

## Sensor/actuator cable - SAC-3P-10,0-PVC/M12FR - 1453821


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Sensor/actuator cable, 3-position, PVC, black RAL 9005, free cable end, on Socket angled M12, coding: A, cable length: 10 m



### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| GTIN                                 | <br>4 046356 573016 |
| GTIN                                 | 4046356573016   |
| Weight per Piece (excluding packing) | 407.000 g   |
| Custom tariff number                 | 85444290  |
| Country of origin                    | Germany   |

### Technical data

#### Dimensions

|  |       |
|--|-------|
| Length of cable                            | 10 m  |
| Stripping length of the free conductor end | 50 mm |

#### 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         | 250 V AC |

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### Technical data

#### General

|                              |              |
|------------------------------|--------------|
|                              | 250 V DC     |
| Number of positions          | 3            |
| Insulation resistance        | ≥ 100 MΩ     |
| Coding                       | A - standard |
| Status display               | No           |
| Protective circuit/component | unwired      |
| Overvoltage category         | II           |
| Degree of pollution          | 3            |
| Insertion/withdrawal cycles  | ≥ 100        |
| Torque                       | 0.4 Nm       |

#### 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                |
| Sealing material                       | NBR   |

#### Standards and Regulations

|  |    |
|--|----|
| Flammability rating according to UL 94 | HB |
|--|----|

#### Cable

|  |                                       |
|--|---------------------------------------|
| Cable type                                 | PVC black                             |
| Cable type (abbreviation)                  | PVC                                   |
| Cable abbreviation                         | LiYY                                  |
| UL AWM style                               | 2464 / 1729 (80°C/300 V)              |
| Conductor cross section                    | 3x 0.34 mm <sup>2</sup> (Signal line) |
| AWG signal line                            | 22                                    |
| Conductor structure signal line            | 19x 0.15 mm                           |
| Core diameter including insulation         | 1.26 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                  | 4.3 mm ±0.2 mm                        |
| Minimum bending radius, fixed installation | 5 x D                                 |

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### Technical data

#### Cable

|   |   |
|---|---|
| Minimum bending radius, flexible installation | 10 x D  |
| Cable weight                                  | 40 kg/km  |
| Outer sheath, material                        | PVC   |
| Material conductor insulation                 | PVC   |
| Conductor material                            | Bare Cu litz wires                                    |
| Insulation resistance                         | $\geq 100 \text{ M}\Omega \cdot \text{km}$ (at 20 °C) |
| Conductor resistance                          | max. 57 $\Omega/\text{km}$ (at 20 °C)                 |
| Nominal voltage, cable                        | $\leq 300 \text{ V}$                                  |
| Test voltage, cable                           | $\geq 2500 \text{ V}$                                 |
| Flame resistance                              | As per UL-Style 2464                                  |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)          |
|   | -25 °C ... 80 °C (cable, flexible installation)       |

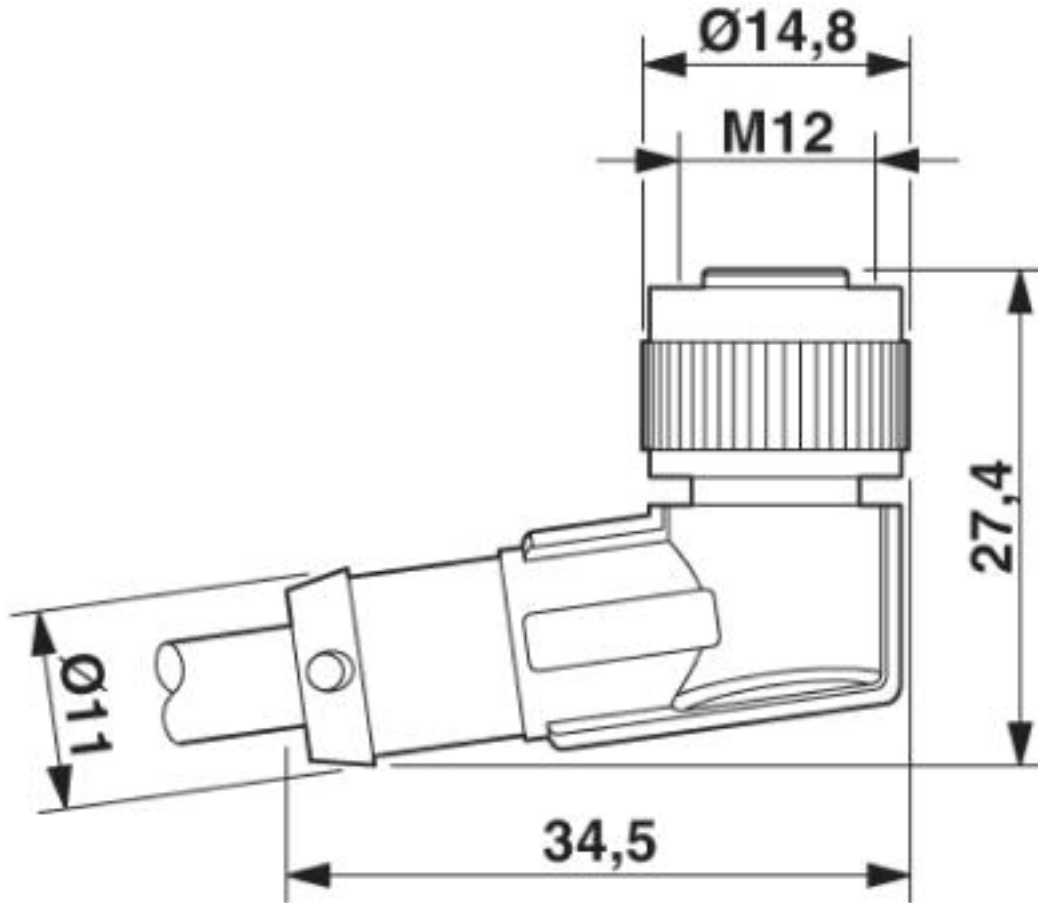
#### Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

### Drawings

# Sensor/actuator cable - SAC-3P-10,0-PVC/M12FR - 1453821

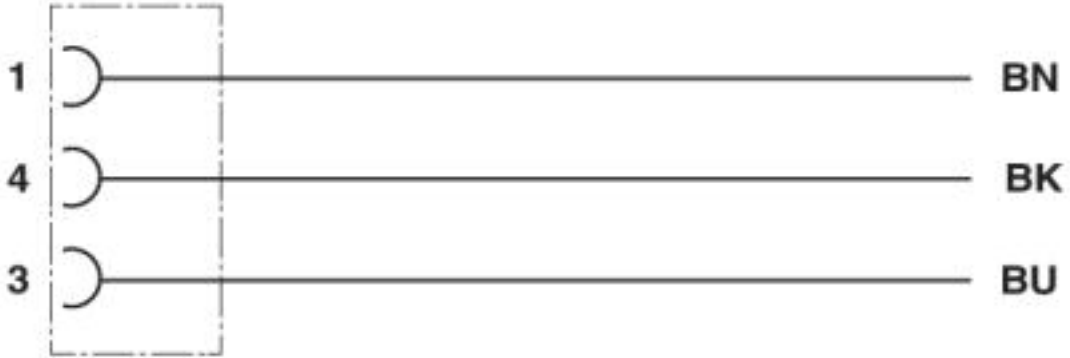
Dimensional drawing



M12 x 1 socket, angled

## Sensor/actuator cable - SAC-3P-10,0-PVC/M12FR - 1453821

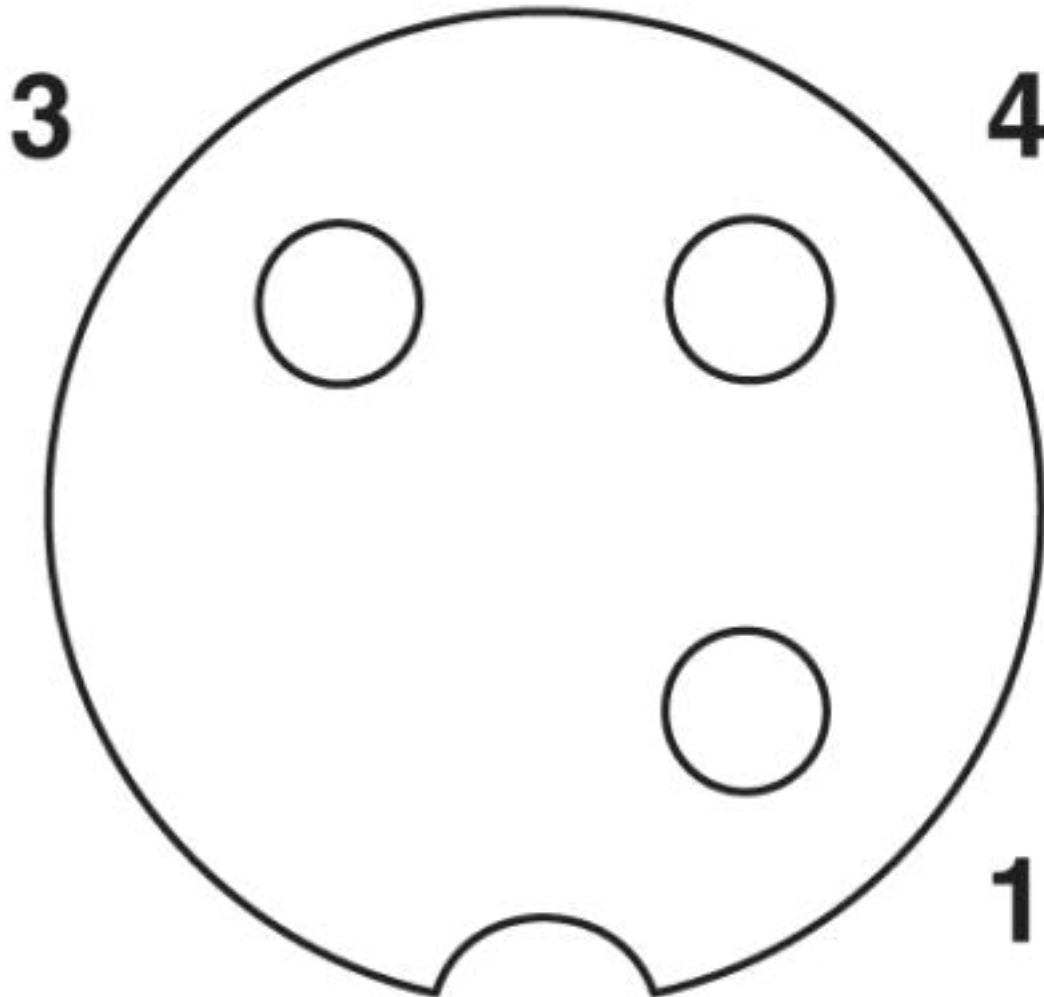
Circuit diagram



Contact assignment of the M12 socket

## Sensor/actuator cable - SAC-3P-10,0-PVC/M12FR - 1453821

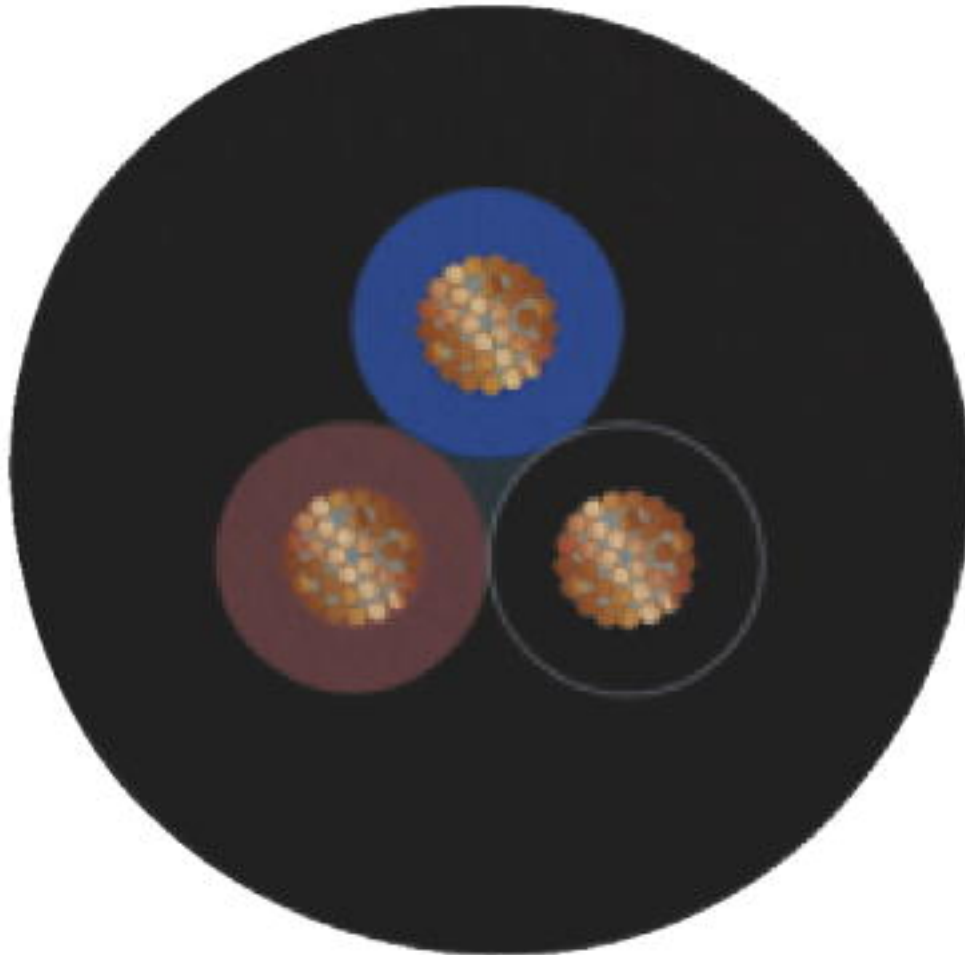
Schematic diagram



Pin assignment M12 socket, 3-pos., A-coded, view female side

## Sensor/actuator cable - SAC-3P-10,0-PVC/M12FR - 1453821

Cable cross section



PVC black [PVC]

### Classifications

eCl@ss

|            |          |
|------------|----------|
| 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 |

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## Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 9.0 | 27060311 |
|------------|----------|

### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |
| UNSPSC 19.0   | 31251501 |
| UNSPSC 20.0   | 31251501 |
| UNSPSC 21.0   | 31251501 |

## Approvals


### Approvals

Approvals

UL Listed / cUL Listed / 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 | 300 V   |   |               |
| Nominal current IN | 4 A   |   |               |

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|              |   |
|--------------|---|
| cULus Listed |  |
|--------------|---|