

# Sensor/Actuator cable - SAC-3P- 3,0-PUR/M 8FS - 1669725

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Sensor/Actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, 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

## Key commercial data

|                         |               |
|-------------------------|---------------|
| <b>package_quantity</b> | 1             |
| <b>GTIN</b>             | 4017918134624 |

## Technical data

### Dimensions

|   |       |
|---|-------|
| <b>Length of cable</b>                            | 3 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                        |

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### 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                              |

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### 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

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UL Listed / cUL Listed / GOST / cULus Listed /

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# Sensor/Actuator cable - SAC-3P- 3,0-PUR/M 8FS - 1669725

## 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- 3,0-PUR/M 8FS - 1669725

### accessories

PABA RD/15 - 1013944



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### Marker carrier cable

PATG 2/15 - 1013038



PATG 3/15 - 1013041



PATG 4/15 - 1013054



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### Marker pen

B-STIFT - 1051993



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### Cutting tools

## Sensor/Actuator cable - SAC-3P- 3,0-PUR/M 8FS - 1669725

### accessories

CUTFOX-S VDE - 1212207



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### Stripping tool

WIREFOX SAC-1 - 1212757



WIREFOX SAC - 1212623



WIREFOX 10 - 1212150



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### Protective cap

PROT-M 8 MS-PA-CHAIN - 1430860



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### Torque tool

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accessories

TSD 02 SAC - 1208487



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## Screwdriver tools

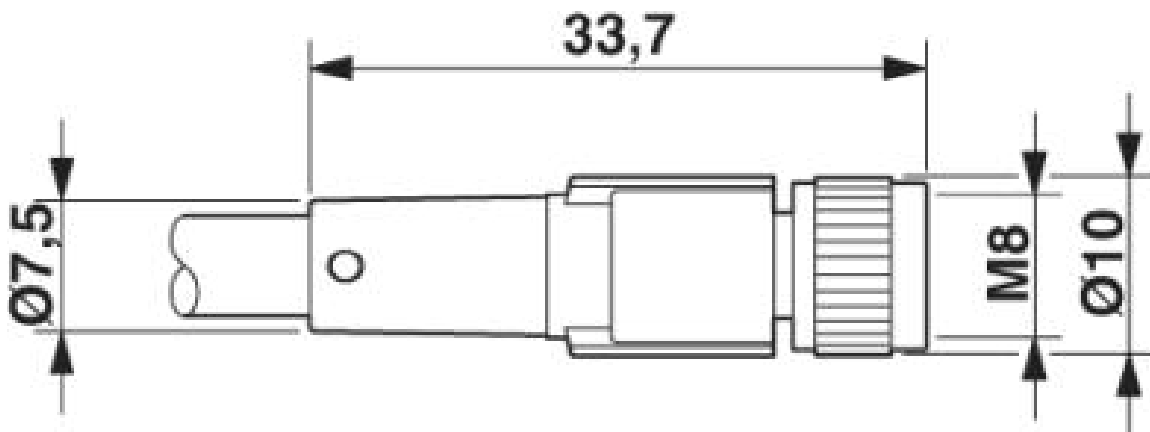
SAC BIT M8-D10 - 1208461



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## Drawings

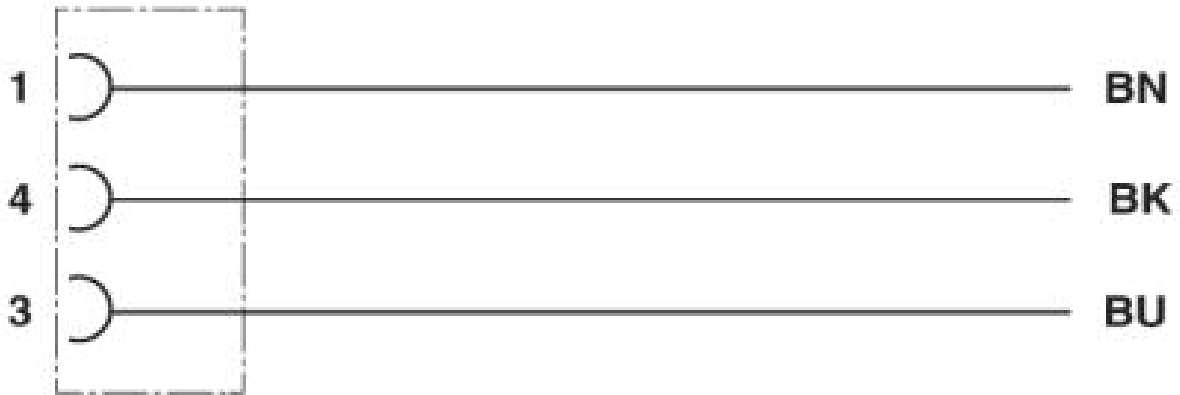
Dimensioned drawing



Socket M8 x 1, straight

## Sensor/Actuator cable - SAC-3P- 3,0-PUR/M 8FS - 1669725

Circuit diagram

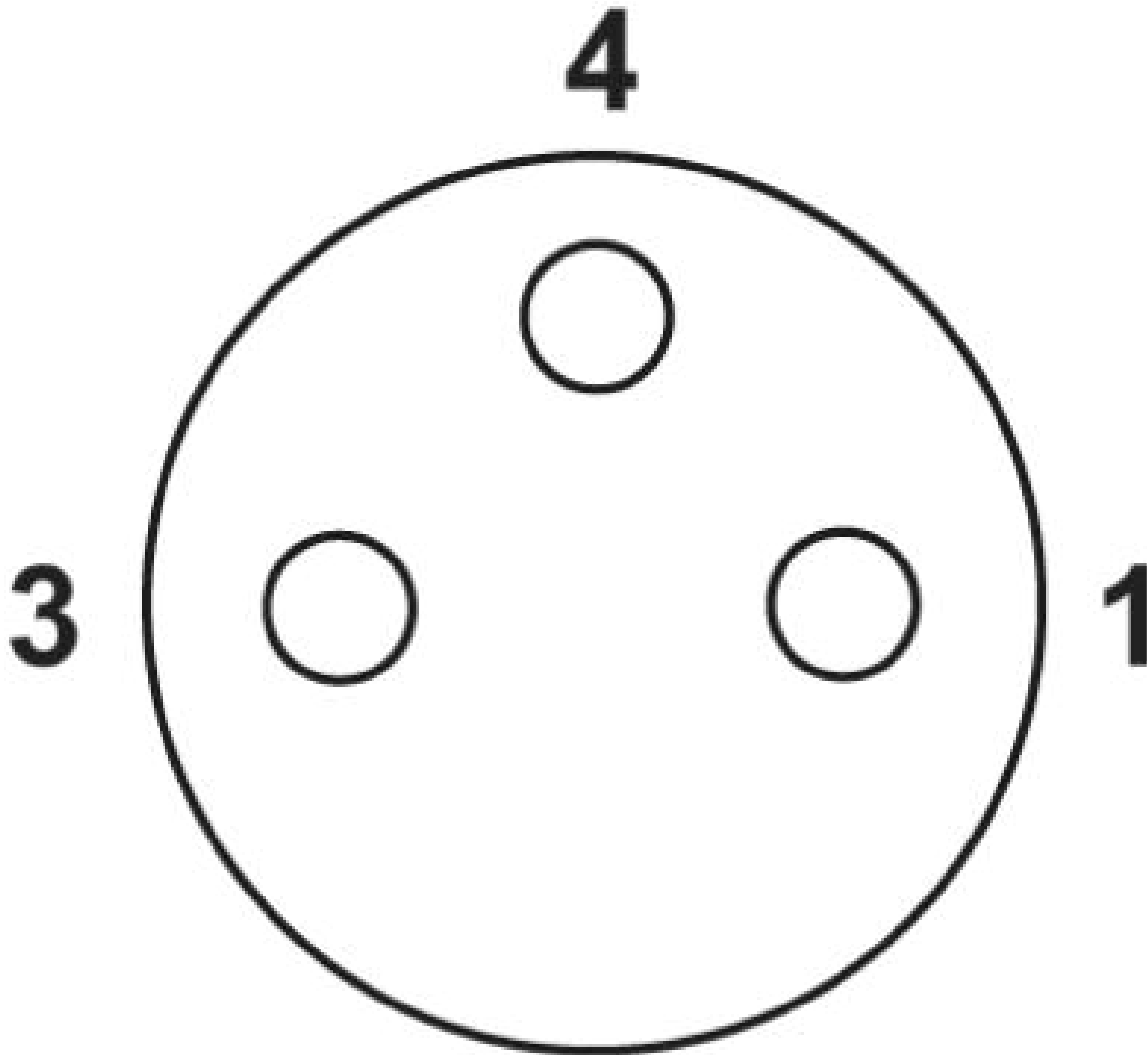


Contact assignment of M8 socket



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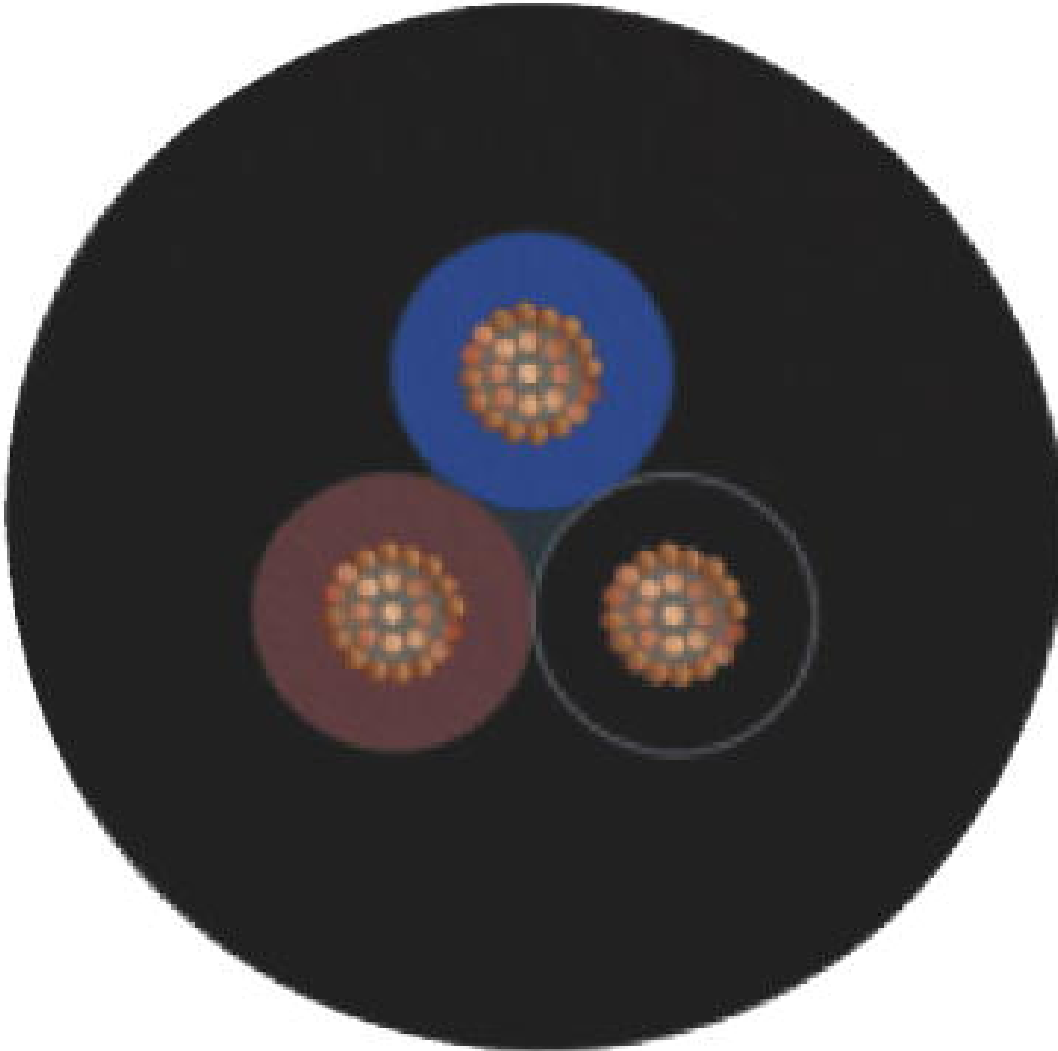
Schematic diagram



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

## Sensor/Actuator cable - SAC-3P- 3,0-PUR/M 8FS - 1669725

Cable cross section



PUR halogen-free black [PUR]

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