

## SAC-4P-M12MS/ 2,0-PUR/M12FS

Order No.: 1693571

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1693571>Sensor/actuator cable, straight M12 plug on straight M12 socket, 4-  
pos., cable length: 2.0 m

### Commercial data

|                |               |
|----------------|---------------|
| EAN            | 4017918445683 |
| Pack           | 1 pcs.        |
| Customs tariff | 85444290      |
| Weight/Piece   | 0.0772 KG     |

### Product notes

WEEE/RoHS-compliant since:  
12/01/2005

<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   | 4                          |
| Volume resistance     | $\leq 5 \text{ m}\Omega$   |
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |

|                                 |  |
|---------------------------------|--|
| Length of cable                 | 2 m  |
| Ambient temperature (operation) | -25 °C ... 90 °C (plug/socket)                 |
|                                 | -40 °C ... 80 °C (cable, fixed installation)   |
|                                 | -5 °C ... 80 °C (cable, flexible installation) |

#### General characteristics

|                                    |   |
|------------------------------------|---|
| Coding                             | A - standard                                |
| Inflammability class acc. to UL 94 | HB  |
| Surge voltage category             | II  |
| Pollution degree                   | 3   |
| Degree of protection               | IP65/IP68/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)              |
| Sealing material                   | NBR   |
| Status display                     | No  |

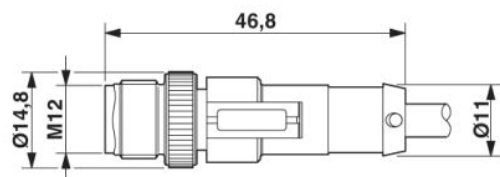
#### Conductor data

|                                    |                                     |
|------------------------------------|-------------------------------------|
| Cable type                         | PUR halogen-free black              |
| Cable type (abbreviation)          | PUR                                 |
| Cable abbreviation                 | Li9Y11Y-HF                          |
| 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 ±0.02 mm                    |
| Thickness, insulation              | Approx. 0.21 mm (Core insulation)   |
|                                    | Approx. 0.8 mm (Outer cable sheath) |
| External cable diameter            | 4.70 mm                             |
| Wire colors                        | Black, brown, blue, white           |
| External sheath, color             | Black-gray RAL 7021                 |
| Insulation resistance              | ≥ 100 MΩ*km                         |
| Conductor resistance               | ≤ 58 Ω/km                           |
| Nominal voltage, conductor         | 300 V                               |
| Test voltage, conductor            | 3000 V                              |

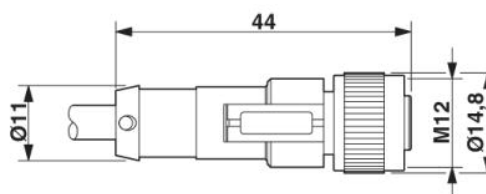
|   |   |
|---|---|
| Overall twist                                 | 4 wires, twisted  |
| Outer sheath, material                        | PUR   |
| Material conductor insulation                 | PP  |
| Conductor material                            | Bare Cu litz wires  |
| Cable weight                                  | 30 kg/km  |
| Smallest bending radius, movable installation | 47 mm   |
| Number of bending cycles                      | 4000000   |
| Bending radius                                | 47 mm   |
| Traversing path                               | 10 m  |
| Traversing rate                               | 3 m/s   |
| Acceleration                                  | 10 m/s <sup>2</sup>   |
| 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                                    |

## Drawings

### Dimensioned drawing



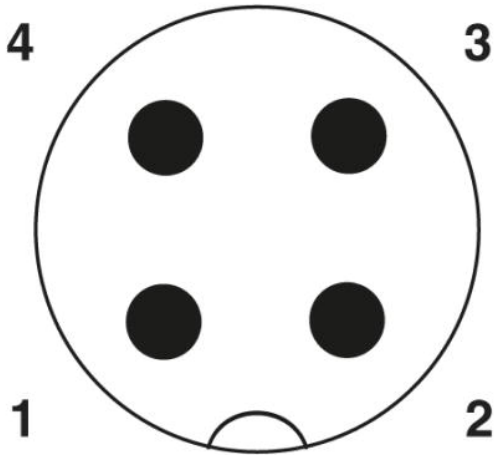
M12 x 1 male connector, straight



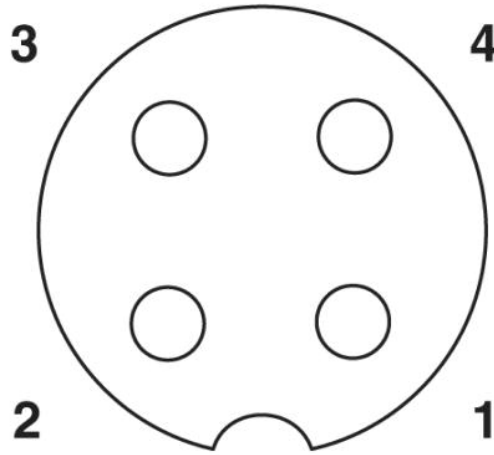
M12 x 1 female connector, straight

Schematic diagram

---



Pin assignment M12 plug, 4-pos., A-coded,  
view plug side



Pin assignment M12 socket, 4-pos., A-coded,  
view female side

**Address**

PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstr. 8  
32825 Blomberg, Germany  
Phone +49 5235 3 00  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>



© 2009 Phoenix Contact  
Technical modifications reserved;