

## Sensor/actuator cable - SAC-3P-M12MS/1,5-PUR/B-1L-Z - 1400778

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: A, on Valve connector B (10 mm), with 1 LED, connected with Z diode, cable length: 1.5 m



### Key Commercial Data

|              |                                                                                                       |
|--------------|-------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                  |
| GTIN         | <br>4 046356 511551 |
| GTIN         | 4046356511551                                                                                         |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 1.5 m |
|-----------------|-------|

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
|                                 | -20 °C ... 85 °C (valve plug)    |
|                                 | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection            | IP65                             |
|                                 | IP67                             |

#### General

|                              |                 |
|------------------------------|-----------------|
| Rated current at 40°C        | 4 A             |
| Rated voltage                | 24 V AC         |
|                              | 24 V DC         |
| Number of positions          | 3               |
| Coding                       | A - standard    |
| Standards/regulations        | Valve connector |
| Status display               | 1 LED           |
| Protective circuit/component | Z diode         |
| Overvoltage category         | III             |
| Degree of pollution          | 3               |
| Insertion/withdrawal cycles  | ≥ 100           |
| Halogen-free                 | yes             |

#### Material

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## Technical data

### 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                          |
| Valve plug contact material            | CuSn                         |
| Valve plug contact surface material    | Sn                           |
| Valve plug contact insert material     | PA 6.6                       |
| Material housing valve plug            | TPU                          |
| Material, knurls                       | Zinc die-cast, nickel-plated |
| Sealing material                       | TPU (Seal molded)            |

### Standards and Regulations

|                          |                 |
|--------------------------|-----------------|
| Halogen-free             | yes             |
| Standards/specifications | Valve connector |

### Cable

|                                             |                                |
|---------------------------------------------|--------------------------------|
| Cable type                                  | PUR halogen-free black         |
| Cable type (abbreviation)                   | PUR                            |
| Cable abbreviation                          | Li9Y11Y-HF                     |
| UL AWM style                                | 20549                          |
| Conductor cross section                     | 3x 0.5 mm <sup>2</sup>         |
| AWG signal line                             | 20                             |
| Conductor structure signal line             | 28x 0.15 mm                    |
| Core diameter including insulation          | 1.5 mm ±0.05 mm (Signal line)  |
| Wire colors                                 | black 1, black 2, green/yellow |
| Overall twist                               | 3 wires, twisted               |
| External cable diameter D                   | 4.5 mm ±0.2 mm                 |
| Smallest bending radius, fixed installation | 22.5 mm                        |
| Number of bending cycles                    | 15000000                       |
| Bending radius                              | 50 mm                          |
| Traversing path                             | 0.9 m                          |
| Traversing rate                             | 5 m/s                          |
| Acceleration                                | 30 m/s <sup>2</sup>            |
| External sheath, color                      | black-gray RAL 7021            |
| Outer sheath, material                      | PUR                            |
| Material conductor insulation               | PP                             |
| Conductor material                          | Bare Cu litz wires             |
| Insulation resistance                       | min. 20 MΩ*km                  |
| Conductor resistance                        | 39 Ω/km (at 20 °C)             |
| Nominal voltage, cable                      | ≤ 300 V                        |
| Test voltage, cable                         | ≥ 1200 V                       |

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### Technical data

#### Cable

|                                 |                                                            |
|---------------------------------|------------------------------------------------------------|
| Other resistance                | largely oil-resistant                                      |
|                                 | partly UV-resistant in accordance with DIN EN ISO 4892-2-A |
| Flame resistance                | according to DIN VDE 0482                                  |
|                                 | According to DIN EN 50265-2-1                              |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815                   |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)               |
|                                 | -20 °C ... 80 °C (Cable, flexible installation)            |

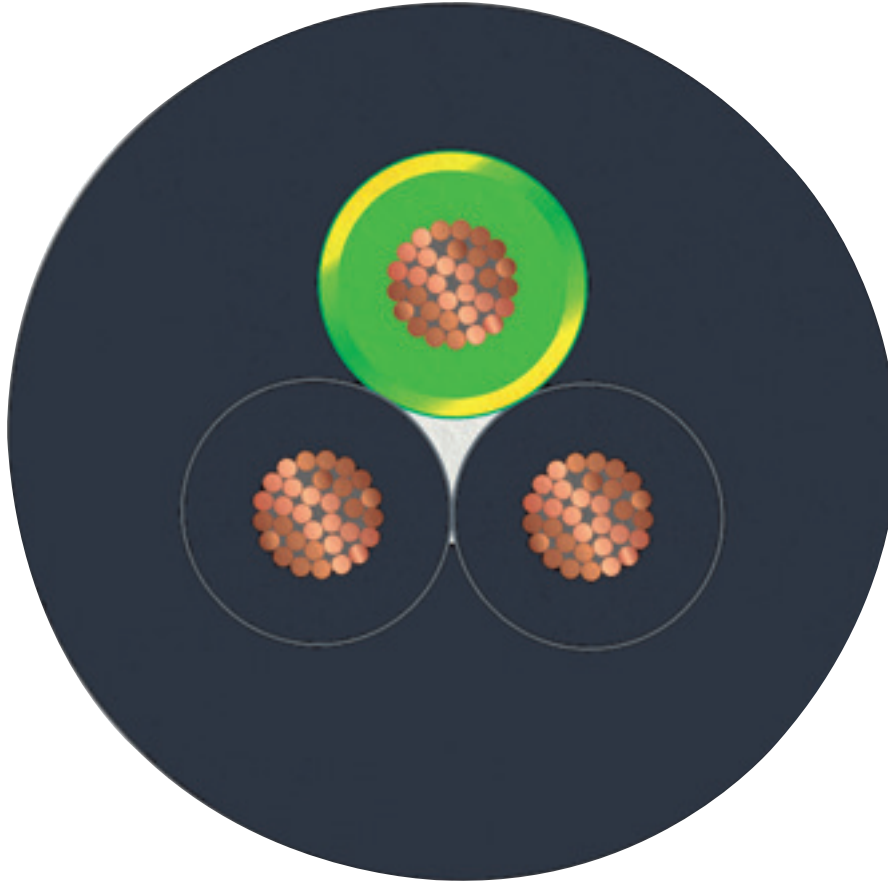
#### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| China RoHS | Environmentally Friendly Use Period = 50 years                                                      |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

### Drawings

## Sensor/actuator cable - SAC-3P-M12MS/1,5-PUR/B-1L-Z - 1400778

Cable cross section



PUR halogen-free black [PUR]

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27060312 |
| eCl@ss 11.0   | 27060312 |
| eCl@ss 4.0    | 27060300 |
| eCl@ss 4.1    | 27060300 |
| eCl@ss 5.0    | 27061800 |
| eCl@ss 5.1    | 27061800 |
| eCl@ss 6.0    | 27279200 |
| eCl@ss 7.0    | 27279218 |
| eCl@ss 9.0    | 27060312 |

ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
|----------|----------|

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### Classifications

#### ETIM

|          |          |
|----------|----------|
| ETIM 4.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |
| UNSPSC 19.0   | 31251501 |
| UNSPSC 20.0   | 31251501 |
| UNSPSC 21.0   | 31251501 |

### Approvals

#### Approvals

#### Approvals

CSAus / EAC-RoHS

#### Ex Approvals

#### Approval details

|                    |                                                                                     |                                                                                                                                         |       |
|--------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------|
| CSAus              |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 13631 |
| Nominal voltage UN |                                                                                     | 24 V                                                                                                                                    |       |
| Nominal current IN |                                                                                     | 4 A                                                                                                                                     |       |

|          |                                                                                     |                          |
|----------|-------------------------------------------------------------------------------------|--------------------------|
| EAC-RoHS |  | RU D-<br>DE.HB35.B.00387 |
|----------|-------------------------------------------------------------------------------------|--------------------------|

### Accessories

#### Accessories

#### Mounting material

## Sensor/actuator cable - SAC-3P-M12MS/1,5-PUR/B-1L-Z - 1400778

### Accessories

Screw - SAC-V-SCREW-M3-29 KNURL - 1403779



Fillister head screw with plastic knurl, M3 x 40

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