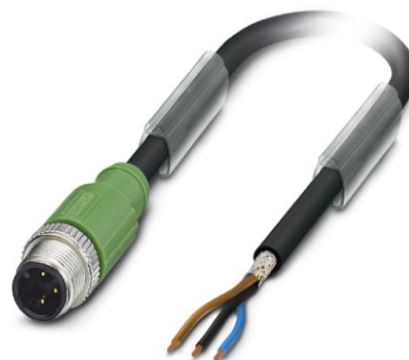


**SAC-3P-M12MS/ 1,5-PUR SH**

Order No.: 1682650

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1682650>

Sensor/Actuator cable, 3-position, PUR, halogen-free, Black-gray RAL 7021, shielded, Plug, straight M12, A-coded, on Free conductor end, Cable length: 1.5 m

**Commercial data**

|                          |                   |
|--------------------------|-------------------|
| EAN                      | 4017918168933     |
| Pack                     | 1 pcs.            |
| Customs tariff           | 85444290          |
| Weight/Piece             | 0.0834 KG         |
| Catalog page information | Page 79 (PC-2009) |

**Product notes**

WEEE/RoHS-compliant since:  
05/10/2007



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

**Technical data****General data**

|                       |                          |
|-----------------------|--------------------------|
| Nominal current $I_N$ | 4 A                      |
| Nominal voltage $U_N$ | 250 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                      |
| Stripping length of the free conductor end | 50 mm                      |

#### General characteristics

|                          |                                             |
|--------------------------|---------------------------------------------|
| Coding                   | A - standard                                |
| Surge voltage category   | II                                          |
| Pollution degree         | 3                                           |
| Degree of protection     | IP65/IP67/IP69K                             |
| 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)              |
| Status display           | No                                          |

#### Conductor data

|                                    |                                                                                 |
|------------------------------------|---------------------------------------------------------------------------------|
| Cable type                         | PUR halogen-free black shielded                                                 |
| Cable type (abbreviation)          | PUR                                                                             |
| Cable abbreviation                 | Li9Y-V1-C-V1-11Y                                                                |
| Conductor cross section            | 0.34 mm <sup>2</sup>                                                            |
| AWG signal line                    | 22                                                                              |
| Conductor structure, signal line   | 42x 0.10 mm                                                                     |
| Core diameter including insulation | 1.27 mm $\pm$ 0.02 mm                                                           |
| Thickness, insulation              | $\geq 0.21 \text{ mm}$ (Core insulation)<br>Approx. 1.1 mm (Outer cable sheath) |
| External cable diameter            | 5.90 mm                                                                         |
| Wire colors                        | Brown, blue, black                                                              |
| External sheath, color             | Black-gray RAL 7021                                                             |
| Insulation resistance              | $\geq 100 \text{ G}\Omega \cdot \text{km}$                                      |
| Conductor resistance               | max. 58 $\Omega/\text{km}$                                                      |
| Nominal voltage, conductor         | $\leq 300 \text{ V}$                                                            |
| Test voltage, conductor            | $\geq 3000 \text{ V}$                                                           |
| Overall twist                      | 3 wires, twisted                                                                |
| Shielding                          | Braided copper wires                                                            |
| Optical shield covering            | 85 %                                                                            |

|                                               |                                                                     |
|-----------------------------------------------|---------------------------------------------------------------------|
| Outer sheath, material                        | PUR                                                                 |
| Material conductor insulation                 | PP                                                                  |
| Conductor material                            | Bare Cu litz wires                                                  |
| Cable weight                                  | 44 kg/km                                                            |
| Smallest bending radius, fixed installation   | 59 mm                                                               |
| Smallest bending radius, movable installation | 59 mm                                                               |
| Number of bending cycles                      | 4000000                                                             |
| Bending radius                                | 59 mm                                                               |
| Traversing path                               | 10 m                                                                |
| Traversing rate                               | 3 m/s                                                               |
| Acceleration                                  | 10 m/s <sup>2</sup>                                                 |
| Ambient temperature (operation)               | -25 °C ... 80 °C (cable, fixed installation)                        |
|                                               | -5 °C ... 80 °C (cable, flexible installation)                      |
| Special properties                            | Flexible cable conduit capable                                      |
|                                               | Silicone-free                                                       |
|                                               | Free of substances which would hinder coating with paint or varnish |
| Flame resistance                              | As per UL-Style 20549                                               |
| Freedom from halogen                          | As per DIN VDE 0472 part 815                                        |
| Resistance to oil                             | complying with DIN EN 60811-2-1                                     |
| Other resistance                              | Highly resistant to acids, alkaline solutions and solvents          |
|                                               | hydrolysis and microbe resistant                                    |

#### Certificates / Approvals

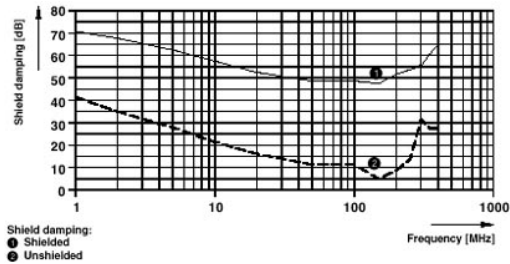


Certification

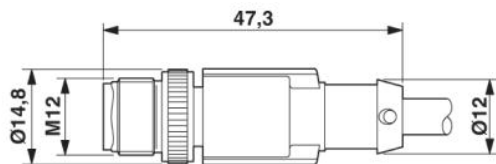
CUL Listed, GOST, UL Listed

## Diagrams/Drawings

### Diagram

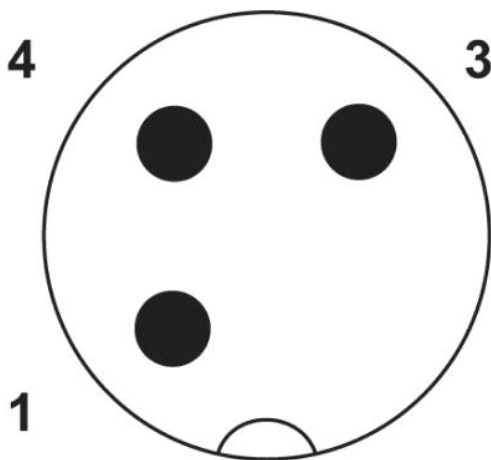


### Dimensioned drawing



M12 x 1 male connector, straight, shielded

### Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

**Address**

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