

# SAC-4P-M12MR/3,0-PUR SH

Order No.: 1682883



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1682883>

Sensor/Actuator cable, 4-position, PUR, halogen-free, Black-gray RAL 7021, shielded, Plug, angled M12, A-coded, on Free conductor end, Cable length: 3 m

| Commercial data          |                   |
|--------------------------|-------------------|
| EAN                      | 4017918169015     |
| Pack                     | 5 pcs.            |
| Customs tariff           | 85444290          |
| Weight/Piece             | 0.1737 KG         |
| Catalog page information | Page 85 (PC-2009) |

#### Product notes

WEEE/RoHS-compliant since:  
06/01/2005



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| 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                            | 3 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 mm (Outer cable sheath) |
| External cable diameter            | 5.90 mm   |
| Wire colors                        | Brown, white, 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                      | 4 wires, twisted  |
| Shielding                          | Braided shielding made of tin-plated copper wires                             |
| Optical shield covering            | 85 %  |

|   |  |
|---|--|
| Outer sheath, material                        | PUR  |
| Material conductor insulation                 | PP   |
| Conductor material                            | Bare Cu litz wires   |
| Cable weight                                  | 47 kg/km   |
| Smallest bending radius, fixed installation   | 59 mm  |
| Smallest bending radius, movable installation | 59 mm  |
| Number of bending cycles                      | 4000000  |
| Bending radius                                | 50 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>-5 °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                              | 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<br>hydrolysis and microbe resistant                         |

#### Certificates / Approvals

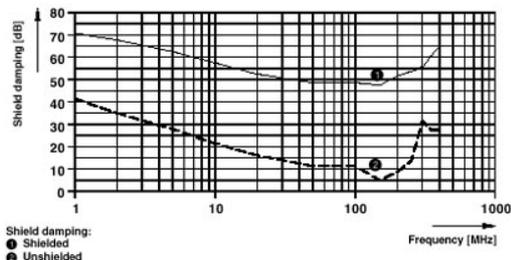


Certification

CUL Listed, GOST, UL Listed

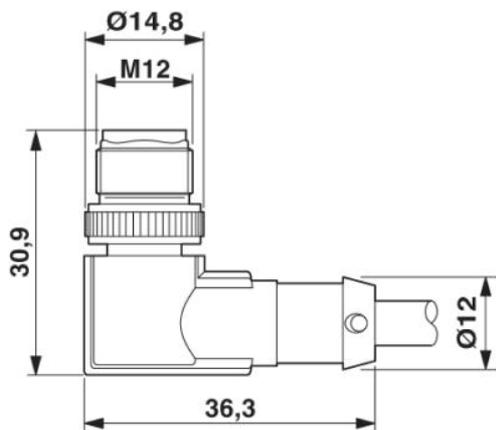
**Diagrams/Drawings**

Diagram



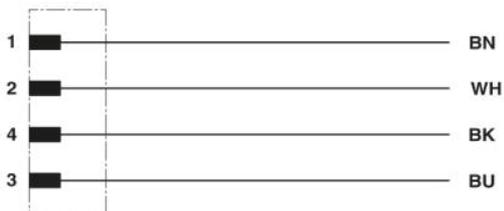
Dimensioned drawing

M12 x 1 male connector, angled, shielded



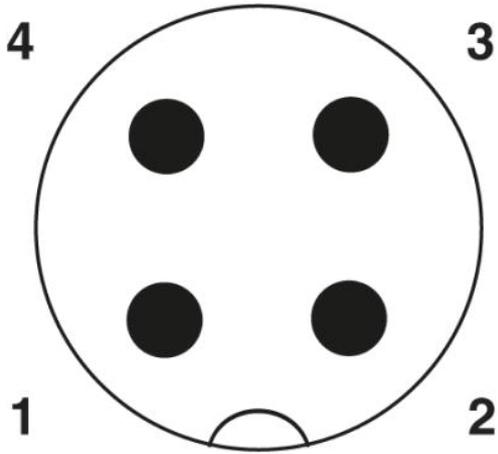
Circuit diagram

Contact assignment of the M12 plug



Schematic diagram

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



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