

## Sensor/actuator cable - SAC-3P-M 8MR/3,0-PVC - 1415866

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Sensor/actuator cable, 3-position, PVC, black RAL 9005, Plug angled M8, on free cable end, cable length: 3 m

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components

RoHS

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                    |
| GTIN         | <br>4 055626 053790 |
| GTIN         | 4055626053790                                                                                           |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 3 m |
|-----------------|-----|

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection            | IP65                             |
|                                 | IP67                             |
|                                 | IP68                             |

#### General

|                       |                              |
|-----------------------|------------------------------|
| Rated current at 40°C | 4 A                          |
| Rated voltage         | 48 V AC                      |
|                       | 60 V DC                      |
| Number of positions   | 3                            |
| Insulation resistance | ≥ 100 MΩ                     |
| Coding                | A - standard                 |
| Standards/regulations | M8 connector IEC 61076-2-104 |

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## Technical data

### General

|                              |         |
|------------------------------|---------|
| Status display               | No      |
| Protective circuit/component | unwired |
| Overvoltage category         | II      |
| Degree of pollution          | 3       |
| Insertion/withdrawal cycles  | ≥ 100   |

### Material

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Flammability rating according to UL 94 | HB                                          |
| Contact material                       | CuSn                                        |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | TPU GF                                      |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Material, knurls                       | Zinc die-cast, nickel-plated                |

### Standards and Regulations

|                                        |                              |
|----------------------------------------|------------------------------|
| Standards/specifications               | M8 connector IEC 61076-2-104 |
| Flammability rating according to UL 94 | HB                           |

### Cable

|                                    |                                              |
|------------------------------------|----------------------------------------------|
| Cable type                         | PVC black                                    |
| Cable type (abbreviation)          | PVC                                          |
| Cable abbreviation                 | LiYY                                         |
| Conductor cross section            | 3x 0.25 mm <sup>2</sup> (Signal line)        |
| AWG signal line                    | 24                                           |
| Conductor structure signal line    | 14x 0.15 mm                                  |
| Core diameter including insulation | 1.17 mm ±0.05 mm                             |
| Thickness, insulation              | ≥ 0.23 mm (Core insulation)                  |
| Wire colors                        | brown, blue, black                           |
| Overall twist                      | 3 wires, twisted                             |
| External sheath, color             | black RAL 9005                               |
| Outer sheath thickness             | ≥ 0.76 mm                                    |
| External cable diameter D          | 4.2 mm ±0.15 mm                              |
| Cable weight                       | 29 kg/km                                     |
| Outer sheath, material             | PVC                                          |
| Material conductor insulation      | PVC                                          |
| Conductor material                 | Bare Cu litz wires                           |
| Insulation resistance              | ≥ 100 MΩ*km (at 20 °C)                       |
| Conductor resistance               | max. 79 Ω/km (at 20 °C)                      |
| Nominal voltage, cable             | ≥ 300 V                                      |
| Test voltage, cable                | ≤ 3000 V                                     |
| Flame resistance                   | As per UL-Style 2464                         |
| Ambient temperature (operation)    | -40 °C ... 80 °C (cable, fixed installation) |

## Sensor/actuator cable - SAC-3P-M 8MR/3,0-PVC - 1415866

### Technical data

#### Cable

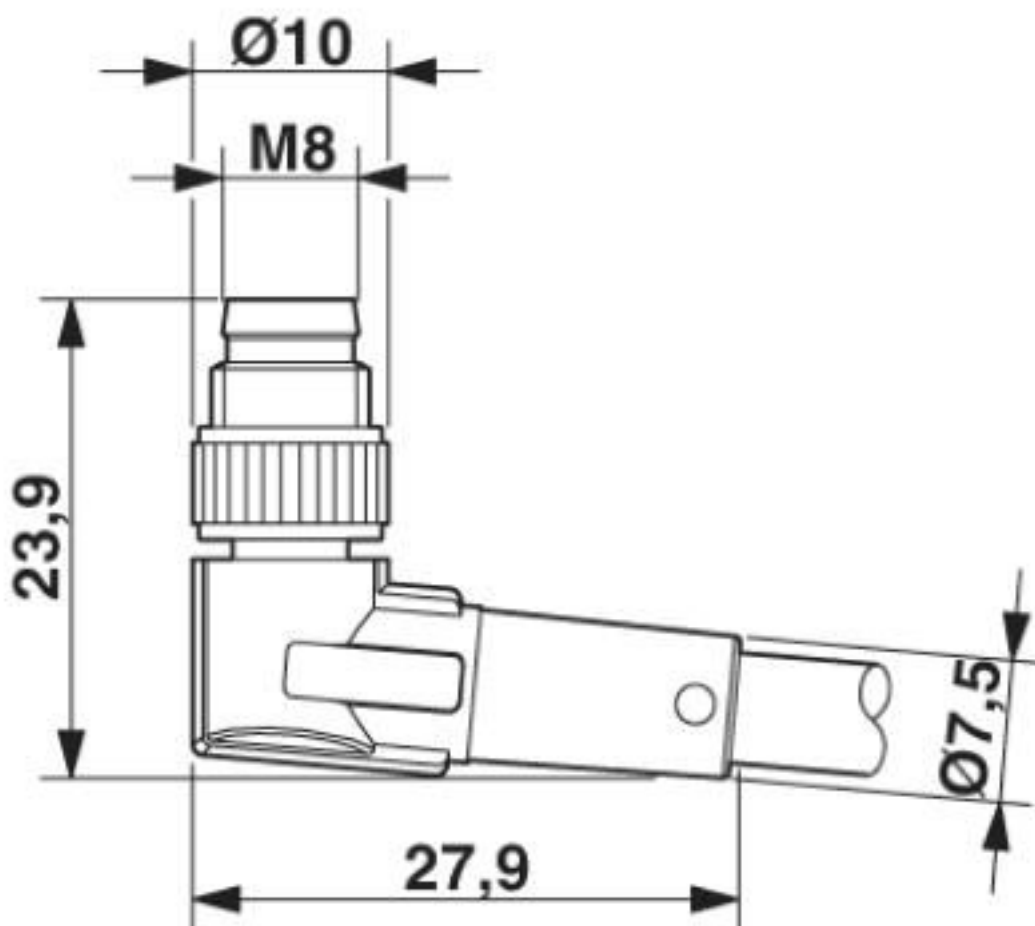
|  |                                                 |
|--|-------------------------------------------------|
|  | -25 °C ... 80 °C (cable, flexible installation) |
|--|-------------------------------------------------|

#### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1                                                                                      |
| China RoHS | Environmentally Friendly Use Period = 50 years                                                      |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

### Drawings

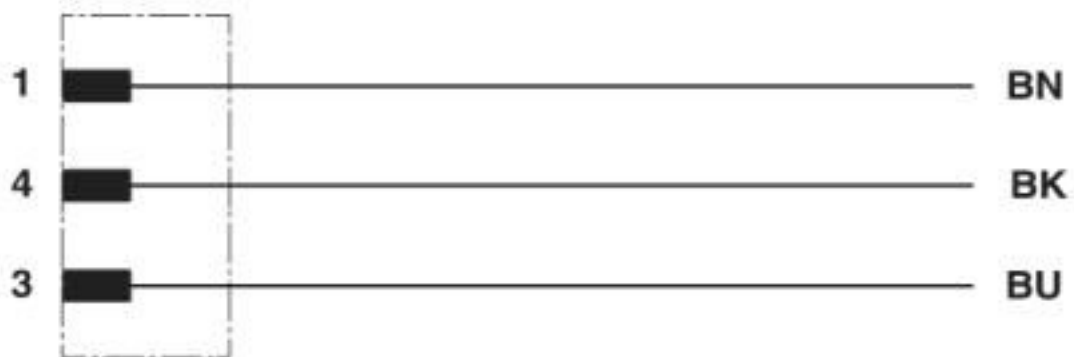
Dimensional drawing



M8 x 1 male plug, angled version

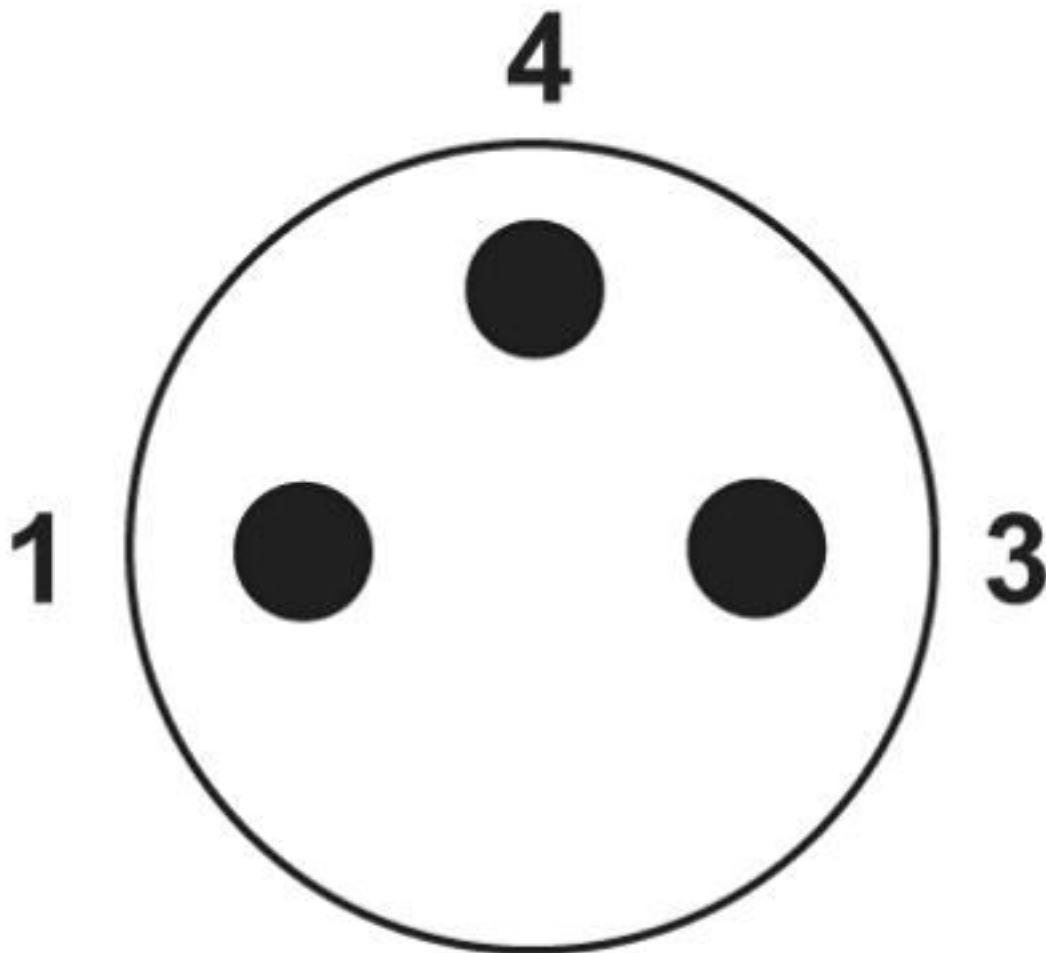
## Sensor/actuator cable - SAC-3P-M 8MR/3,0-PVC - 1415866

Circuit diagram



Contact assignment of the M8 plug

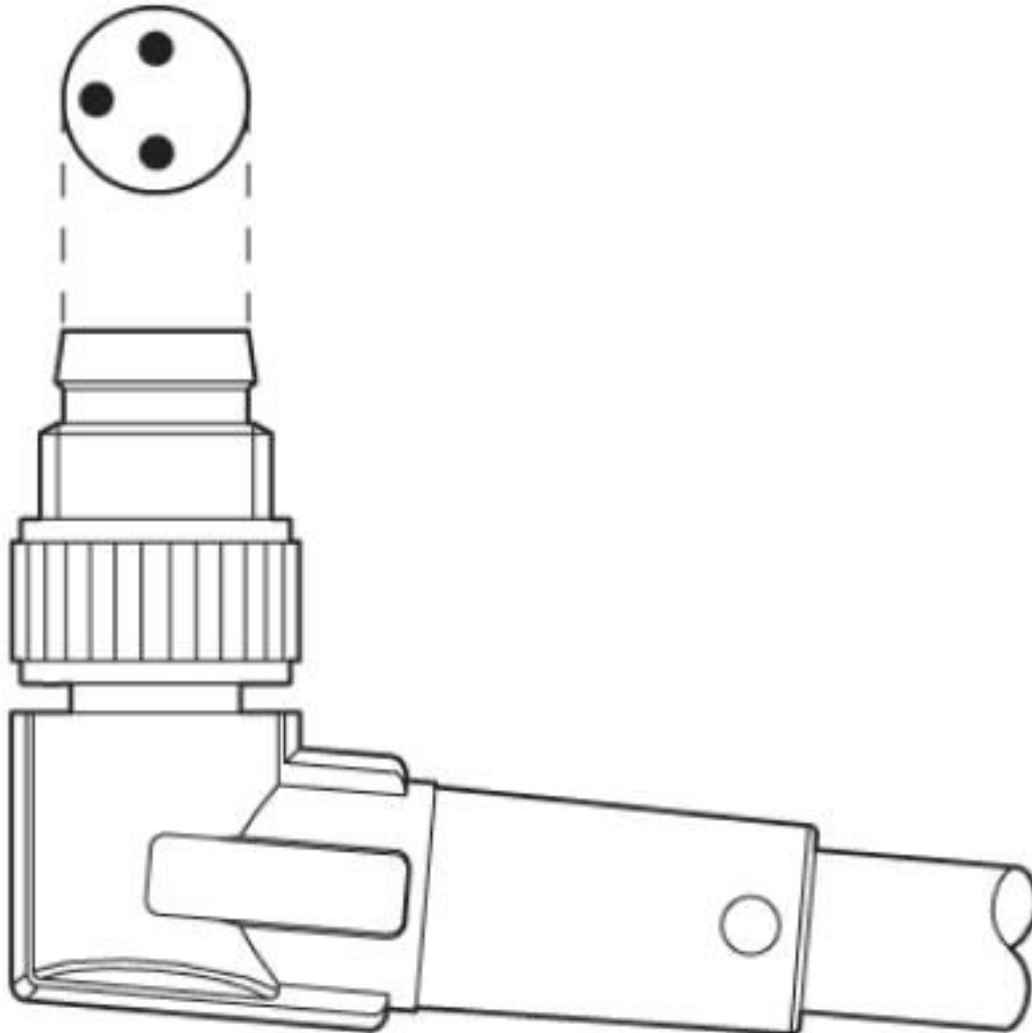
Schematic diagram



Pin assignment M8 plug, 3-pos., view male side

## Sensor/actuator cable - SAC-3P-M 8MR/3,0-PVC - 1415866

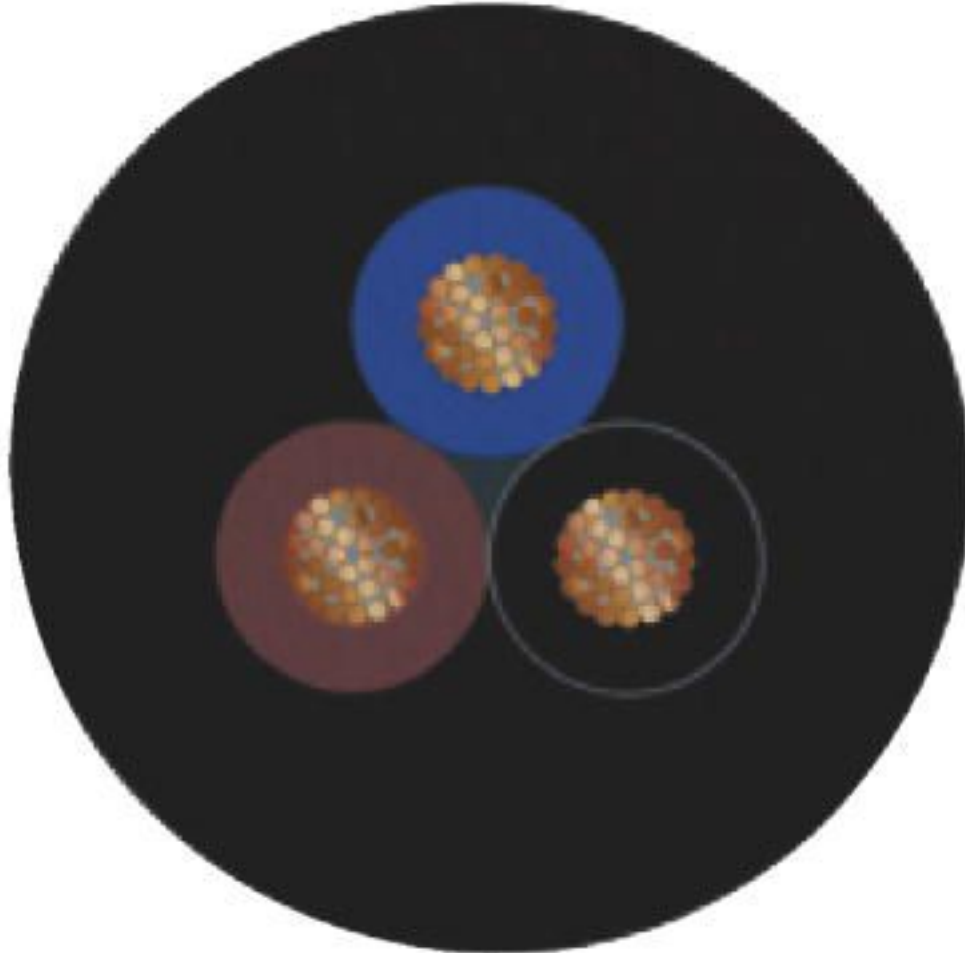
Schematic diagram



Layout of connector pin assignments

## Sensor/actuator cable - SAC-3P-M 8MR/3,0-PVC - 1415866

Cable cross section



PVC black [PVC]

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27060311 |
| eCl@ss 4.0    | 27060300 |
| eCl@ss 4.1    | 27060300 |
| eCl@ss 5.0    | 27061800 |
| eCl@ss 5.1    | 27061800 |
| eCl@ss 6.0    | 27279200 |
| eCl@ss 7.0    | 27279218 |
| eCl@ss 8.0    | 27279218 |
| eCl@ss 9.0    | 27060311 |

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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 13.2 | 31251501 |
| UNSPSC 19.0 | 31251501 |
| UNSPSC 20.0 | 31251501 |
| UNSPSC 21.0 | 31251501 |

## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / EAC-RoHS / cULus Listed

#### Ex Approvals

### Approval details

|                    |                                                                                     |                                                                                                                                                       |               |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| UL Listed          |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
| Nominal voltage UN | 60 V                                                                                |                                                                                                                                                       |               |
| Nominal current IN | 4 A                                                                                 |                                                                                                                                                       |               |

|                    |                                                                                     |                                                                                                                                                       |               |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| cUL Listed         |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
| Nominal voltage UN | 60 V                                                                                |                                                                                                                                                       |               |
| Nominal current IN | 4 A                                                                                 |                                                                                                                                                       |               |

|          |                                                                                     |                          |
|----------|-------------------------------------------------------------------------------------|--------------------------|
| EAC-RoHS |  | RU D-<br>DE.HB35.B.00387 |
|----------|-------------------------------------------------------------------------------------|--------------------------|

## Sensor/actuator cable - SAC-3P-M 8MR/3,0-PVC - 1415866

### Approvals

cULus Listed



### Accessories

#### Accessories

#### Conductor marking

Insert label - PABA WH/23 - 1013779



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

Insert label - PABA YE/23 - 1013782



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

### Corrugated pipe

Protective hose - WP-PA HF 13,0 BK - 3240681



Polyamide protective hose, inflammability class V0, UV resistant

Protective hose - WP-PA HF-HB 13,0 BK - 3240839



Polyamide protective hose, inflammability class HB, UV resistant

### Cutting tools

## Sensor/actuator cable - SAC-3P-M 8MR/3,0-PVC - 1415866

### Accessories

Diagonal cutter - CUTFOX-S VDE - 1212207



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

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### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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### Protective cap

Sealing cap - PROT-M 8 FS-PA-CHAIN - 1430857



M8 sealing cap made of plastic with fixing band for sensor cables, for M8 plugs

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### Screwdriver tools

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

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### Stripping tool

Stripping tool - WIREFOX SAC-1 - 1212757



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 3.2 to 4.4 mm, any stripping length

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### Accessories

Stripping tool - WIREFOX SAC - 1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 4.4 to 7 mm, any stripping length

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Stripping tool - WIREFOX 10 - 1212150



Stripping tool, for cables and conductors from 0.02 - 10 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

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### Torque tool

Torque screwdriver - TSD 02 SAC - 1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

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Protective hose adapter - WP-CTA POM 13,0 BK - 1422884



Protective hose adapter, for corrugated hoses with a nominal size of 13 (10 x 13), corrugated in parallel

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