

**SAC-5P-M12MS/ 3,0-802**

Order No.: 1457238

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1457238>

Sensor/Actuator cable, 5-position, PUR halogen-free, welding sputter-resistant, highly flexible, Gray RAL 7001, Plug, straight M12, A-coded, on Free conductor end, Cable length: 3 m

**Commercial data**

|                |                                                                                                        |
|----------------|--------------------------------------------------------------------------------------------------------|
| GTIN (EAN)     | <br>4 046356 593656 |
| Note           | Made-to-order                                                                                          |
| sales group    | D112                                                                                                   |
| Pack           | 1 pcs.                                                                                                 |
| Customs tariff | 85444290                                                                                               |

**Product notes**

WEEE/RoHS-compliant since:  
07/06/2010



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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                 | 3 m                                                  |
| 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            | Zinc die-cast, (nickel-plated)              |
| Status display              | No                                          |

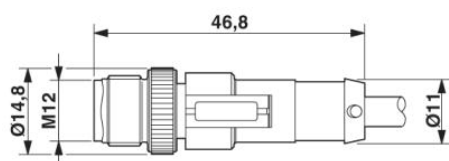
#### Conductor data

|                                    |                                                                     |
|------------------------------------|---------------------------------------------------------------------|
| Cable type                         | PUR halogen-free, highly flexible, resistant to welding beads, gray |
| Cable type (abbreviation)          | 802                                                                 |
| Cable abbreviation                 | Li12Y11Y-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 | 1.3 mm $\pm$ 0.05 mm                                                |
| External cable diameter            | 5.1 mm $\pm$ 0.2 mm                                                 |
| Wire colors                        | Black, brown, blue, white, green/yellow                             |
| External sheath, color             | Gray RAL 7001                                                       |
| Insulation resistance              | min. 20 M $\Omega$ *km                                              |
| Conductor resistance               | Approx. 53 $\Omega$ /km                                             |
| Nominal voltage, conductor         | 300 V                                                               |
| Test voltage, conductor            | 1200 V                                                              |
| Overall twist                      | 5 wires around filler to the core                                   |
| Outer sheath, material             | PUR                                                                 |
| Material conductor insulation      | PES                                                                 |

|                                               |                                                                                                                                    |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Conductor material                            | Bare Cu litz wires                                                                                                                 |
| Smallest bending radius, fixed installation   | 26 mm                                                                                                                              |
| Smallest bending radius, movable installation | 26 mm                                                                                                                              |
| Number of bending cycles                      | 15000000                                                                                                                           |
| Bending radius                                | 50 mm                                                                                                                              |
| Traversing path                               | 0.9 m                                                                                                                              |
| Traversing rate                               | 5 m/s                                                                                                                              |
| Acceleration                                  | 30 m/s <sup>2</sup>                                                                                                                |
| Torsion force                                 | ± 360 °/m                                                                                                                          |
| Ambient temperature (operation)               | -40 °C ... 90 °C (cable, fixed installation)                                                                                       |
|                                               | -30 °C ... 90 °C (cable, flexible installation)                                                                                    |
| Special properties                            | Sheath resistant to welding beads, can be recycled, matt, without adhesion, wear-resistant, flame resistant and self-extinguishing |
|                                               | Free from silicone and cadmium                                                                                                     |
|                                               | Free of substances which would hinder coating with paint or varnish                                                                |
| Flame resistance                              | DIN VDE 0472 part 804, test type B                                                                                                 |
|                                               | IEC 60332-1                                                                                                                        |
|                                               | In accordance with UL FT-2                                                                                                         |
| Halogen-free                                  | The cable is halogen-free                                                                                                          |
| Resistance to oil                             | As per VDE 0472 Part 803                                                                                                           |
| Other resistance                              | Highly resistant to acids, alkaline solutions and solvents                                                                         |

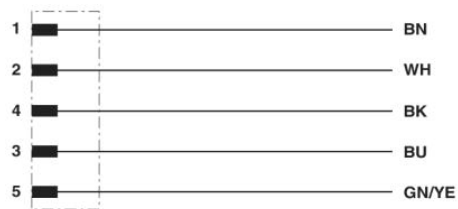
## Diagrams/Drawings

### Dimensioned drawing



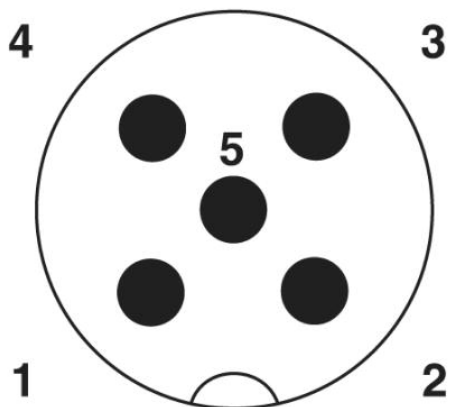
M12 x 1 male connector, straight

#### 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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