

## Sensor/Actuator cable - SAC-3P-M 8MS/10,0-PUR/M 8FS - 1693322

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Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, Plug straight M8, on Socket straight M8, Cable length: 10 m

### Key commercial data

|                  |               |
|------------------|---------------|
| package_quantity | 1             |
| GTIN             | 4017918438746 |

### Technical data

#### Dimensions

|                 |      |
|-----------------|------|
| Length of cable | 10 m |
|-----------------|------|

#### Ambient conditions

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

#### General

|                        |              |
|------------------------|--------------|
| Rated current at 40°C  | 4 A          |
| Rated voltage          | 60 V         |
| Number of positions    | 3            |
| Contact resistance     | ≤ 5 mΩ       |
| Insulation resistance  | ≥ 100 MΩ     |
| Coding                 | A - standard |
| Status display         | No           |
| Surge voltage category | II           |
| Pollution degree       | 3            |

#### Material

|                                         |                                             |
|-----------------------------------------|---------------------------------------------|
| Inflammability class 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 |

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## Technical data

### Material

|                  |                              |
|------------------|------------------------------|
| Material, knurls | Zinc die-cast, nickel-plated |
| Sealing material | NBR                          |

### Cable

|                                               |                                                                     |
|-----------------------------------------------|---------------------------------------------------------------------|
| Cable type                                    | PUR halogen-free black                                              |
| Cable type (abbreviation)                     | PUR                                                                 |
| Cable abbreviation                            | Li9Y11Y-HF                                                          |
| UL AWM style                                  | 20549                                                               |
| Conductor cross section                       | 3x 0.25 mm <sup>2</sup> (signal line)                               |
| AWG signal line                               | 24                                                                  |
| Conductor structure signal line               | 32x 0.10 mm                                                         |
| Core diameter including insulation            | 1.17 mm ±0.02 mm (signal line)                                      |
| Thickness, insulation                         | ≥ 0.38 mm (Core insulation)                                         |
| Thickness, insulation                         | approx. 0.9 mm (Outer cable sheath)                                 |
| Wire colors                                   | brown, blue, black                                                  |
| Overall twist                                 | 3 wires, twisted                                                    |
| Length of twist, overall twist                | 40 mm                                                               |
| External sheath, color                        | Black-gray RAL 7021                                                 |
| External cable diameter D                     | 4.4 mm ±0.15 mm                                                     |
| Smallest bending radius, fixed installation   | 22 mm                                                               |
| Smallest bending radius, movable installation | 44 mm                                                               |
| Number of bending cycles                      | 4000000                                                             |
| Bending radius                                | 44 mm                                                               |
| Traversing path                               | 10 m                                                                |
| Traversing rate                               | 3 m/s                                                               |
| Acceleration                                  | 10 m/s <sup>2</sup>                                                 |
| Cable weight                                  | 24 kg/km                                                            |
| Outer sheath, material                        | PUR                                                                 |
| Material conductor insulation                 | PP                                                                  |
| Conductor material                            | Bare Cu litz wires                                                  |
| Insulation resistance                         | ≥ 100 GΩ*km (at 20 °C)                                              |
| Conductor resistance                          | ≤ 78 Ω/km (at 20 °C)                                                |
| Nominal voltage, cable                        | ≤ 300 V                                                             |
| Test voltage, cable                           | ≥ 3000 V                                                            |
| Special properties                            | Flexible cable conduit capable                                      |
| Special properties                            | Silicone-free                                                       |
| Special properties                            | Free of substances which would hinder coating with paint or varnish |
| Flame resistance                              | in accordance with DIN UL-Style 20549                               |
| Halogen-free                                  | in accordance with DIN VDE 0472 part 815                            |
| Resistance to oil                             | in accordance with DIN EN 60811-2-1                                 |

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## Technical data

### Cable

|                                        |                                                            |
|----------------------------------------|------------------------------------------------------------|
| <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 / cULus Listed /

### Approval details

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

## Sensor/Actuator cable - SAC-3P-M 8MS/10,0-PUR/M 8FS - 1693322

### approvals

|                    |       |
|--------------------|-------|
|                    |       |
| Nominal voltage UN | 125 V |
| Nominal current IN | 4 A   |
| mm²/AWG/kcmil      |       |

|                                                                                              |       |
|----------------------------------------------------------------------------------------------|-------|
| cUL Listed  |       |
|                                                                                              |       |
| Nominal voltage UN                                                                           | 125 V |
| Nominal current IN                                                                           | 4 A   |
| mm²/AWG/kcmil                                                                                |       |

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

### accessories

#### Protective cap

PROT-M 8 FS-PA-CHAIN - 1430857



PROT-M 8 MS-PA-CHAIN - 1430860



### Conductor marking

PABA WH/15 - 1013151



## Sensor/Actuator cable - SAC-3P-M 8MS/10,0-PUR/M 8FS - 1693322

### accessories

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PABA YE/15 - 1013698



PABA RD/15 - 1013944



### Marker carrier cable

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PATO 2/15 - 1013122



PATO 3/15 - 1013135



PATO 4/15 - 1013148



### Marker pen

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## Sensor/Actuator cable - SAC-3P-M 8MS/10,0-PUR/M 8FS - 1693322

### accessories

B-STIFT - 1051993



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### Torque tool

TSD 02 SAC - 1208487



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### Screwdriver tools

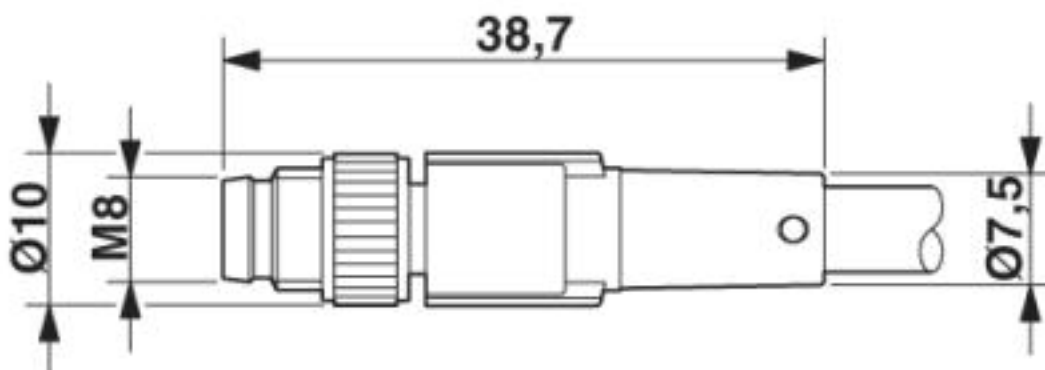
SAC BIT M8-D10 - 1208461



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### Drawings

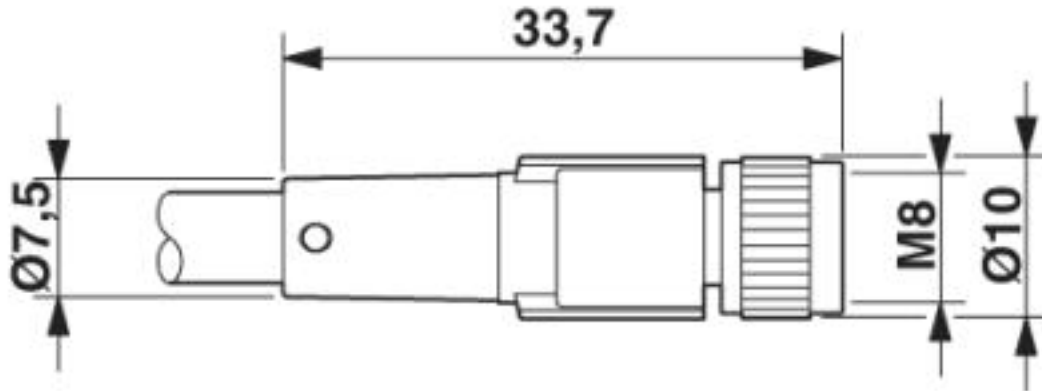
Dimensioned drawing



M8 x 1 male plug, straight version

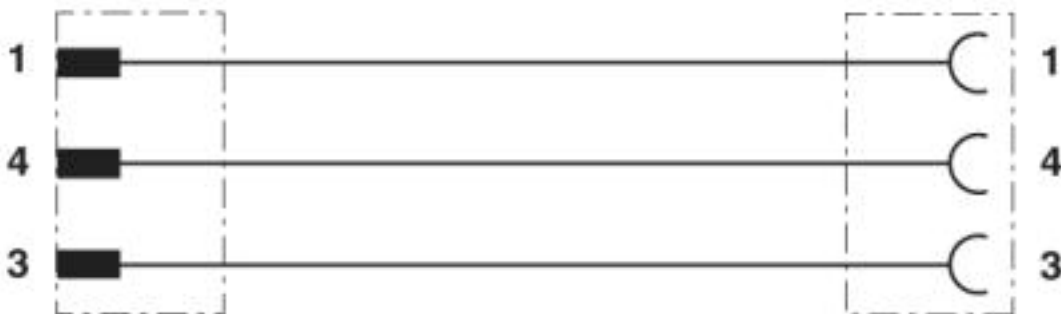
## Sensor/Actuator cable - SAC-3P-M 8MS/10,0-PUR/M 8FS - 1693322

Dimensioned drawing



Socket M8 x 1, straight

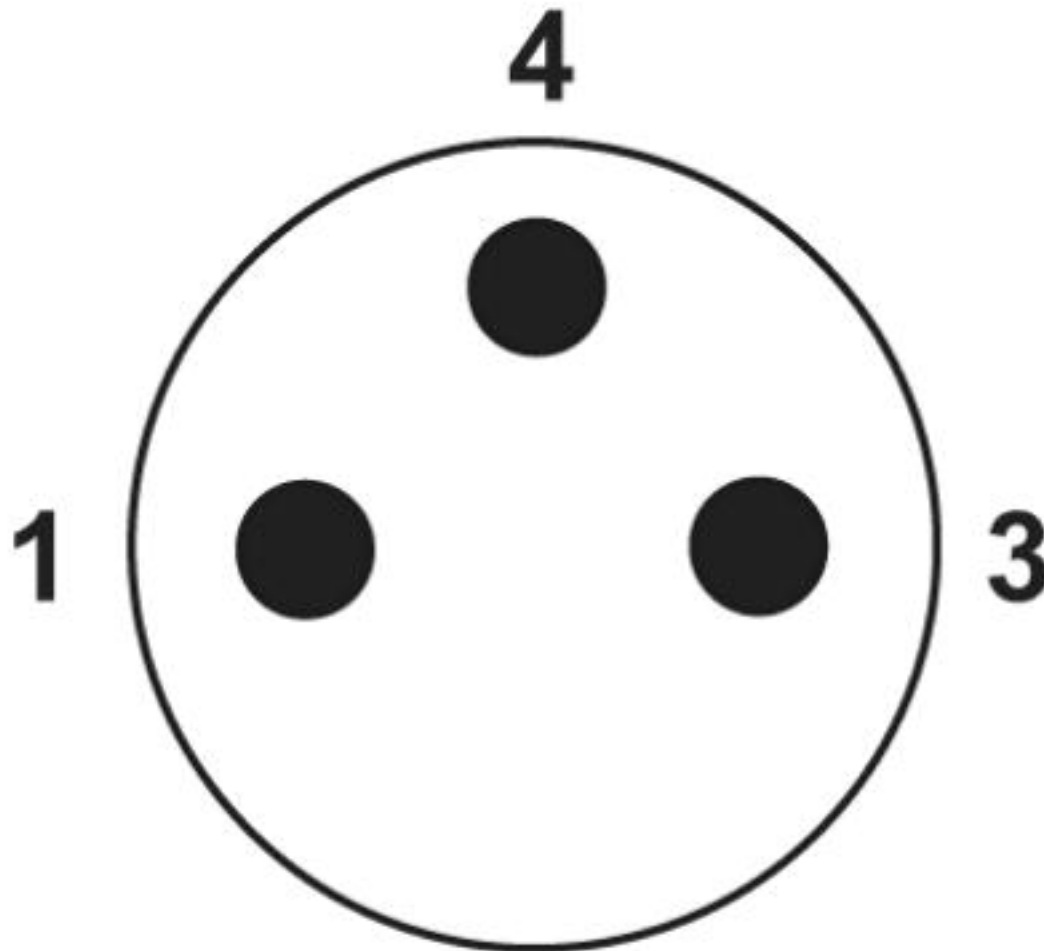
Circuit diagram



Contact assignment of M8 plugs/sockets

## Sensor/Actuator cable - SAC-3P-M 8MS/10,0-PUR/M 8FS - 1693322

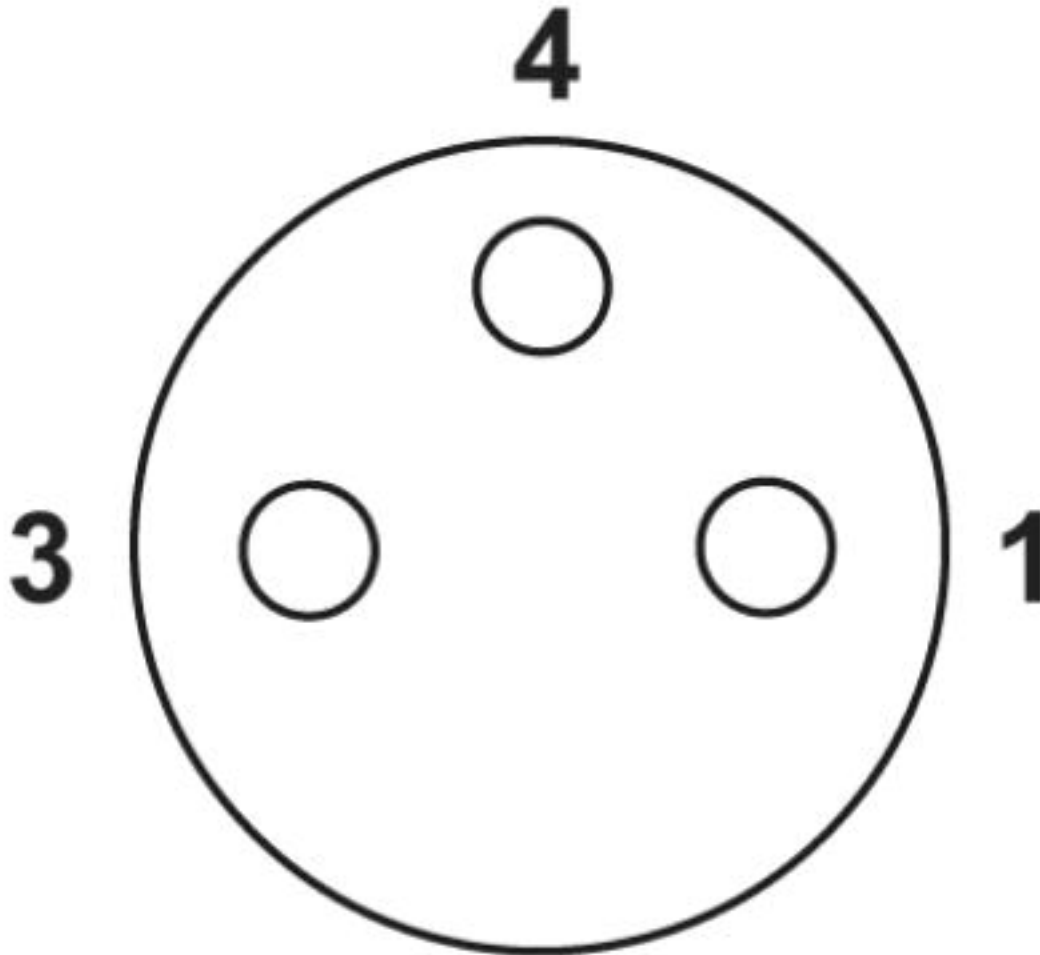
Schematic diagram



Pin assignment M8 plug, 3-pos., view male side

## Sensor/Actuator cable - SAC-3P-M 8MS/10,0-PUR/M 8FS - 1693322

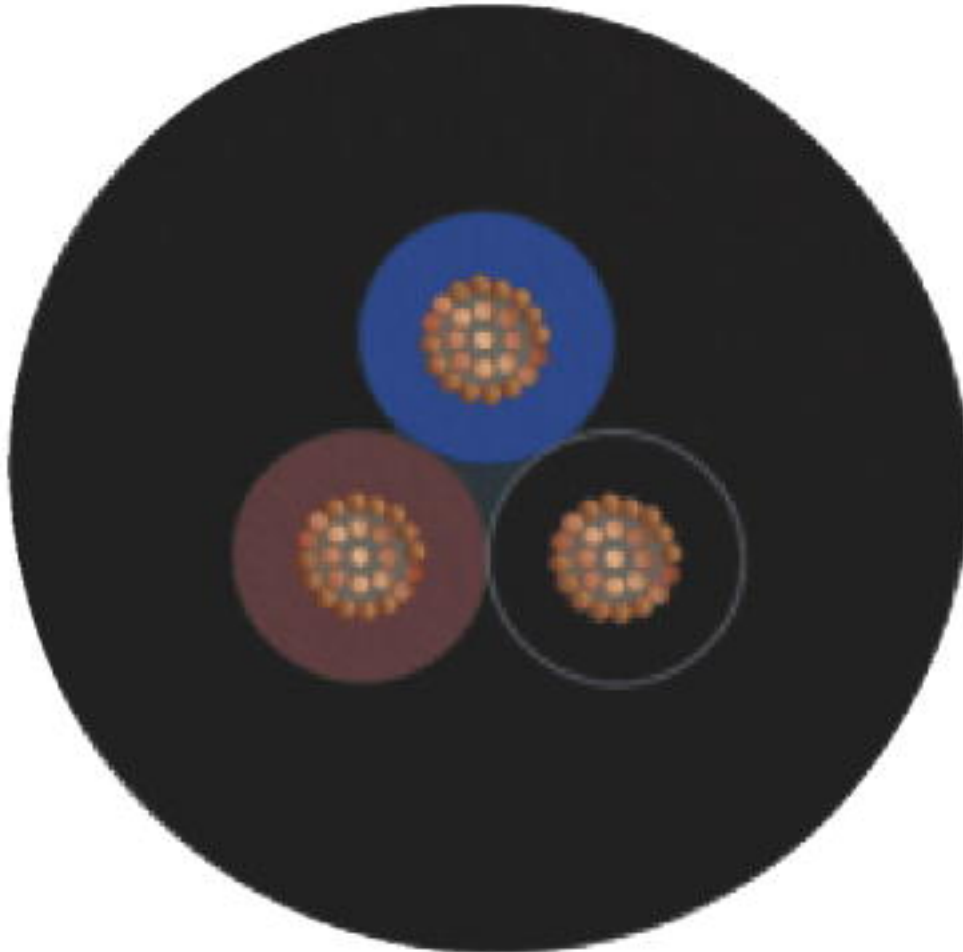
Schematic diagram



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

## Sensor/Actuator cable - SAC-3P-M 8MS/10,0-PUR/M 8FS - 1693322

Cable cross section



PUR halogen-free black [PUR]

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