

## 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

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 1 pc                                                                                                    |
| GTIN                                 | <br>4 017918 134624 |
| Weight per Piece (excluding packing) | 72.1 g                                                                                                  |
| Custom tariff number                 | 85444290                                                                                                |
| Country of origin                    | Germany                                                                                                 |

### 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                             |
|                                 | IP67                             |
|                                 | IP68                             |

#### General

|                       |     |
|-----------------------|-----|
| Rated current at 40°C | 4 A |
|-----------------------|-----|

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### Technical data

#### General

|                              |                              |
|------------------------------|------------------------------|
| Rated voltage                | 60 V                         |
| Number of positions          | 3                            |
| Insulation resistance        | $\geq 100 \text{ M}\Omega$   |
| Coding                       | A - standard                 |
| Standards/regulations        | M8 connector IEC 61076-2-104 |
| Status display               | No                           |
| Protective circuit/component | Unwired                      |
| Overvoltage category         | II                           |
| Pollution degree             | 3                            |
| Insertion/withdrawal cycles  | $\geq 100$                   |
| Torque                       | 0.2 Nm (M8 connectors)       |

#### Material

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Flammability rating 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                                         |

#### Standards and Regulations

|                                        |                 |
|----------------------------------------|-----------------|
| Standard designation                   | M8 connector    |
| Standards/regulations                  | IEC 61076-2-104 |
| Flammability rating according to UL 94 | HB              |

#### 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 $\pm$ 0.02 mm (signal line)      |
| Thickness, insulation              | $\geq 0.38 \text{ mm}$ (Core insulation) |
| Wire colors                        | brown, blue, black                       |
| Overall twist                      | 3 wires, twisted                         |
| Length of twist, overall twist     | 40 mm                                    |

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### Technical data

#### Cable

|                                               |                                                                     |
|-----------------------------------------------|---------------------------------------------------------------------|
| External sheath, color                        | black-gray RAL 7021                                                 |
| Outer sheath thickness                        | approx. 0.9 mm                                                      |
| External cable diameter D                     | 4.4 mm $\pm$ 0.15 mm                                                |
| Smallest bending radius, fixed installation   | 22 mm                                                               |
| Smallest bending radius, movable installation | 44 mm                                                               |
| Minimum bending radius, fixed installation    | 5 x D                                                               |
| Minimum bending radius, flexible installation | 10 x D                                                              |
| 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                         | $\geq 100 \text{ G}\Omega \cdot \text{km}$ (at 20 °C)               |
| Conductor resistance                          | $\leq 78 \text{ }\Omega/\text{km}$ (at 20 °C)                       |
| Nominal voltage, cable                        | $\leq 300 \text{ V}$                                                |
| Test voltage, cable                           | $\geq 3000 \text{ V}$                                               |
| 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 |
|------------|----------|

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### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| 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 | 27279218 |

#### 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 |

### Approvals

#### Approvals

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##### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

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##### Ex Approvals

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##### Approvals submitted

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#### Approval details

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### Approvals

|                                                                                             |       |
|---------------------------------------------------------------------------------------------|-------|
| UL Listed  |       |
|                                                                                             |       |
| Nominal current I <sub>N</sub>                                                              | 4 A   |
| Nominal voltage U <sub>N</sub>                                                              | 125 V |

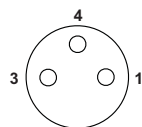
|                                                                                              |       |
|----------------------------------------------------------------------------------------------|-------|
| cUL Listed  |       |
|                                                                                              |       |
| Nominal current I <sub>N</sub>                                                               | 4 A   |
| Nominal voltage U <sub>N</sub>                                                               | 125 V |

|     |
|-----|
| EAC |
|-----|

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

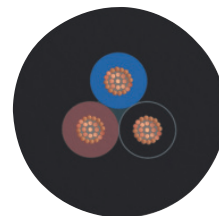
### Drawings

Schematic diagram



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

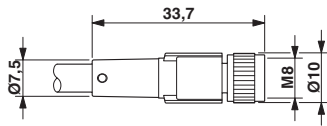
Cable cross section



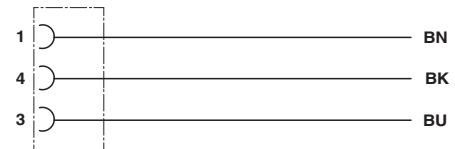
PUR halogen-free black [PUR]

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Dimensional drawing



Circuit diagram



Socket M8 x 1, straight

Contact assignment of M8 socket