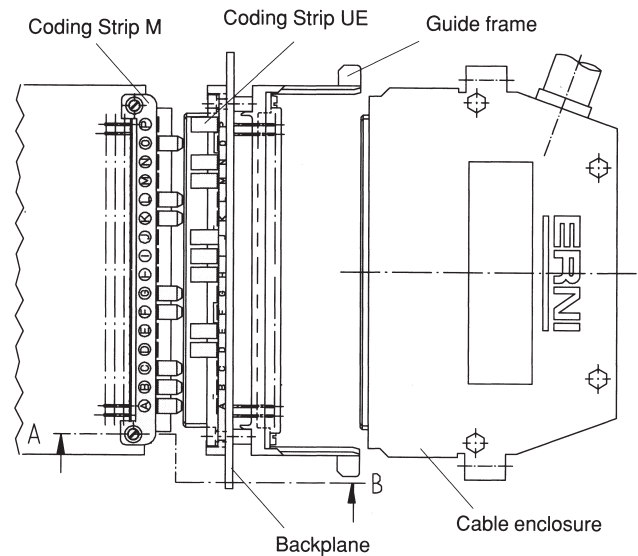
### Coding Strip style UE

Female connectors B, C, D, E, M, CD128, E160  
Inverse Male connectors Q, R, RD128, TE160

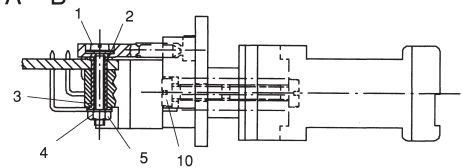
For use with female connectors or inverse male connectors as per DIN 41612 in a backplane mounting scheme together with peripheral connections.



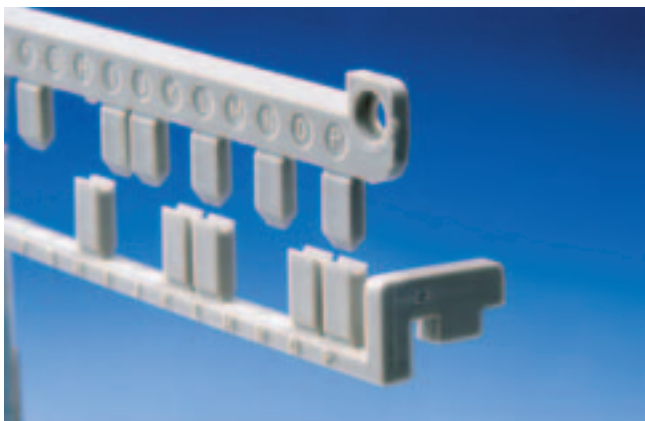
Coding Strip UE mounted on a backplane with a peripheral interface.



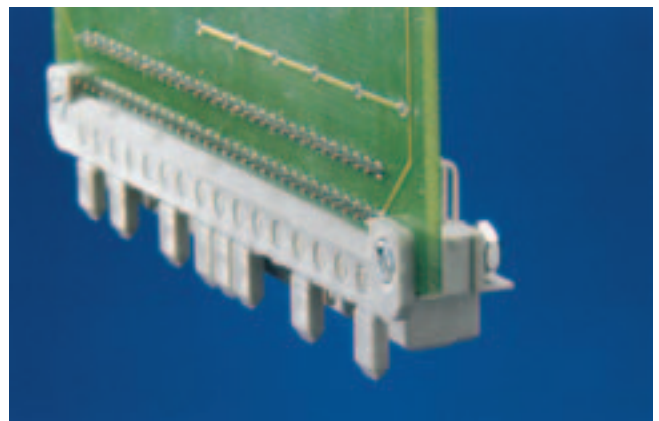
Section A – B



See table on page 197 for reference.



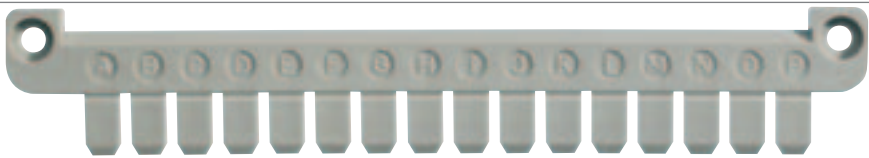
Ruggedized coding tabs on the coding strips can withstand a strain of up to 250 N even when misaligned mating occurs.



When coding the plug-in module, the coding strip M is always used. The M strips' coding tabs are identified with the letters A, B, C, . . . , P.



### Ordering Instructions for Coding Strips

| Description                                                                                                                | Material    | Remarks                                                                                                         | Part Number   |
|----------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------|---------------|
|                                          |             |                                                                                                                 |               |
| <b>Coding Strips M</b><br>Male connectors B, C, D, E, H11, M, CD128, E160<br>Inverse Female connectors Q, R, RD128, TE160  | PBTP 30% GF | Coding Strips M should be mounted after soldering.                                                              | <b>083502</b> |
|                                          |             |                                                                                                                 |               |
| <b>Coding Strips F</b><br>Female connectors B, C, D, E, H11, M, CD128, E160<br>Inverse Male connectors Q, R, RD128, TE160  | PBTP 30% GF | The Coding Strips must be screwed or riveted together with the connector; no additional drill holes are needed. | <b>083504</b> |
|                                        |             |                                                                                                                 |               |
| <b>Coding Strips FL</b><br>Female connectors B, C, D, E, H11, M, CD128, E160<br>Inverse Male connectors Q, R, RD128, TE160 | PBTP 30% GF | The Coding Strips must be screwed or riveted together with the connector; no additional drill holes are needed. | <b>083506</b> |
|                                        |             |                                                                                                                 |               |
| <b>Coding Strips UE</b><br>Female connectors B, C, D, E, M, CD128, E160<br>Inverse Male connectors Q, R, RD128, TE160      | PBTP 30% GF | The Coding Strips must be screwed or riveted together with the connector; no additional drill holes are needed. | <b>414705</b> |

### Mounting Hardware for Coding Strips (*not included with coding strips*)

| Pos <sup>1)</sup> | Description         | Size            | Pos <sup>1)</sup> | Description         | Size             |
|-------------------|---------------------|-----------------|-------------------|---------------------|------------------|
| 1                 | Fillster head screw | M 1.6x12 DIN 84 | 6                 | Fillster head srew  | M 2.5x12 DIN 84  |
| 2                 | Washer              | A 1.8 DIN 125   | 7                 | Washer              | 2.7 DIN 125      |
| 3                 | Rivet               |                 | 8                 | Hexagonal nut       | M 2.5 DIN 934    |
| 4                 | Spring washer       | A 1.7 DIN 137   | 9                 | Sheet metal srew    | B 2.2x9.5 DIN 84 |
| 5                 | Hexagonal nut       | M 1.6 DIN 934   | 10                | Fillster head sheed | M 2.5x10 DIN 84  |

<sup>1)</sup> Position numbers are from sketches on pages 195 and 196.

### Coding Taps

Female connectors B/3, C/3, B/2, C/2, B, C, D, H11, H15, M, CD128, E160

Inverse Female connectors Q/3, R/3, Q/2, R/2, P, Q, R, RD128, TE160



The coding tabs are inserted into existing slots on the female connector. By using coding pliers, the corresponding pre-notched area on the male connector is recessed.

The number of coding tab locations available depends on the size and style of the connector.

*To maintain connector stability, the maximum recommended number of coding possibilities is based on using only 1/2 the total available coding slots.*

*Thus the specific number of coding possibilities is shown in the table on page 194.*

This coding system is supplied in a star-shaped assembly with 4 coding tabs.

### Ordering Instructions

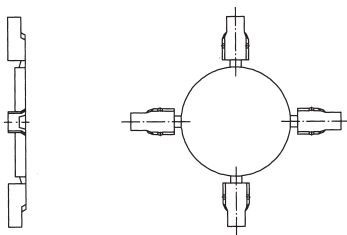
#### 4 Coding tab assembly:

Female connectors

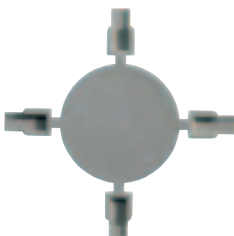
B/3, C/3, B/2, C/2, B, C, D, M, CD128, E160

Inverse Female connectors

Q/3, R/3, Q/2, R/2, P, Q, R, RD128, TE160



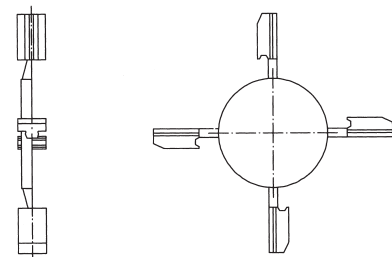
Part number: **033014**



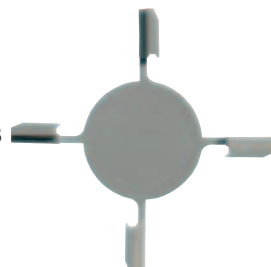
#### 4 Coding tab assembly:

Female connectors

H11, H15



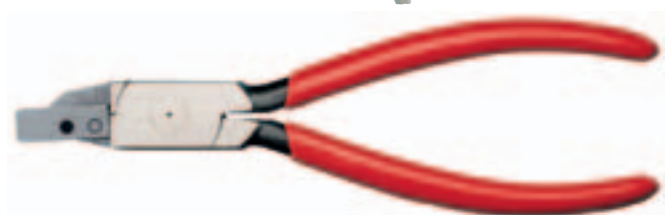
Part number: **434878**



### Coding pliers

For removing the coding position on the male connector

Part number: **473270**



### Coding Pins

Female connectors D, E, F, H15, H7/F24

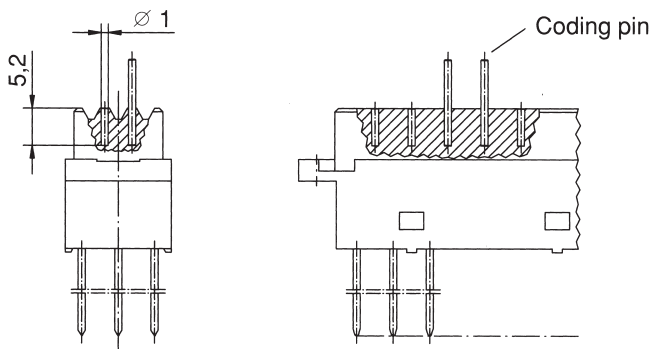


The coding pins are inserted with an insertion tool into predrilled holes located between the contact rows on the female connector. Corresponding holes must then be drilled on the male connector.

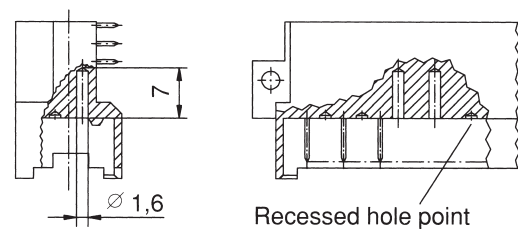
Recessed hole points on the male connector provides alignment for drilling the corresponding holes.

### Coding Instructions

Female connector

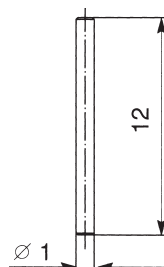


Male connector



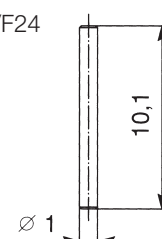
Suitable for Type D,E,F

Part number: **033007**



Suitable for Type H15,H7/F24

Part number: **424338**

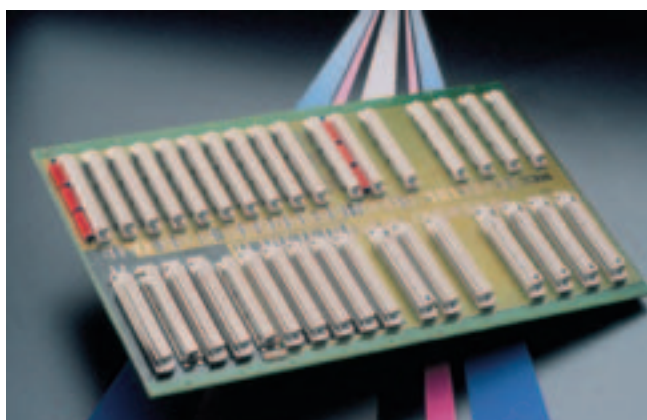
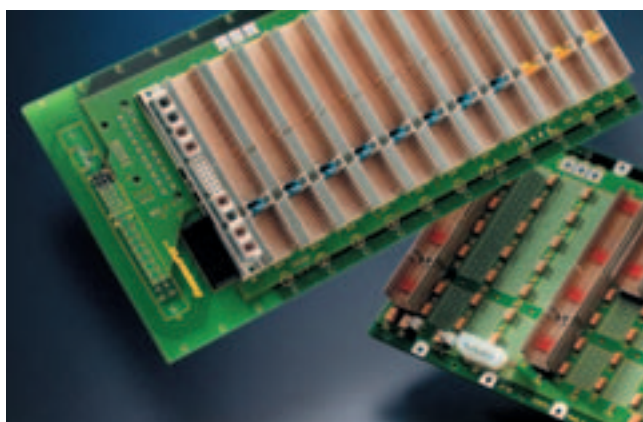


### Coding Tool

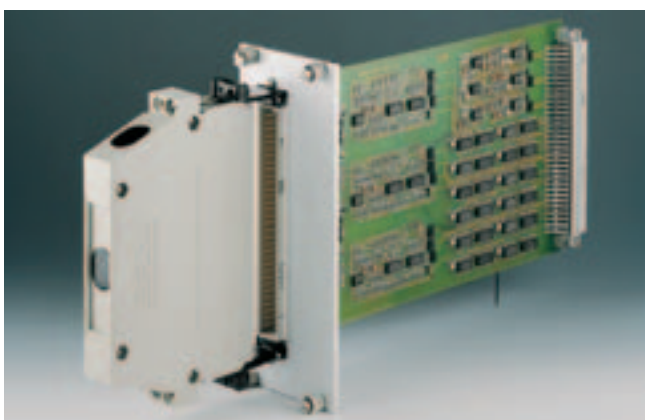
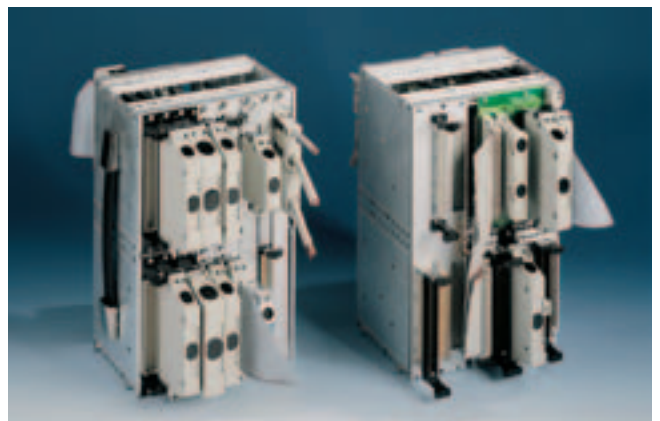
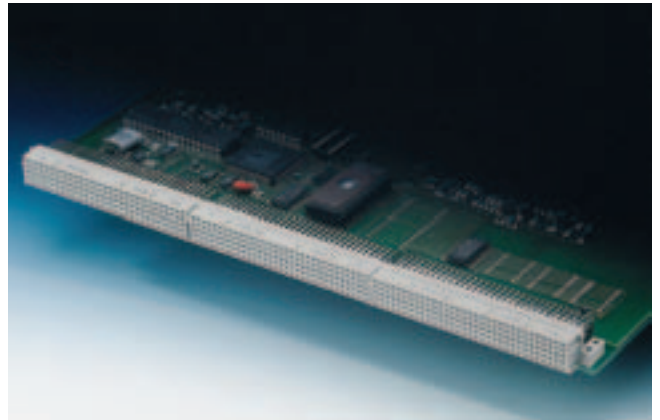
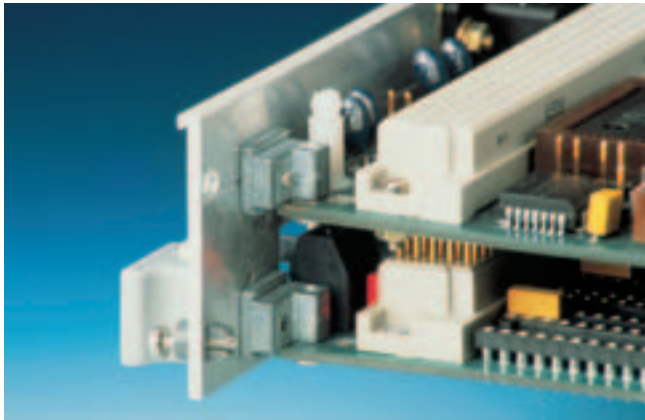
For inserting coding pins into the predrilled holes on the female connector.

Part number: **063007**











| Part Number  | Page | Part Number  | Page |
|--------------|------|--------------|------|
| 003382 ..... | 142  | 013275 ..... | 191  |
| 004177 ..... | 141  | 013414 ..... | 138  |
| 004289 ..... | 128  | 013653 ..... | 142  |
| 004362 ..... | 62   | 013970 ..... | 148  |
| 004413 ..... | 54   | 014145 ..... | 191  |
| 004427 ..... | 134  | 014374 ..... | 189  |
| 004483 ..... | 45   | 014375 ..... | 189  |
| 004484 ..... | 88   | 023545 ..... | 23   |
| 004485 ..... | 88   | 023783 ..... | 53   |
| 004498 ..... | 45   | 023816 ..... | 104  |
| 004500 ..... | 91   | 024069 ..... | 186  |
| 004777 ..... | 116  | 024070 ..... | 187  |
| 004778 ..... | 116  | 024104 ..... | 186  |
| 013025 ..... | 134  | 024201 ..... | 152  |
| 013026 ..... | 141  | 033007 ..... | 197  |
| 013058 ..... | 116  | 033014 ..... | 196  |
| 013071 ..... | 122  | 033055 ..... | 184  |
| 013073 ..... | 122  | 033298 ..... | 104  |
| 013074 ..... | 122  | 033427 ..... | 134  |
| 013096 ..... | 116  | 033428 ..... | 135  |
| 013130 ..... | 23   | 033436 ..... | 104  |
| 013131 ..... | 52   | 033579 ..... | 135  |
| 013132 ..... | 52   | 033704 ..... | 116  |
| 013133 ..... | 30   | 034190 ..... | 163  |
| 013134 ..... | 62   | 034702 ..... | 191  |
| 013135 ..... | 27   | 034796 ..... | 191  |
| 013136 ..... | 58   | 034797 ..... | 191  |
| 013154 ..... | 110  | 034798 ..... | 191  |
| 013155 ..... | 122  | 034799 ..... | 191  |
| 013156 ..... | 113  | 034800 ..... | 191  |
| 013157 ..... | 125  | 034801 ..... | 191  |
| 013160 ..... | 122  | 034802 ..... | 191  |
| 013161 ..... | 122  | 043064 ..... | 141  |
| 013164 ..... | 122  | 043582 ..... | 58   |
| 013166 ..... | 125  | 043606 ..... | 23   |
| 013167 ..... | 125  | 044639 ..... | 163  |
| 013171 ..... | 110  | 053395 ..... | 162  |
| 013172 ..... | 110  | 053400 ..... | 162  |
| 013174 ..... | 110  | 053408 ..... | 162  |
| 013175 ..... | 110  | 053410 ..... | 162  |
| 013178 ..... | 110  | 053412 ..... | 162  |
| 013183 ..... | 113  | 054755 ..... | 149  |
| 013184 ..... | 113  | 054756 ..... | 148  |
| 013254 ..... | 52   | 063007 ..... | 197  |



| Part Number | Page | Part Number | Page |
|-------------|------|-------------|------|
| 063046      | 142  | 154954      | 59   |
| 063048      | 142  | 154956      | 62   |
| 063049      | 142  | 154957      | 62   |
| 063277      | 88   | 154959      | 104  |
| 063300      | 138  | 154961      | 85   |
| 063357      | 149  | 154964      | 88   |
| 063358      | 148  | 154970      | 110  |
| 063465      | 141  | 154971      | 113  |
| 063515      | 55   | 164306      | 85   |
| 063795      | 52   | 164944      | 55   |
| 064312      | 162  | 194576      | 85   |
| 064583      | 191  | 194578      | 85   |
| 064584      | 191  | 204752      | 68   |
| 064585      | 191  | 214836      | 72   |
| 064586      | 191  | 220051      | 12   |
| 064708      | 191  | 220051      | 11   |
| 064709      | 191  | 220051      | 11   |
| 064710      | 191  | 220108      | 12   |
| 064711      | 191  | 220108      | 11   |
| 064712      | 191  | 220139      | 11   |
| 064713      | 191  | 220153      | 11   |
| 064714      | 191  | 220316      | 12   |
| 064715      | 191  | 220364      | 12   |
| 064716      | 191  | 220368      | 11   |
| 064717      | 191  | 220369      | 11   |
| 064728      | 191  | 220370      | 12   |
| 064729      | 191  | 220411      | 12   |
| 064755      | 162  | 220527      | 12   |
| 064757      | 162  | 220527      | 11   |
| 083502      | 195  | 220527      | 11   |
| 083504      | 195  | 220681      | 12   |
| 083506      | 195  | 220889      | 11   |
| 104552      | 52   | 220890      | 11   |
| 123211      | 162  | 220891      | 11   |
| 123589      | 62   | 220892      | 11   |
| 123601      | 59   | 220894      | 11   |
| 123717      | 58   | 220991      | 12   |
| 123751      | 53   | 223346      | 55   |
| 123905      | 182  | 223368      | 73   |
| 134581      | 55   | 223839      | 71   |
| 144705      | 55   | 224408      | 68   |
| 144708      | 91   | 224410      | 67   |
| 144710      | 88   | 224411      | 71   |
| 144713      | 104  | 224412      | 68   |



| Part Number | Page | Part Number | Page |
|-------------|------|-------------|------|
| 224470      | 72   | 244672      | 119  |
| 224471      | 71   | 244999      | 107  |
| 224473      | 73   | 254015      | 68   |
| 224474      | 73   | 254062      | 157  |
| 224475      | 73   | 254117      | 68   |
| 224476      | 73   | 254118      | 107  |
| 230032      | 12   | 254120      | 67   |
| 233226      | 168  | 254121      | 68   |
| 233230      | 168  | 254124      | 119  |
| 233232      | 168  | 254135      | 66   |
| 233233      | 168  | 254136      | 66   |
| 233234      | 168  | 254137      | 67   |
| 233235      | 168  | 254141      | 83   |
| 234062      | 188  | 254320      | 80   |
| 234063      | 188  | 254321      | 80   |
| 234064      | 188  | 254326      | 101  |
| 234065      | 188  | 254370      | 41   |
| 234066      | 188  | 254498      | 77   |
| 234067      | 188  | 254836      | 80   |
| 234069      | 66   | 254838      | 80   |
| 234432      | 70   | 254843      | 107  |
| 234516      | 68   | 254844      | 107  |
| 234647      | 76   | 254846      | 33   |
| 234712      | 83   | 254847      | 33   |
| 234713      | 83   | 254848      | 33   |
| 243246      | 169  | 254851      | 67   |
| 244126      | 67   | 254852      | 76   |
| 244139      | 95   | 254854      | 76   |
| 244265      | 69   | 254878      | 33   |
| 244268      | 67   | 254887      | 76   |
| 244294      | 67   | 254893      | 76   |
| 244295      | 68   | 254895      | 77   |
| 244296      | 69   | 254896      | 76   |
| 244297      | 69   | 254897      | 72   |
| 244298      | 69   | 254931      | 72   |
| 244299      | 69   | 254960      | 119  |
| 244300      | 70   | 254970      | 77   |
| 244301      | 71   | 254975      | 119  |
| 244302      | 71   | 254976      | 33   |
| 244303      | 71   | 254977      | 107  |
| 244304      | 72   | 254978      | 107  |
| 244305      | 72   | 254979      | 107  |
| 244306      | 72   | 254995      | 80   |
| 244307      | 72   | 284035      | 77   |





| Part Number | Page | Part Number | Page |
|-------------|------|-------------|------|
| 284082      | 70   | 284419      | 101  |
| 284134      | 68   | 284420      | 83   |
| 284135      | 68   | 284650      | 35   |
| 284136      | 76   | 284651      | 34   |
| 284164      | 34   | 284652      | 69   |
| 284165      | 35   | 284653      | 95   |
| 284166      | 35   | 284752      | 68   |
| 284167      | 38   | 284870      | 34   |
| 284168      | 38   | 284871      | 34   |
| 284169      | 41   | 284873      | 34   |
| 284170      | 71   | 284874      | 34   |
| 284171      | 76   | 284875      | 34   |
| 284172      | 77   | 284876      | 35   |
| 284173      | 80   | 284877      | 35   |
| 284174      | 77   | 284878      | 35   |
| 284175      | 77   | 284880      | 35   |
| 284176      | 80   | 284881      | 35   |
| 284177      | 33   | 284882      | 35   |
| 284178      | 33   | 284883      | 35   |
| 284179      | 33   | 284886      | 38   |
| 284180      | 107  | 284888      | 38   |
| 284181      | 107  | 284889      | 38   |
| 284182      | 107  | 284891      | 38   |
| 284183      | 107  | 284895      | 38   |
| 284184      | 119  | 284896      | 41   |
| 284185      | 119  | 284933      | 76   |
| 284258      | 94   | 284938      | 77   |
| 284259      | 94   | 284941      | 77   |
| 284260      | 94   | 284942      | 77   |
| 284261      | 94   | 284944      | 77   |
| 284262      | 94   | 284951      | 107  |
| 284263      | 94   | 284968      | 69   |
| 284264      | 94   | 284970      | 69   |
| 284269      | 95   | 284971      | 66   |
| 284270      | 95   | 284975      | 70   |
| 284272      | 88   | 284976      | 71   |
| 284308      | 72   | 284977      | 71   |
| 284313      | 119  | 284979      | 71   |
| 284318      | 80   | 284984      | 72   |
| 284319      | 38   | 284991      | 72   |
| 284323      | 76   | 294694      | 34   |
| 284324      | 98   | 294710      | 157  |
| 284325      | 98   | 294711      | 158  |
| 284418      | 41   | 294712      | 158  |



| Part Number  | Page | Part Number  | Page |
|--------------|------|--------------|------|
| 294716 ..... | 101  | 354111 ..... | 160  |
| 294721 ..... | 49   | 354112 ..... | 159  |
| 294722 ..... | 49   | 354116 ..... | 156  |
| 294728 ..... | 157  | 354117 ..... | 160  |
| 294730 ..... | 160  | 354133 ..... | 160  |
| 294732 ..... | 156  | 354134 ..... | 98   |
| 294733 ..... | 157  | 354135 ..... | 94   |
| 294736 ..... | 156  | 354139 ..... | 157  |
| 294737 ..... | 157  | 354140 ..... | 157  |
| 294738 ..... | 76   | 354152 ..... | 158  |
| 294740 ..... | 156  | 354155 ..... | 160  |
| 294742 ..... | 67   | 354156 ..... | 160  |
| 294743 ..... | 156  | 354157 ..... | 158  |
| 294863 ..... | 101  | 354158 ..... | 160  |
| 294927 ..... | 49   | 354159 ..... | 98   |
| 303284 ..... | 144  | 354160 ..... | 159  |
| 303484 ..... | 144  | 354161 ..... | 159  |
| 304221 ..... | 84   | 354162 ..... | 158  |
| 304225 ..... | 84   | 354163 ..... | 158  |
| 304421 ..... | 84   | 354164 ..... | 159  |
| 304425 ..... | 84   | 354165 ..... | 160  |
| 314404 ..... | 149  | 354166 ..... | 158  |
| 314425 ..... | 149  | 354173 ..... | 159  |
| 314447 ..... | 149  | 354215 ..... | 159  |
| 333139 ..... | 191  | 354219 ..... | 158  |
| 333139 ..... | 183  | 354220 ..... | 98   |
| 334203 ..... | 144  | 354223 ..... | 158  |
| 334210 ..... | 84   | 354226 ..... | 159  |
| 334211 ..... | 84   | 354229 ..... | 159  |
| 334214 ..... | 84   | 354239 ..... | 158  |
| 334215 ..... | 84   | 354240 ..... | 159  |
| 334403 ..... | 144  | 354246 ..... | 156  |
| 334410 ..... | 84   | 354247 ..... | 156  |
| 334411 ..... | 84   | 354251 ..... | 98   |
| 334414 ..... | 84   | 354252 ..... | 156  |
| 334415 ..... | 84   | 354381 ..... | 83   |
| 344234 ..... | 150  | 354382 ..... | 88   |
| 344265 ..... | 150  | 354383 ..... | 91   |
| 344434 ..... | 150  | 354384 ..... | 88   |
| 344451 ..... | 150  | 354385 ..... | 83   |
| 344465 ..... | 150  | 354388 ..... | 91   |
| 354108 ..... | 159  | 354395 ..... | 83   |
| 354109 ..... | 160  | 354396 ..... | 83   |
| 354110 ..... | 160  | 354397 ..... | 88   |



| Part Number  | Page | Part Number  | Page |
|--------------|------|--------------|------|
| 354399 ..... | 83   | 414416 ..... | 54   |
| 354400 ..... | 83   | 414574 ..... | 174  |
| 354406 ..... | 88   | 414575 ..... | 173  |
| 354418 ..... | 83   | 414702 ..... | 83   |
| 354972 ..... | 128  | 414705 ..... | 195  |
| 364104 ..... | 49   | 414715 ..... | 191  |
| 364366 ..... | 156  | 414715 ..... | 183  |
| 374849 ..... | 156  | 424188 ..... | 62   |
| 413168 ..... | 174  | 424189 ..... | 62   |
| 413169 ..... | 173  | 424195 ..... | 91   |
| 413170 ..... | 175  | 424201 ..... | 88   |
| 413171 ..... | 179  | 424207 ..... | 30   |
| 413172 ..... | 179  | 424213 ..... | 45   |
| 413173 ..... | 180  | 424219 ..... | 45   |
| 413637 ..... | 174  | 424338 ..... | 197  |
| 413638 ..... | 173  | 424623 ..... | 184  |
| 413640 ..... | 179  | 424654 ..... | 169  |
| 413852 ..... | 27   | 424655 ..... | 169  |
| 413853 ..... | 27   | 424797 ..... | 134  |
| 413858 ..... | 58   | 424798 ..... | 134  |
| 413859 ..... | 58   | 424801 ..... | 134  |
| 413864 ..... | 59   | 424803 ..... | 134  |
| 413865 ..... | 59   | 424804 ..... | 134  |
| 413971 ..... | 191  | 424806 ..... | 141  |
| 413971 ..... | 183  | 424807 ..... | 141  |
| 414068 ..... | 184  | 424810 ..... | 141  |
| 414082 ..... | 184  | 424812 ..... | 141  |
| 414219 ..... | 191  | 424813 ..... | 141  |
| 414219 ..... | 183  | 433215 ..... | 191  |
| 414327 ..... | 76   | 433222 ..... | 164  |
| 414377 ..... | 24   | 433590 ..... | 128  |
| 414378 ..... | 24   | 433591 ..... | 128  |
| 414379 ..... | 24   | 434286 ..... | 191  |
| 414380 ..... | 24   | 434286 ..... | 183  |
| 414401 ..... | 53   | 434325 ..... | 54   |
| 414403 ..... | 53   | 434329 ..... | 59   |
| 414404 ..... | 53   | 434878 ..... | 196  |
| 414406 ..... | 54   | 471555 ..... | 189  |
| 414407 ..... | 54   | 471556 ..... | 12   |
| 414409 ..... | 54   | 471556 ..... | 12   |
| 414410 ..... | 54   | 471556 ..... | 12   |
| 414412 ..... | 54   | 471556 ..... | 12   |
| 414413 ..... | 54   | 471556 ..... | 12   |
| 414415 ..... | 54   | 471584 ..... | 11   |



| Part Number  | Page | Part Number  | Page |
|--------------|------|--------------|------|
| 471584 ..... | 11   | 471867 ..... | 11   |
| 471590 ..... | 11   | 471920 ..... | 11   |
| 471591 ..... | 11   | 471922 ..... | 12   |
| 471592 ..... | 11   | 471943 ..... | 11   |
| 471597 ..... | 12   | 473161 ..... | 11   |
| 471606 ..... | 12   | 473188 ..... | 184  |
| 471608 ..... | 12   | 473200 ..... | 184  |
| 471628 ..... | 12   | 473270 ..... | 196  |
| 471629 ..... | 12   | 473447 ..... | 12   |
| 471630 ..... | 12   | 473447 ..... | 12   |
| 471631 ..... | 12   | 473447 ..... | 11   |
| 471632 ..... | 12   | 473447 ..... | 11   |
| 471633 ..... | 12   | 473447 ..... | 11   |
| 471634 ..... | 12   | 473447 ..... | 11   |
| 471637 ..... | 12   | 473449 ..... | 11   |
| 471638 ..... | 12   | 533201 ..... | 54   |
| 471640 ..... | 12   | 533202 ..... | 54   |
| 471677 ..... | 11   | 533203 ..... | 53   |
| 471684 ..... | 11   | 533206 ..... | 23   |
| 471684 ..... | 11   | 533207 ..... | 23   |
| 471684 ..... | 11   | 533208 ..... | 23   |
| 471694 ..... | 11   | 533210 ..... | 131  |
| 471694 ..... | 11   | 533401 ..... | 54   |
| 471694 ..... | 11   | 533402 ..... | 54   |
| 471710 ..... | 12   | 533403 ..... | 53   |
| 471710 ..... | 12   | 533404 ..... | 53   |
| 471729 ..... | 12   | 533406 ..... | 23   |
| 471729 ..... | 12   | 533407 ..... | 23   |
| 471729 ..... | 12   | 533408 ..... | 23   |
| 471729 ..... | 12   | 533410 ..... | 131  |
| 471729 ..... | 12   | 533423 ..... | 53   |
| 471787 ..... | 11   | 593248 ..... | 179  |
| 471791 ..... | 11   | 593250 ..... | 179  |
| 471793 ..... | 12   | 593252 ..... | 179  |
| 471793 ..... | 12   | 593254 ..... | 179  |
| 471836 ..... | 11   | 593256 ..... | 180  |
| 471837 ..... | 11   | 593808 ..... | 153  |
| 471839 ..... | 11   | 593809 ..... | 153  |
| 471855 ..... | 12   | 593811 ..... | 153  |
| 471855 ..... | 11   | 593812 ..... | 153  |
| 471855 ..... | 11   | 593814 ..... | 152  |
| 471867 ..... | 11   | 593815 ..... | 152  |
| 471867 ..... | 11   | 593817 ..... | 152  |
| 471867 ..... | 11   | 593818 ..... | 152  |



| Part Number  | Page | Part Number  | Page |
|--------------|------|--------------|------|
| 593927 ..... | 45   | 594566 ..... | 135  |
| 593928 ..... | 45   | 594567 ..... | 135  |
| 593933 ..... | 45   | 594569 ..... | 135  |
| 593934 ..... | 45   | 594570 ..... | 135  |
| 593952 ..... | 45   | 594575 ..... | 142  |
| 593964 ..... | 45   | 594576 ..... | 142  |
| 593990 ..... | 148  | 594578 ..... | 142  |
| 593991 ..... | 148  | 594579 ..... | 142  |
| 594056 ..... | 27   | 594613 ..... | 27   |
| 594096 ..... | 131  | 594614 ..... | 27   |
| 594157 ..... | 153  | 594633 ..... | 58   |
| 594159 ..... | 153  | 594634 ..... | 58   |
| 594160 ..... | 153  | 594635 ..... | 58   |
| 594162 ..... | 152  | 594636 ..... | 58   |
| 594163 ..... | 152  | 594638 ..... | 59   |
| 594165 ..... | 152  | 594640 ..... | 59   |
| 594166 ..... | 152  | 594641 ..... | 59   |
| 594168 ..... | 163  | 594750 ..... | 175  |
| 594170 ..... | 163  | 594751 ..... | 175  |
| 594172 ..... | 163  | 594752 ..... | 175  |
| 594174 ..... | 163  | 594802 ..... | 138  |
| 594176 ..... | 163  | 913049 ..... | 184  |
| 594178 ..... | 163  | 913615 ..... | 116  |
| 594180 ..... | 163  | 913637 ..... | 163  |
| 594182 ..... | 163  | 913716 ..... | 163  |
| 594184 ..... | 164  | 913738 ..... | 169  |
| 594207 ..... | 162  | 913767 ..... | 104  |
| 594209 ..... | 162  | 914004 ..... | 164  |
| 594211 ..... | 162  | 354197 ..... | 156  |
| 594213 ..... | 162  |              |      |
| 594215 ..... | 162  |              |      |
| 594219 ..... | 164  |              |      |
| 594220 ..... | 164  |              |      |
| 594221 ..... | 163  |              |      |
| 594223 ..... | 163  |              |      |
| 594225 ..... | 163  |              |      |
| 594227 ..... | 163  |              |      |
| 594229 ..... | 163  |              |      |
| 594231 ..... | 163  |              |      |
| 594233 ..... | 164  |              |      |
| 594343 ..... | 138  |              |      |
| 594400 ..... | 59   |              |      |
| 594470 ..... | 182  |              |      |
| 594491 ..... | 148  |              |      |



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