

# SAC-5P-M12MR/10,0-PUR P

Order No.: 1442667



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1442667>

Sensor/Actuator cable, 5-position, PUR halogen-free, Black-gray RAL 7021, Plug, angled M12, A-coded, on Free conductor end, Cable length: 10 m

## Commercial data

|                          |                     |
|--------------------------|---------------------|
| GTIN (EAN)               | 4 046356 535427     |
| Note                     | Made-to-order       |
| sales group              | D112                |
| Pack                     | 1 pcs.              |
| Customs tariff           | 85444290            |
| Catalog page information | Page 116 (NTK-2010) |

## Product notes

WEEE/RoHS-compliant since:  
09/30/2009



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## Technical data

### General data

|                       |        |
|-----------------------|--------|
| Rated current at 40°C | 4 A    |
| Rated voltage         | 60 V   |
| Number of positions   | 5      |
| Volume resistance     | ≤ 5 mΩ |

|                                            |                                                      |
|--------------------------------------------|------------------------------------------------------|
| Insulation resistance                      | $\geq 100 \text{ M}\Omega$                           |
| Length of cable                            | 10 m                                                 |
| Stripping length of the free conductor end | 50 mm                                                |
| Ambient temperature (operation)            | -25 °C ... 90 °C (Male connector / female connector) |

#### General characteristics

|                             |                                             |
|-----------------------------|---------------------------------------------|
| Standards/regulations       | M12 connector IEC 61076-2-101               |
| Coding                      | A - standard                                |
| Surge voltage category      | II                                          |
| Pollution degree            | 3                                           |
| Degree of protection        | IP65/IP68/IP69K                             |
| Insertion/withdrawal cycles | $\geq 100$                                  |
| Contact material            | CuSn                                        |
| Contact surface material    | Ni/Au                                       |
| Contact carrier material    | TPU GF                                      |
| Material of grip body       | TPU, hardly inflammable, self-extinguishing |
| Material, knurls            | Polyamide                                   |
| Status display              | No                                          |

#### Conductor data

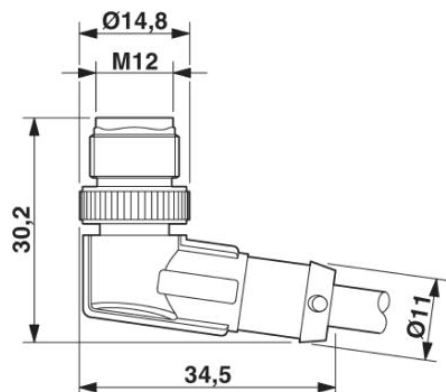
|                                    |                                                     |
|------------------------------------|-----------------------------------------------------|
| Cable type                         | PUR halogen-free black                              |
| Cable type (abbreviation)          | PUR                                                 |
| UL AWM Style                       | 20549                                               |
| Conductor cross section            | $0.34 \text{ mm}^2$                                 |
| AWG signal line                    | 22                                                  |
| Conductor structure signal line    | 42x 0.10 mm                                         |
| Core diameter including insulation | $1.27 \text{ mm} \pm 0.02 \text{ mm}$               |
| Thickness, insulation              | Approx. 0.7 mm                                      |
| External cable diameter            | $5 \text{ mm} \pm 0.15 \text{ mm}$                  |
| Wire colors                        | Black, brown, blue, white, green/yellow             |
| External sheath, color             | Black-gray RAL 7021                                 |
| Insulation resistance              | $\geq 16 \text{ G}\Omega \cdot \text{km}$ (at 20°C) |
| Conductor resistance               | max. $58 \text{ }\Omega/\text{km}$ (at 20°C)        |
| Nominal voltage, conductor         | 300 V                                               |
| Test voltage, conductor            | 3000 V                                              |
| Outer sheath, material             | PUR                                                 |

|                                               |                                                                     |
|-----------------------------------------------|---------------------------------------------------------------------|
| Conductor material                            | Bare Cu litz wires                                                  |
| Cable weight                                  | 35 kg/km                                                            |
| Smallest bending radius, fixed installation   | 25 mm                                                               |
| Smallest bending radius, movable installation | 50 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)                        |
|                                               | -25 °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 |
|                                               | flexibel                                                            |
| 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          |
|                                               | hydrolysis and microbe resistant                                    |
|                                               | Resistant to salt water                                             |

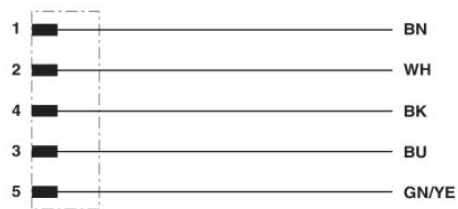
## Diagrams/Drawings

Dimensioned drawing

M12 x 1 male connector, angled

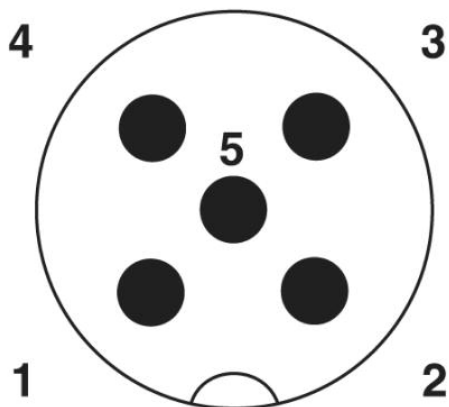


#### Circuit diagram



Contact assignment of the M12 plug

#### Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side

**Address**

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