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## Sensor/Actuator cable - SAC-3P-M 8MS/5,0-PUR/M 8FR - 1693270

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Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, Plug straight M8, on Socket angled M8, Cable length: 5 m



### Key commercial data

|                                      |           |
|--------------------------------------|-----------|
| Packing unit                         | 1 1       |
| Weight per Piece (excluding packing) | 120.0 GRM |
| Custom tariff number                 | 85444290  |
| Country of origin                    | Germany   |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 5 m |
|-----------------|-----|

#### Ambient conditions

|                      |      |
|----------------------|------|
| Degree of protection | IP65 |
|                      | IP67 |
|                      | 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            |

# Sensor/Actuator cable - SAC-3P-M 8MS/5,0-PUR/M 8FR - 1693270

## Technical data

### 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 |
| 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)           |
|   | 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                               |

# Sensor/Actuator cable - SAC-3P-M 8MS/5,0-PUR/M 8FR - 1693270

## Technical data

### Cable

|                                 |   |
|---------------------------------|---|
| Test voltage, cable             | ≥ 3000 V  |
| Special properties              | Flexible cable conduit capable                                      |
|                                 | Silicone-free   |
|                                 | 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                                 |
| Other resistance                | hydrolysis and microbe resistant                                    |
|                                 | Highly resistant to acids, alkaline solutions and solvents          |
|                                 | Resistant to salt water   |
|                                 | partly UV-resistant in accordance with DIN EN ISO 4892-2-A          |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)                        |
|                                 | -25 °C ... 80 °C (cable, flexible installation)                     |

## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27061801 |

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000830 |
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |

## Sensor/Actuator cable - SAC-3P-M 8MS/5,0-PUR/M 8FR - 1693270

### Approvals

#### Approvals

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##### Approvals

UL Listed / cUL Listed / cULus Listed

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##### Ex Approvals

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##### Approvals submitted

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#### Approval details

|  |       |
|--|-------|
| UL Listed  |       |
| Nominal current IN   | 4 A   |
| Nominal voltage UN   | 125 V |

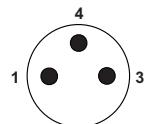
|  |       |
|--|-------|
| cUL Listed  |       |
| Nominal current IN   | 4 A   |
| Nominal voltage UN   | 125 V |

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

### Drawings

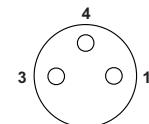
## Sensor/Actuator cable - SAC-3P-M 8MS/5,0-PUR/M 8FR - 1693270

Schematic diagram



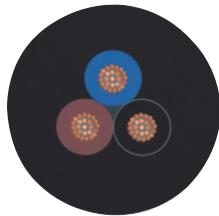
Pin assignment M8 plug, 3-pos., view male side

Schematic diagram



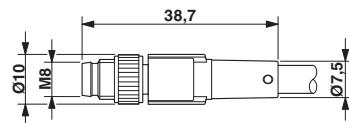
Pin assignment M8 socket, 3-pos., view female side

Cable cross section



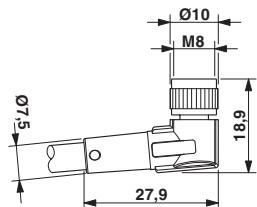
PUR halogen-free black [PUR]

Dimensioned drawing



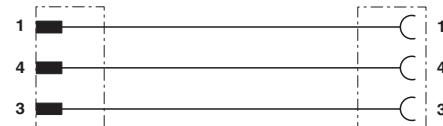
M8 x 1 male plug, straight version

Dimensioned drawing



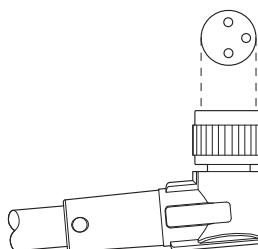
Socket M8 x 1, angled

Circuit diagram



Contact assignment of M8 plugs/sockets

Schematic diagram



Layout of connector pin assignments

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