

## Sensor/actuator cable - SAC-3P-10,0-542/ FR SH SCO BK - 1406268


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Sensor/actuator cable, 3-position, PVC, yellow, shielded, free cable end, on Socket angled M12 SPEEDCON, A-coded, cable length: 10 m



### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| GTIN                                 | <br>4 046356 797849 |
| GTIN                                 | 4046356797849   |
| Weight per Piece (excluding packing) | 450.000 g   |
| Custom tariff number                 | 85444290  |
| Country of origin                    | United States   |

### Technical data

#### Dimensions

|                 |      |
|-----------------|------|
| Length of cable | 10 m |
|-----------------|------|

#### Ambient conditions

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

#### General

|                       |                    |
|-----------------------|--------------------|
| Rated current at 40°C | 4 A                |
| Rated voltage         | 48 V AC<br>60 V DC |
| Number of positions   | 3                  |
| Insulation resistance | ≥ 100 MΩ           |

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## Technical data

### General

|                              |                               |
|------------------------------|-------------------------------|
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | No                            |
| Protective circuit/component | unwired                       |
| Overvoltage category         | II                            |
| Degree of pollution          | 3                             |
| Insertion/withdrawal cycles  | ≥ 100                         |
| Torque                       | 0.4 Nm (M12 connector)        |

### 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

|  |                 |
|--|-----------------|
| Standard designation                   | M12 connector   |
| Standards/regulations                  | IEC 61076-2-101 |
| Flammability rating according to UL 94 | HB              |

### Cable

|   |                              |
|---|------------------------------|
| Cable type                                    | PVC yellow 105 °C            |
| Cable type (abbreviation)                     | 542                          |
| UL AWM style                                  | 2517 (105 °C / 300 V)        |
| AWG signal line                               | 22                           |
| Conductor structure signal line               | 30x 1.30 mm                  |
| Core diameter including insulation            | 1.27 mm ±0.03 mm             |
| Wire colors                                   | brown, blue, black           |
| Overall twist                                 | 3 wires, twisted             |
| Shielding                                     | Tinned copper braided shield |
| Optical shield covering                       | 85 %                         |
| External sheath, color                        | yellow                       |
| External cable diameter D                     | 5.2 mm ±0.2 mm               |
| Minimum bending radius, flexible installation | 12 x D                       |
| Cable weight                                  | 40 kg/km                     |
| Outer sheath, material                        | PVC                          |

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### Technical data

#### Cable

|                                 |   |
|---------------------------------|---|
| Material conductor insulation   | PVC   |
| Conductor material              | Tin-plated Cu litz wires                        |
| Insulation resistance           | $\geq$ (550 M Ohms/m @ 500V)                    |
| Conductor resistance            | max. 50.5 $\Omega$ /km (20 °C)                  |
| Nominal voltage, cable          | 300 V   |
| Special properties              | UL standards PLTC and ITC                       |
| Flame resistance                | FT4   |
| Other resistance                | UV resistant                                    |
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation)   |
|                                 | -5 °C ... 105 °C (cable, flexible installation) |

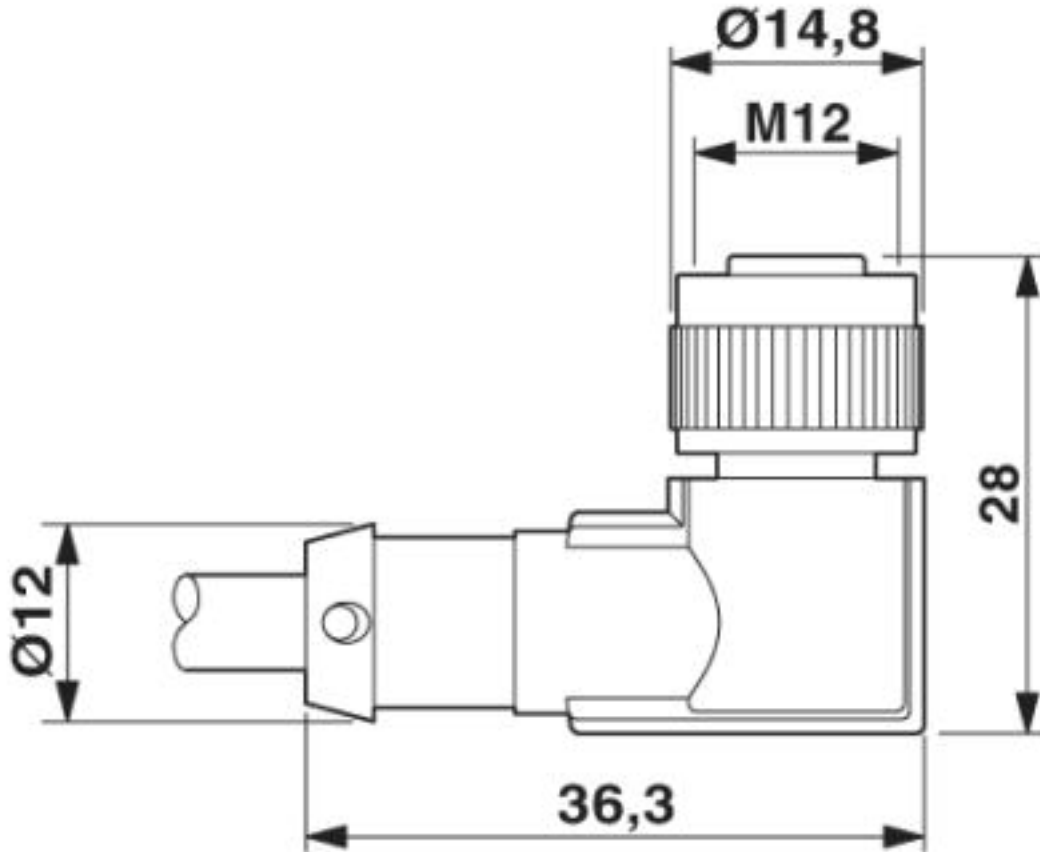
#### Environmental Product Compliance

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

#### Drawings

# Sensor/actuator cable - SAC-3P-10,0-542/ FR SH SCO BK - 1406268

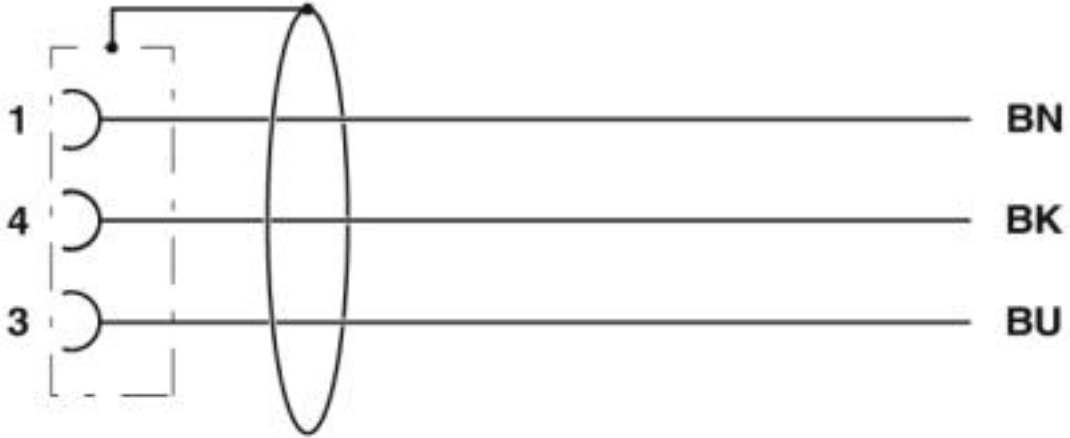
Dimensional drawing



M12 x 1 socket, angled, shielded

# Sensor/actuator cable - SAC-3P-10,0-542/ FR SH SCO BK - 1406268

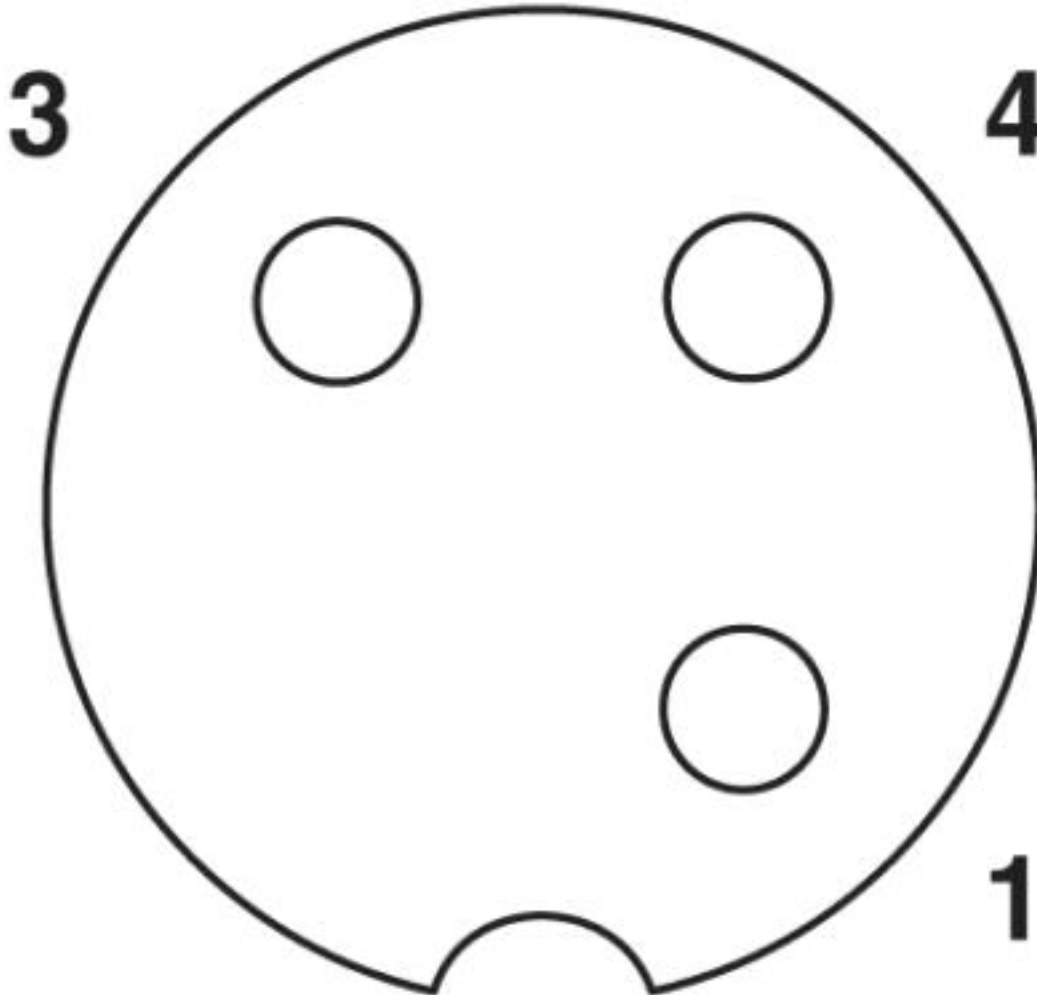
Circuit diagram



Contact assignment of the M12 socket

# Sensor/actuator cable - SAC-3P-10,0-542/ FR SH SCO BK - 1406268

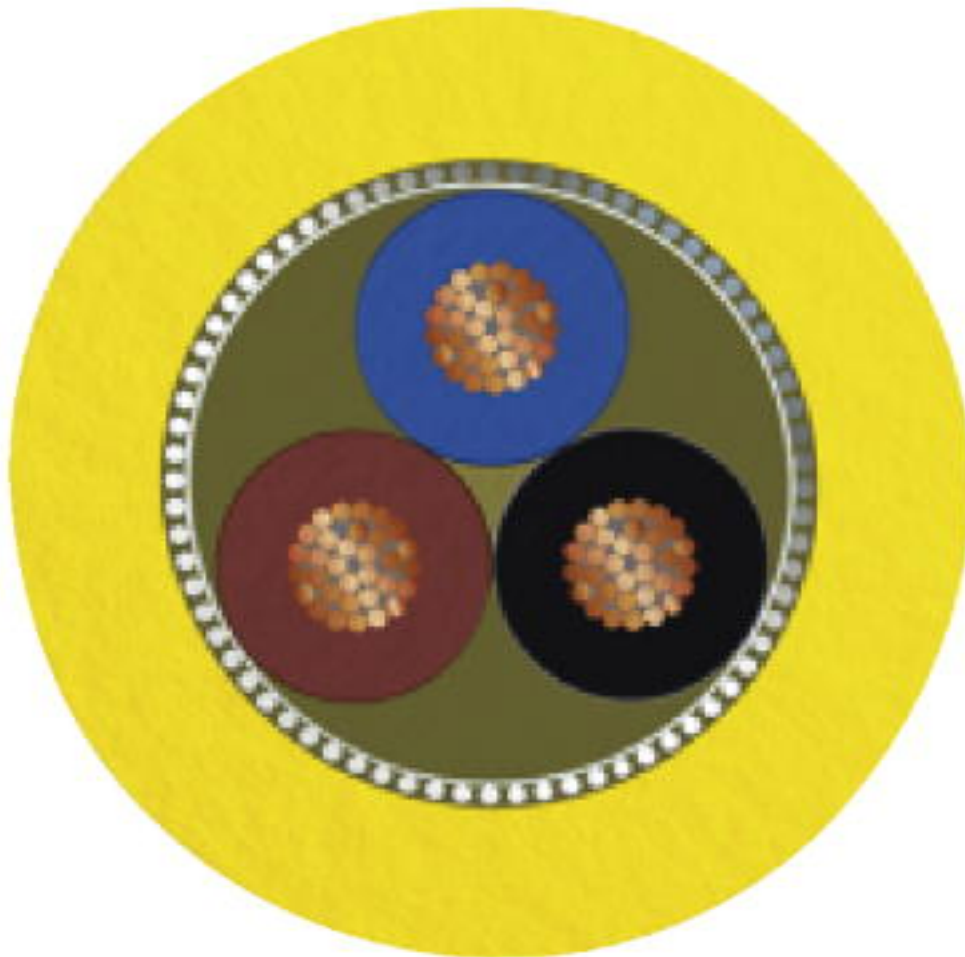
Schematic diagram



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

## Sensor/actuator cable - SAC-3P-10,0-542/ FR SH SCO BK - 1406268

Cable cross section



PVC yellow 105 °C [542]

### 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 |

## Approvals

### Approvals

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Approvals


UL Listed / cUL Listed / EAC / cULus Listed

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Ex Approvals

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### 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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## Approvals

|                    |  |   |               |
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|     |  |                          |
|-----|--|--------------------------|
| EAC |  | RU C-<br>DE.BL08.B.00286 |
|-----|--|--------------------------|

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

## Accessories

### Accessories

#### Protective cap

Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



#### Safety locking

Locking clip - SAC-M12-EXCLIP-F - 1558991

Locking clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools



#### Screwdriver tools

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### Accessories

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

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Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

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Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

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Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm