

## Sensor/Actuator cable - SAC-4P- 3,0-PUR/M 8FS SH - 1521928

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://download.phoenixcontact.com>)



Sensor/Actuator cable, 4-position, PUR halogen-free, Black-gray RAL 7021, shielded, Free cable end, on Socket straight M8, Cable length: 3 m

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our standard: robust halogen-free PUR cable
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference

### Key commercial data

|                  |               |
|------------------|---------------|
| package_quantity | 1             |
| GTIN             | 4017918968885 |

### Technical data

#### Dimensions

|                                            |       |
|--------------------------------------------|-------|
| Length of cable                            | 3 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                             |
| Degree of protection            | IP67                             |

#### General

|                              |                              |
|------------------------------|------------------------------|
| Rated current at 40°C        | 4 A                          |
| Rated voltage                | 30 V                         |
| Number of positions          | 4                            |
| Contact resistance           | ≤ 5 mΩ                       |
| Insulation resistance        | ≥ 100 MΩ                     |
| Coding                       | A - standard                 |
| Standards/regulations        | M8 connector IEC 61076-2-104 |
| Status display               | No                           |
| Protective circuit/component | Unwired                      |
| Surge voltage category       | II                           |
| Pollution degree             | 3                            |
| Insertion/withdrawal cycles  | ≥ 100                        |
| Torque                       | 0.2 Nm (M8 connectors)       |

# Sensor/Actuator cable - SAC-4P- 3,0-PUR/M 8FS SH - 1521928

## Technical data

### Material

|                                                |                                             |
|------------------------------------------------|---------------------------------------------|
| <b>Inflammability class according to UL 94</b> | HB                                          |
| <b>Contact material</b>                        | CuSn                                        |
| <b>Contact surface material</b>                | Ni/Au                                       |
| <b>Contact carrier material</b>                | TPU GF                                      |
| <b>Material of grip body</b>                   | TPU, hardly inflammable, self-extinguishing |
| <b>Material, knurls</b>                        | Zinc die-cast, nickel-plated                |
| <b>Sealing material</b>                        | NBR                                         |

### Cable

|                                                      |                                       |
|------------------------------------------------------|---------------------------------------|
| <b>Cable type</b>                                    | PUR halogen-free black shielded       |
| <b>Cable type (abbreviation)</b>                     | PUR                                   |
| <b>Cable abbreviation</b>                            | LiF9YC11Y                             |
| <b>UL AWM style</b>                                  | 20549                                 |
| <b>Conductor cross section</b>                       | 4x 0.25 mm <sup>2</sup> (signal line) |
| <b>AWG signal line</b>                               | 24                                    |
| <b>Conductor structure signal line</b>               | 32x 0.10 mm                           |
| <b>Core diameter including insulation</b>            | 1.17 mm ±0.02 mm (signal line)        |
| <b>Thickness, insulation</b>                         | ≥ 0.21 mm (Core insulation)           |
| <b>Thickness, insulation</b>                         | approx. 0.7 mm (Outer cable sheath)   |
| <b>Wire colors</b>                                   | brown, white, blue, black             |
| <b>Overall twist</b>                                 | 4 wires, twisted                      |
| <b>Shielding</b>                                     | Braided copper wires                  |
| <b>Optical shield covering</b>                       | 85 %                                  |
| <b>External sheath, color</b>                        | Black-gray RAL 7021                   |
| <b>External cable diameter D</b>                     | 5 mm ±0.15 mm                         |
| <b>Smallest bending radius, fixed installation</b>   | 25 mm                                 |
| <b>Smallest bending radius, movable installation</b> | 50 mm                                 |
| <b>Number of bending cycles</b>                      | 4000000                               |
| <b>Bending radius</b>                                | 50 mm                                 |
| <b>Traversing path</b>                               | 10 m                                  |
| <b>Traversing rate</b>                               | 3 m/s                                 |
| <b>Acceleration</b>                                  | 10 m/s <sup>2</sup>                   |
| <b>Cable weight</b>                                  | 36 kg/km                              |
| <b>Outer sheath, material</b>                        | PUR                                   |
| <b>Material conductor insulation</b>                 | PP                                    |
| <b>Conductor material</b>                            | Bare Cu litz wires                    |
| <b>Insulation resistance</b>                         | ≥ 100 GΩ*km (at 20 °C)                |
| <b>Conductor resistance</b>                          | max. 78 Ω/km (at 20 °C)               |
| <b>Nominal voltage, cable</b>                        | ≤ 300 V                               |
| <b>Test voltage, cable</b>                           | ≥ 3000 V                              |
| <b>Special properties</b>                            | Flexible cable conduit capable        |
| <b>Special properties</b>                            | Silicone-free                         |

## Sensor/Actuator cable - SAC-4P- 3,0-PUR/M 8FS SH - 1521928

### Technical data

#### Cable

|                                        |                                                                     |
|----------------------------------------|---------------------------------------------------------------------|
| <b>Special properties</b>              | Free of substances which would hinder coating with paint or varnish |
| <b>Flame resistance</b>                | in accordance with DIN UL-Style 20549                               |
| <b>Halogen-free</b>                    | in accordance with DIN VDE 0472 part 815                            |
| <b>Other resistance</b>                | hydrolysis and microbe resistant                                    |
| <b>Other resistance</b>                | partly UV-resistant in accordance with DIN EN ISO 4892-2-A          |
| <b>Ambient temperature (operation)</b> | -40 °C ... 80 °C (cable, fixed installation)                        |
| <b>Ambient temperature (operation)</b> | -25 °C ... 80 °C (cable, flexible installation)                     |

### classifications

#### eCl@ss

|                   |          |
|-------------------|----------|
| <b>eCl@ss 4.0</b> | 27060306 |
| <b>eCl@ss 4.1</b> | 27060306 |
| <b>eCl@ss 5.0</b> | 27061801 |
| <b>eCl@ss 5.1</b> | 27061801 |
| <b>eCl@ss 6.0</b> | 27061801 |
| <b>eCl@ss 7.0</b> | 27061801 |
| <b>eCl@ss 8.0</b> | 27061801 |

#### ETIM

|                 |          |
|-----------------|----------|
| <b>ETIM 2.0</b> | EC000830 |
| <b>ETIM 3.0</b> | EC001855 |
| <b>ETIM 4.0</b> | EC001855 |
| <b>ETIM 5.0</b> | EC001855 |

#### UNSPSC

|                      |          |
|----------------------|----------|
| <b>UNSPSC 6.01</b>   | 31251501 |
| <b>UNSPSC 7.0901</b> | 31251501 |
| <b>UNSPSC 11</b>     | 31251501 |
| <b>UNSPSC 12.01</b>  | 31251501 |
| <b>UNSPSC 13.2</b>   | 31251501 |

### approvals

UL Listed / cUL Listed / GOST / cULus Listed /

#### Approval details

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

## Sensor/Actuator cable - SAC-4P- 3,0-PUR/M 8FS SH - 1521928

### approvals

| Nominal voltage UN         | 125 V |
|----------------------------|-------|
| Nominal current IN         | 4 A   |
| mm <sup>2</sup> /AWG/kcmil |       |

| cUL Listed  |       |
|----------------------------------------------------------------------------------------------|-------|
|                                                                                              |       |
| Nominal voltage UN                                                                           | 125 V |
| Nominal current IN                                                                           | 4 A   |
| mm <sup>2</sup> /AWG/kcmil                                                                   |       |

|                                                                                        |
|----------------------------------------------------------------------------------------|
| GOST  |
|----------------------------------------------------------------------------------------|

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

### accessories

#### Conductor marking

PABA WH/15 - 1013151



PABA YE/15 - 1013698



## Sensor/Actuator cable - SAC-4P- 3,0-PUR/M 8FS SH - 1521928

### accessories

PABA RD/15 - 1013944



---

### Marker carrier cable

PATG 2/15 - 1013038



PATG 3/15 - 1013041



PATG 4/15 - 1013054



---

### Marker pen

B-STIFT - 1051993



---

### Cutting tools

## Sensor/Actuator cable - SAC-4P- 3,0-PUR/M 8FS SH - 1521928

### accessories

CUTFOX-S VDE - 1212207



---

### Stripping tool

WIREFOX SAC - 1212623



WIREFOX 10 - 1212150



---

### Protective cap

PROT-M 8 MS-PA-CHAIN - 1430860



---

### Torque tool

TSD 02 SAC - 1208487



## Sensor/Actuator cable - SAC-4P- 3,0-PUR/M 8FS SH - 1521928

accessories

### Screwdriver tools

SAC BIT M8-D10 - 1208461

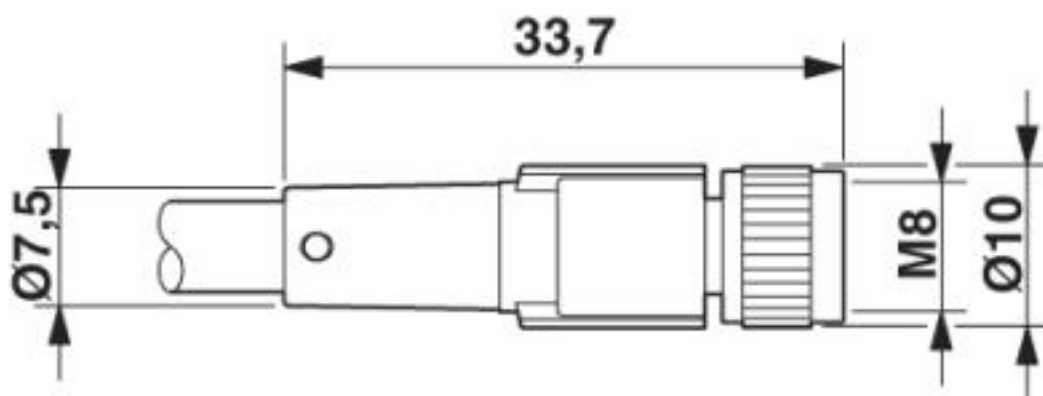


accessories

WIREFOX SAC-1 - 1212757

## Drawings

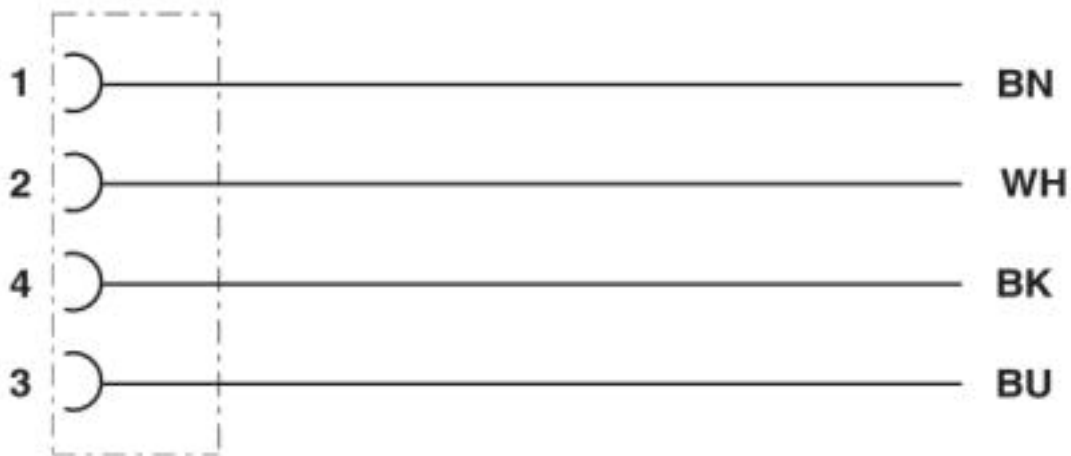
Dimensioned drawing



Socket M8 x 1, straight

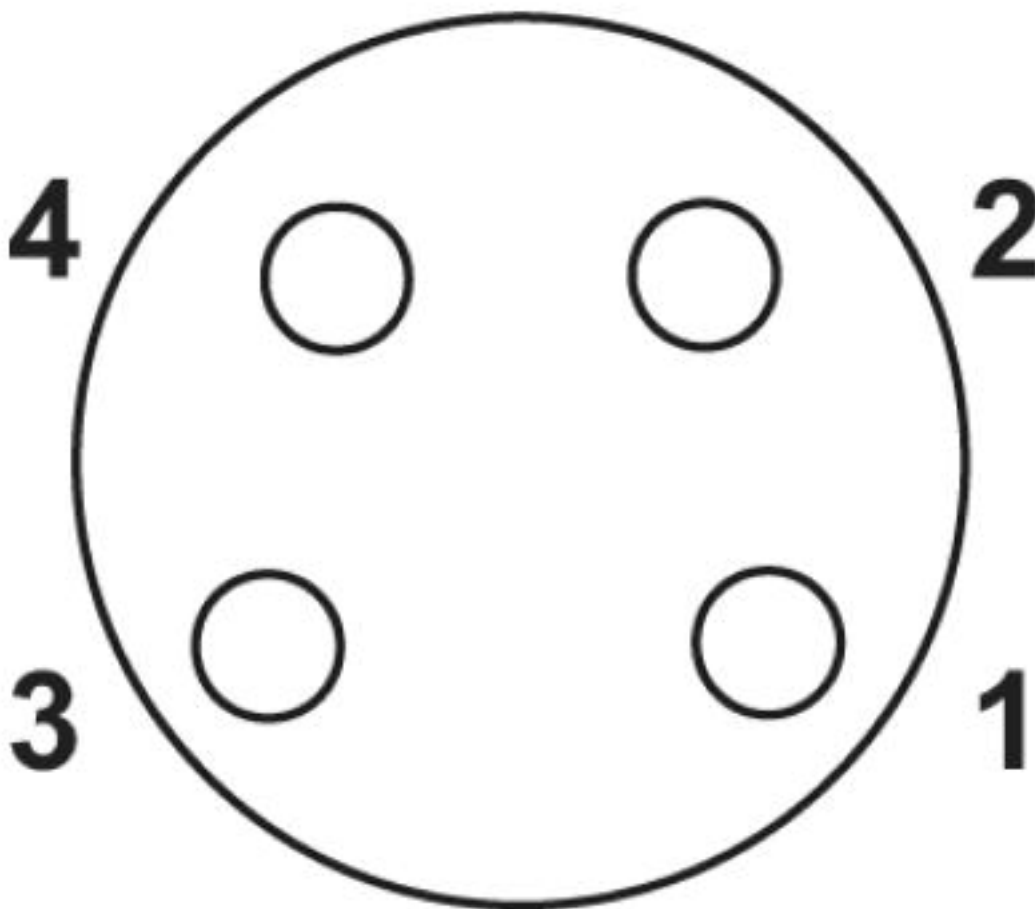
## Sensor/Actuator cable - SAC-4P- 3,0-PUR/M 8FS SH - 1521928

Circuit diagram



Contact assignment of M8 socket

Schematic diagram

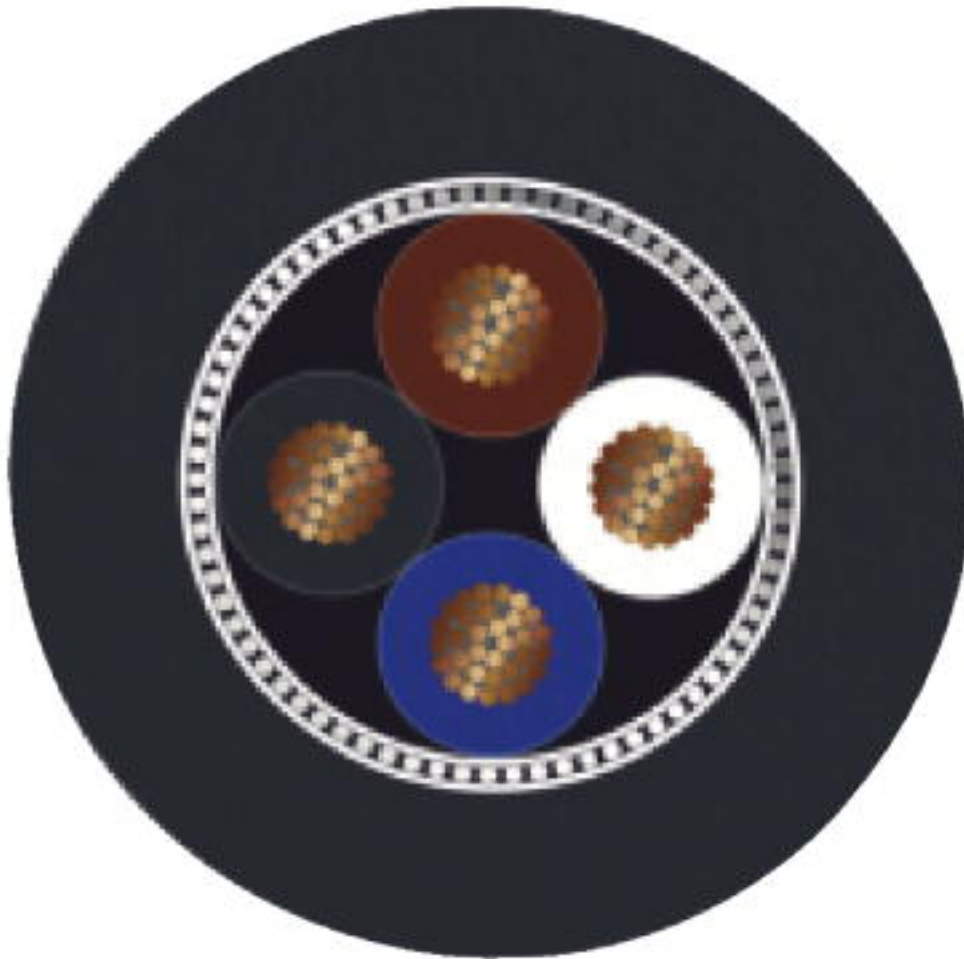


Pin assignment M8 socket, 4-pos.



## Sensor/Actuator cable - SAC-4P- 3,0-PUR/M 8FS SH - 1521928

Cable cross section



PUR halogen-free black shielded [PUR]

© Phoenix Contact 2013 - all rights reserved  
<http://www.phoenixcontact.com>