

## Sensor/Actuator cable - SAC-3P- 20,0-542/ FS SH SCO BK - 1417962

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Sensor/Actuator cable, 3-position, PVC, yellow RAL 1021, shielded, free cable end, on Socket straight M12 SPEEDCON, A-coded, Cable length: 20 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 | 20 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          | 3                             |
| Insulation resistance        | ≥ 100 MΩ                      |
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | No                            |
| Protective circuit/component | Unwired                       |

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### 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           |
| 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                          |
| 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                        |

# Sensor/Actuator cable - SAC-3P- 20,0-542/ FS SH SCO BK - 1417962

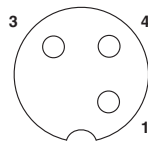
## Technical data

### Cable

|                                 |   |
|---------------------------------|---|
| Special properties              | UL standards PLTC and ITC                     |
| Other resistance                | UV resistant                                  |
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation) |

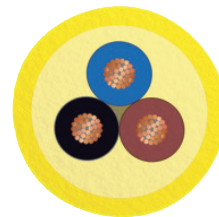
## Drawings

Schematic diagram



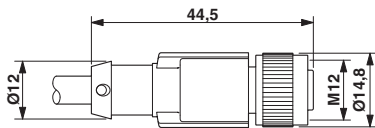
Pin assignment M12 socket, 3-pos., A-coded, view female side

Cable cross section



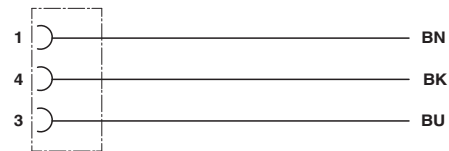
PVC yellow 105 °C [542]

Dimensional drawing



M12 x 1 socket, straight, shielded

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-3P- 20,0-542/ FS SH SCO BK - 1417962

### Accessories

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

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



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### 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

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### 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

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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

## Sensor/Actuator cable - SAC-3P- 20,0-542/ FS SH SCO BK - 1417962

### Accessories

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

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