

## SAC-3P-MS/ 1,5-PUR/B-1L-Z SCO

Order No.: 1435302



Sensor/Actuator cable, 3-position, PUR, halogen-free, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Valve plug type B (10 mm), with 1 LED, connected with Z diode, Cable length: 1.5 m



### Commercial data

|                          |                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------|
| EAN                      | <br>4 046356 413626 |
| Pack                     | 1                                                                                                     |
| Customs tariff           | 85444290                                                                                              |
| Catalog page information | Page 106 (PC-2009)                                                                                    |

### Product notes

WEEE/RoHS-compliant since:  
2009-03-12



### Technical data

#### General data

|                       |                            |
|-----------------------|----------------------------|
| Rated current at 40°C | 4 A                        |
| Rated voltage         | 24 V                       |
| Number of positions   | 3                          |
| Volume resistance     | $\leq 5 \text{ m}\Omega$   |
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Length of cable       | 1.5 m                      |

|                                 |                                                      |
|---------------------------------|------------------------------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Male connector / female connector) |
|                                 | -20 °C ... 85 °C (valve plug)                        |

**General characteristics**

|                                    |                                |
|------------------------------------|--------------------------------|
| Standards/regulations              | M12 connector IEC 61076-2-101  |
| Coding                             | A - standard                   |
| Surge voltage category             | III                            |
| Pollution degree                   | 3                              |
| Degree of protection               | IP65/IP67                      |
| Contact material                   | CuSn                           |
| Contact surface material           | Ni/Au                          |
| Contact carrier material           | TPU GF                         |
| Material of grip body              | TPU                            |
| Contact material                   | CuSn                           |
| Contact surface material           | Sn                             |
| Valve plug contact insert material | PA 66                          |
| Material, housing, valve plug      | TPU                            |
| Material, knurls                   | Zinc die-cast, (nickel-plated) |
| Sealing material                   | TPU (Seal molded)              |
| Status display                     | 1 LED                          |
| Protective circuit/component       | Z diode                        |

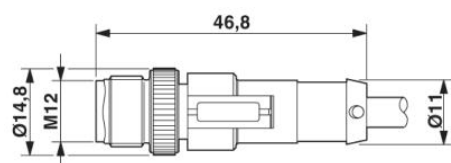
**Conductor data**

|                                    |                                |
|------------------------------------|--------------------------------|
| Cable type                         | PUR halogen-free black         |
| Cable type (abbreviation)          | PUR                            |
| Cable abbreviation                 | Li9Y11Y-HF                     |
| Conductor cross section            | 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                |
| External cable diameter            | 4.50 mm                        |
| Wire colors                        | Black 1, black 2, green/yellow |
| External sheath, color             | Black-gray RAL 7021            |
| Insulation resistance              | ≥ 20 MΩ*km                     |
| Conductor resistance               | ≤ 39 Ω/km                      |
| Nominal voltage, conductor         | ≤ 300 V                        |

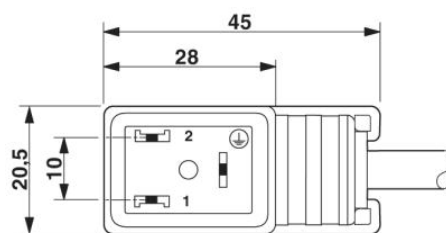
|                                             |                                                                                                                        |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Test voltage, conductor                     | 1200 V                                                                                                                 |
| Overall twist                               | 3 wires, twisted                                                                                                       |
| Outer sheath, material                      | PUR                                                                                                                    |
| Material conductor insulation               | PP                                                                                                                     |
| Conductor material                          | Bare Cu litz wires                                                                                                     |
| Cable weight                                | 30 kg/km                                                                                                               |
| Smallest bending radius, fixed installation | 22.5 mm                                                                                                                |
| Number of bending cycles                    | 4000000                                                                                                                |
| Bending radius                              | 45 mm                                                                                                                  |
| Traversing path                             | 10 m                                                                                                                   |
| Traversing rate                             | 3 m/s                                                                                                                  |
| Acceleration                                | 10 m/s <sup>2</sup>                                                                                                    |
| Ambient temperature (operation)             | -40 °C ... 80 °C (cable, fixed installation)<br>-20 °C ... 80 °C (cable, flexible installation)                        |
| Special properties                          | Flexible cable conduit capable<br>Silicone-free<br>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                            | Highly resistant to acids, alkaline solutions and solvents<br>hydrolysis and microbe resistant                         |

## Drawings

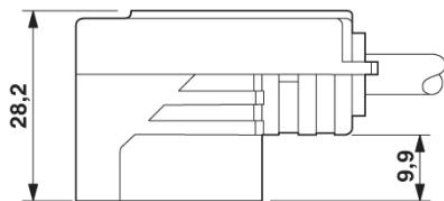
### Dimensioned drawing



M12 x 1 male connector, straight



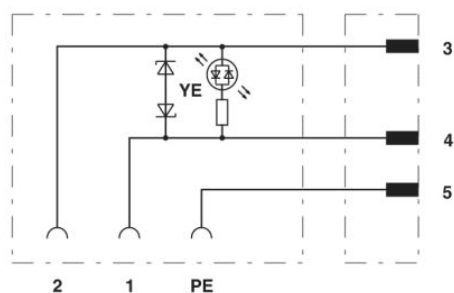
Valve plug, type B



Valve connector, type B, side view

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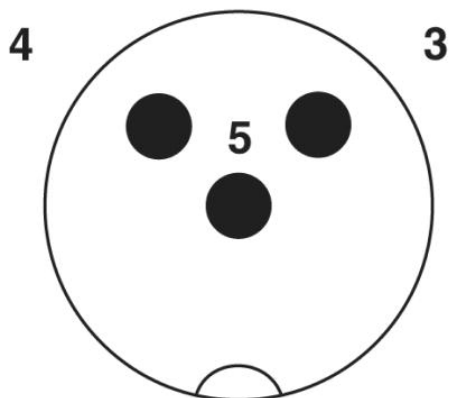
Circuit diagram



Contact assignment of M12 plug and valve connector

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Schematic diagram



Pin assignment M12 plug, 3-pos., valve connector