

# Sensor/Actuator cable - SAC-3P- 5,0-PUR/M 8FS - 1669628

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, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M8, Cable length: 5 m

## Product Features

- Easy and safe: 100% electrically tested plug-in components
- Our standard: robust halogen-free PUR cable

## Key commercial data

|                         |               |
|-------------------------|---------------|
| <b>package_quantity</b> | 1             |
| <b>GTIN</b>             | 4017918134563 |

## Technical data

### Dimensions

|   |       |
|---|-------|
| <b>Length of cable</b>                            | 5 m   |
| <b>Stripping length of the free conductor end</b> | 50 mm |

### Ambient conditions

|  |                                  |
|--|----------------------------------|
| <b>Ambient temperature (operation)</b> | -25 °C ... 90 °C (Plug / socket) |
| <b>Degree of protection</b>            | IP65                             |
| <b>Degree of protection</b>            | IP67                             |
| <b>Degree of protection</b>            | IP68                             |

### General

|                                     |                              |
|-------------------------------------|------------------------------|
| <b>Rated current at 40°C</b>        | 4 A                          |
| <b>Rated voltage</b>                | 60 V                         |
| <b>Number of positions</b>          | 3                            |
| <b>Contact resistance</b>           | ≤ 5 mΩ                       |
| <b>Insulation resistance</b>        | ≥ 100 MΩ                     |
| <b>Coding</b>                       | A - standard                 |
| <b>Standards/regulations</b>        | M8 connector IEC 61076-2-104 |
| <b>Status display</b>               | No                           |
| <b>Protective circuit/component</b> | Unwired                      |
| <b>Surge voltage category</b>       | II                           |
| <b>Pollution degree</b>             | 3                            |
| <b>Insertion/withdrawal cycles</b>  | ≥ 100                        |

## Sensor/Actuator cable - SAC-3P- 5,0-PUR/M 8FS - 1669628

### Technical data

#### General

|               |                        |
|---------------|------------------------|
| <b>Torque</b> | 0.2 Nm (M8 connectors) |
|---------------|------------------------|

#### 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                |
| <b>Cable type (abbreviation)</b>                     | PUR                                   |
| <b>Cable abbreviation</b>                            | Li9Y11Y-HF                            |
| <b>UL AWM style</b>                                  | 20549                                 |
| <b>Conductor cross section</b>                       | 3x 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>                         | ≥ 0.38 mm (Core insulation)           |
| <b>Thickness, insulation</b>                         | approx. 0.9 mm (Outer cable sheath)   |
| <b>Wire colors</b>                                   | brown, blue, black                    |
| <b>Overall twist</b>                                 | 3 wires, twisted                      |
| <b>Length of twist, overall twist</b>                | 40 mm                                 |
| <b>External sheath, color</b>                        | black-gray RAL 7021                   |
| <b>External cable diameter D</b>                     | 4.4 mm ±0.15 mm                       |
| <b>Smallest bending radius, fixed installation</b>   | 22 mm                                 |
| <b>Smallest bending radius, movable installation</b> | 44 mm                                 |
| <b>Number of bending cycles</b>                      | 4000000                               |
| <b>Bending radius</b>                                | 44 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>                                  | 24 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>                          | ≤ 78 Ω/km (at 20 °C)                  |
| <b>Nominal voltage, cable</b>                        | ≤ 300 V                               |
| <b>Test voltage, cable</b>                           | ≥ 3000 V                              |

## Sensor/Actuator cable - SAC-3P- 5,0-PUR/M 8FS - 1669628

### Technical data

#### Cable

|  |   |
|--|---|
| <b>Special properties</b>              | Flexible cable conduit capable                                      |
| <b>Special properties</b>              | Silicone-free   |
| <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>Resistance to oil</b>               | in accordance with DIN EN 60811-2-1                                 |
| <b>Other resistance</b>                | hydrolysis and microbe resistant                                    |
| <b>Other resistance</b>                | Highly resistant to acids, alkaline solutions and solvents          |
| <b>Other resistance</b>                | Resistant to salt water   |
| <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 /

---

# Sensor/Actuator cable - SAC-3P- 5,0-PUR/M 8FS - 1669628

## approvals

### Approval details

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

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

|             |  |
|-------------|--|
| <b>GOST</b> |  |
|-------------|--|

|                     |  |
|---------------------|--|
| <b>cULus Listed</b> |  |
|---------------------|--|

## accessories

### Conductor marking

PABA WH/15 - 1013151



PABA YE/15 - 1013698



## Sensor/Actuator cable - SAC-3P- 5,0-PUR/M 8FS - 1669628

### 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-3P- 5,0-PUR/M 8FS - 1669628

### accessories

CUTFOX-S VDE - 1212207



---

### Stripping tool

WIREFOX SAC-1 - 1212757



WIREFOX SAC - 1212623



WIREFOX 10 - 1212150



---

### Protective cap

PROT-M 8 MS-PA-CHAIN - 1430860



---

### Torque tool

# Sensor/Actuator cable - SAC-3P- 5,0-PUR/M 8FS - 1669628

accessories

TSD 02 SAC - 1208487



---

## Screwdriver tools

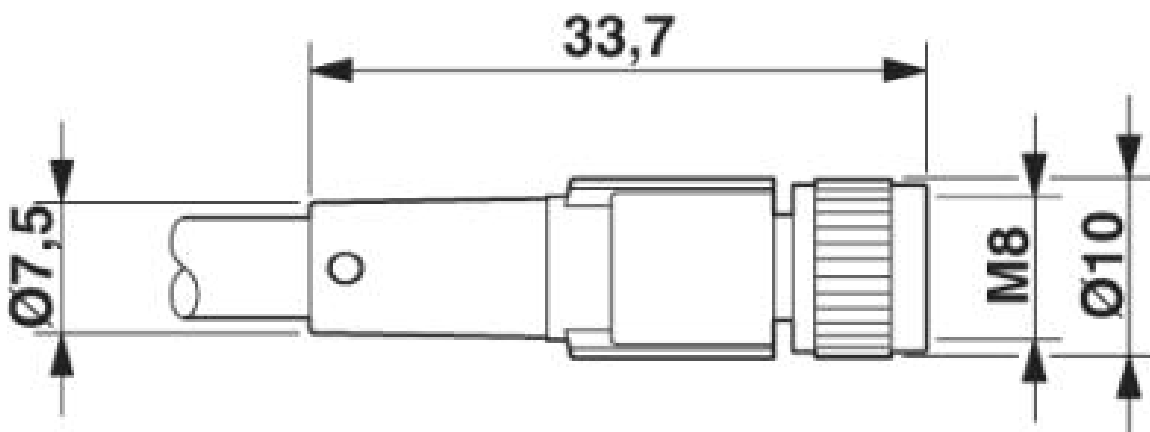
SAC BIT M8-D10 - 1208461



---

## Drawings

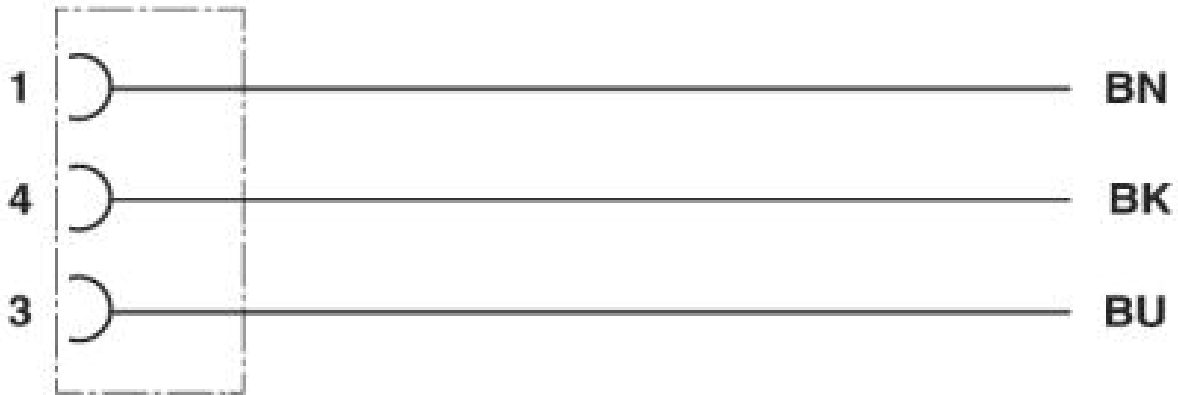
Dimensioned drawing



Socket M8 x 1, straight

## Sensor/Actuator cable - SAC-3P- 5,0-PUR/M 8FS - 1669628

Circuit diagram

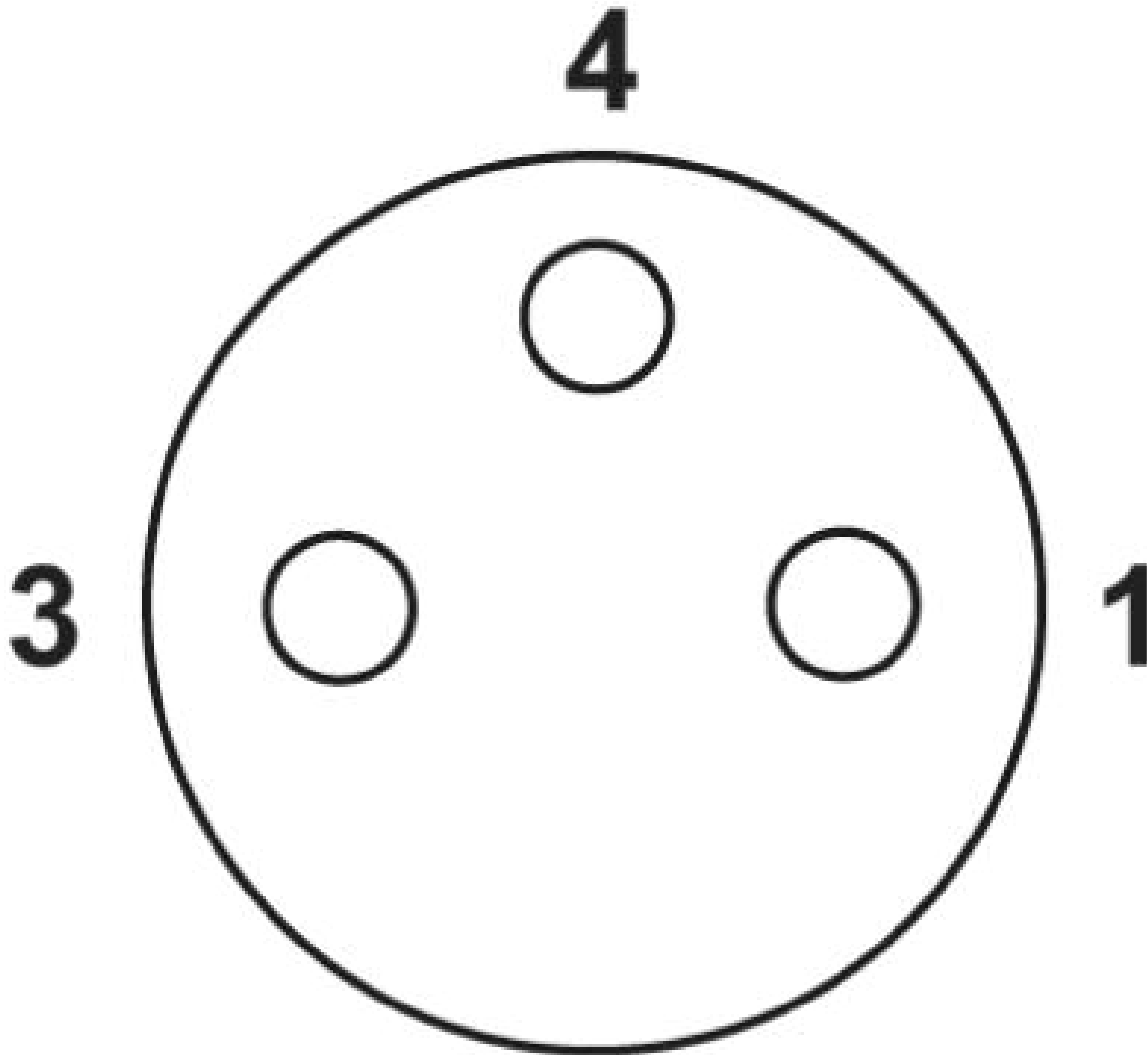


Contact assignment of M8 socket



# Sensor/Actuator cable - SAC-3P- 5,0-PUR/M 8FS - 1669628

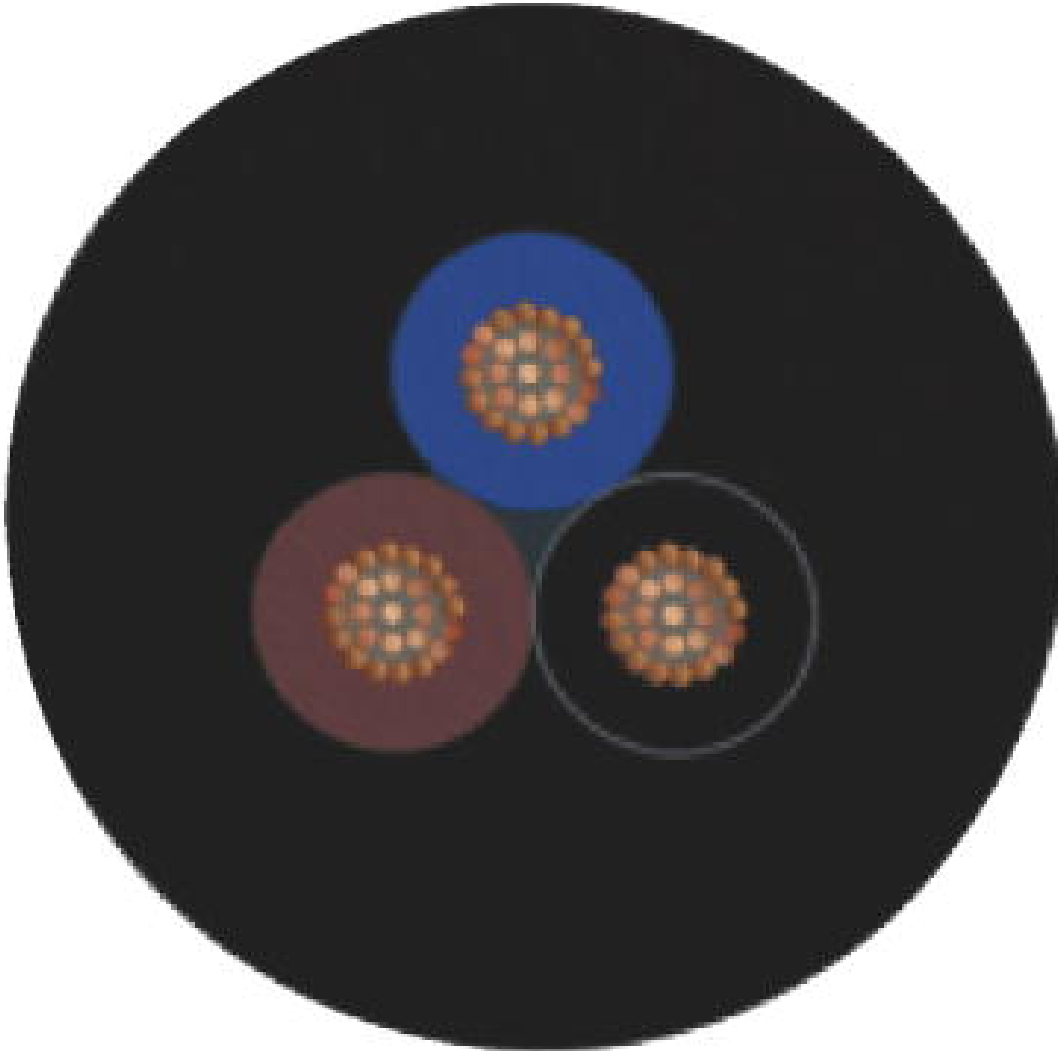
Schematic diagram



Pin assignment M8 socket, 3-pos., view female side

## Sensor/Actuator cable - SAC-3P- 5,0-PUR/M 8FS - 1669628

Cable cross section



PUR halogen-free black [PUR]

© Phoenix Contact 2014 - all rights reserved  
<http://www.phoenixcontact.com>