

## Sensor/Actuator cable - SAC-4P- 15,0-542/ FR SCO BK - 1417963

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Sensor/Actuator cable, 4-position, PVC, yellow RAL 1021, free cable end, on Socket angled M12 SPEEDCON, A-coded, Cable length: 15 m



### Key Commercial Data

|                                      |               |
|--------------------------------------|---------------|
| Packing unit                         | 1 STK         |
| Weight per Piece (excluding packing) | 100.0 g       |
| Custom tariff number                 | 85444290      |
| Country of origin                    | United States |

### Technical data

#### Dimensions

|                 |      |
|-----------------|------|
| Length of cable | 15 m |
|-----------------|------|

#### Ambient conditions

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

#### General

|                              |                               |
|------------------------------|-------------------------------|
| Rated current at 40°C        | 4 A                           |
| Rated voltage                | 250 V                         |
| Number of positions          | 4                             |
| Insulation resistance        | ≥ 10 MΩ                       |
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | No                            |
| Protective circuit/component | Unwired                       |

## Sensor/Actuator cable - SAC-4P- 15,0-542/ FR SCO BK - 1417963

### Technical data

#### General

|                             |                        |
|-----------------------------|------------------------|
| 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                        |
| Core diameter including insulation            | 1.27 mm ±0.03 mm          |
| Wire colors                                   | brown, blue, black, white |
| Overall twist                                 | 4 wires, twisted          |
| External sheath, color                        | yellow                    |
| External cable diameter D                     | 5 mm ±0.2 mm              |
| Minimum bending radius, flexible installation | 8 x D                     |
| Cable weight                                  | 36 kg/km                  |
| Outer sheath, material                        | PVC                       |
| Material conductor insulation                 | PVC                       |
| Conductor material                            | Tin-plated Cu litz wires  |
| Insulation resistance                         | ≥ (550 M Ohms/m @ 500V)   |
| Conductor resistance                          | max. 50.5 Ω/km (20° C)    |
| Nominal voltage, cable                        | 300 V                     |
| Special properties                            | UL standards PLTC and ITC |
| Other resistance                              | UV resistant              |

# Sensor/Actuator cable - SAC-4P- 15,0-542/ FR SCO BK - 1417963

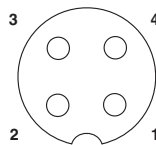
## Technical data

### Cable

|                                 |   |
|---------------------------------|---|
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation) |
|---------------------------------|---|

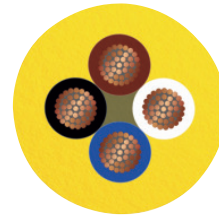
## Drawings

Schematic diagram



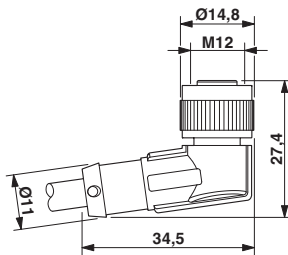
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



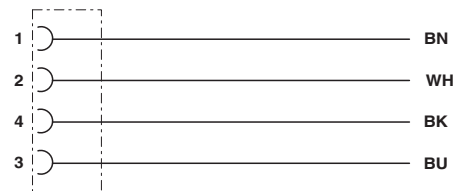
PVC yellow 105 °C [542]

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 socket

## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

### ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC001855 |
|----------|----------|

## Accessories

Accessories

Protective cap

## Sensor/Actuator cable - SAC-4P- 15,0-542/ FR SCO BK - 1417963

### Accessories

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

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

---

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

---

### Torque tool

## Sensor/Actuator cable - SAC-4P- 15,0-542/ FR SCO BK - 1417963

### Accessories

Torque screwdriver - TSD 04 SAC - 1208429



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

---

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



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

---

---