

## SAC-4P-M12MS/ 1,5-PUR SH

Order No.: 1682715

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1682715>

Sensor/Actuator cable, 4-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                      | 4017918168995     |
| Pack                     | 1 pcs.            |
| Customs tariff           | 85444290          |
| Weight/Piece             | 0.0886 KG         |
| Catalog page information | Page 85 (PC-2009) |

**Product notes**

WEEE/RoHS-compliant since:  
11/17/2006



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| Technical data        |                          |
|-----------------------|--------------------------|
| <b>General data</b>   |                          |
| 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                      | ≥ 100 MΩ |
| 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)              |
| Sealing material         | NBR   |
| 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 ±0.02 mm                                  |
| Thickness, insulation              | ≥ 0.21 mm (Core insulation)                       |
|                                    | 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              | ≥ 100 GΩ*km                                       |
| Conductor resistance               | max. 58 Ω/km                                      |
| Nominal voltage, conductor         | ≤ 300 V   |
| Test voltage, conductor            | ≥ 3000 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)                        |
|   | -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

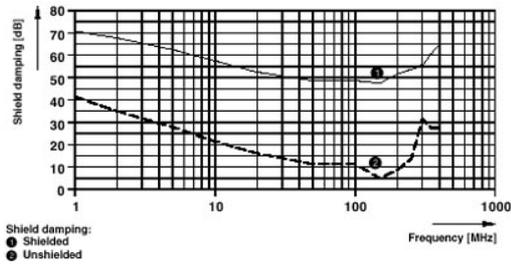


Certification

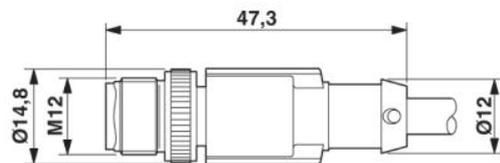
CUL Listed, GOST, UL Listed

**Diagrams/Drawings**

Diagram

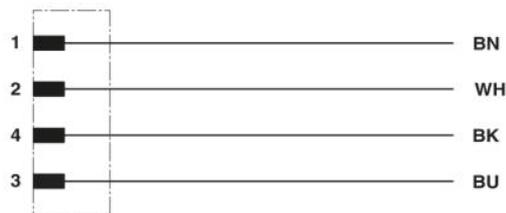


Dimensioned drawing



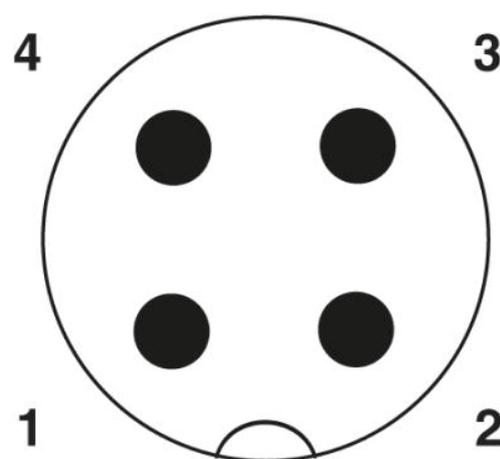
M12 x 1 male connector, straight, shielded

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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