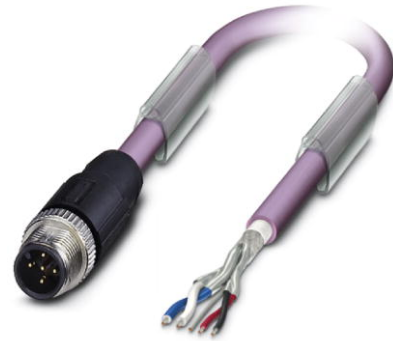



**SAC-5P-M12MS/ 2,0-920**

Order No.: 1507421

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1507421>

Bus system cable, 5-position, PUR halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, A-coded, on Free conductor end, Cable length: 2 m

**Commercial data**

|                          |   |
|--------------------------|---|
| GTIN (EAN)               | <br>4 017918 900236 |
| sales group              | D117  |
| Pack                     | 1 pcs.  |
| Customs tariff           | 85444290  |
| Catalog page information | Page 397 (PC-2011)  |

**Product notes**

WEEE/RoHS-compliant since:  
03/02/2006



<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**

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

|  |  |
|--|--|
| Insulation resistance                      | ≥ 100 MΩ   |
| Length of cable                            | 2 m  |
| Stripping length of the free conductor end | 50 mm  |
| Ambient temperature (operation)            | -25 °C ... 90 °C (Male connector / female connector) |

**General characteristics**

|                             |   |
|-----------------------------|---|
| Coding                      | A - standard                                |
| Surge voltage category      | II  |
| Pollution degree            | 3   |
| Degree of protection        | IP65/IP67/IP69K                             |
| Insertion/withdrawal cycles | ≥ 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                          | CAN Bus/DeviceNet                   |
| Cable type (abbreviation)           | 920                                 |
| Conductor cross section             | 0.2 mm <sup>2</sup> (signal line)   |
|                                     | 0.32 mm <sup>2</sup> (Power supply) |
|                                     | 0.32 mm <sup>2</sup> (Drain wire)   |
| AWG signal line                     | 24                                  |
| Conductor structure signal line     | 19x 0.12 mm                         |
| AWG power supply                    | 22                                  |
| Conductor structure, voltage supply | 19x 0.15 mm                         |
| Core diameter including insulation  | 2.05 mm ±0.1 mm (signal line)       |
|                                     | 1.4 mm ±0.05 mm (Power supply)      |
| External cable diameter             | 6.70 mm                             |
| Wire colors                         | Red-black, blue-white               |
| External sheath, color              | Violet, RAL 4001                    |
| Insulation resistance               | ≥ 5 GΩ*km (signal line)             |
|                                     | ≥ 100 MΩ*km (Power supply)          |

|   |   |
|---|---|
| Conductor resistance                          | ≤ 78.4 Ω/km (signal line)                             |
|   | ≥ 51.6 Ω/km (Power supply)                            |
| Working capacitance                           | 39.3 pF (Signal line, Core-Core)                      |
|   | 78.7 pF (Signal line, Core-Shield)                    |
| Nominal voltage, conductor                    | 30 V (signal line)                                    |
|   | 300 V (Power supply)                                  |
| Test voltage, conductor                       | 1500 V (signal line)                                  |
|   | 2000 V (Power supply)                                 |
| Twisted pairs                                 | 2 cores to the pair                                   |
| Type of pair shielding                        | Aluminum-lined polyester foil                         |
| Overall twist                                 | 2 pairs around a drain wire in the center to the core |
| Shielding                                     | Tinned copper braided shield                          |
| Optical shield covering                       | 70 %  |
| Outer sheath, material                        | PUR   |
| Material conductor insulation                 | PE (Power supply)                                     |
|   | Foamed PE (signal line)                               |
| Conductor material                            | Tin-plated Cu litz wires                              |
| Smallest bending radius, fixed installation   | 67 mm   |
| Smallest bending radius, movable installation | 67 mm   |
| Number of bending cycles                      | 5000000   |
| Bending radius                                | 67 mm   |
| Traversing path                               | 10 m  |
| Traversing rate                               | 3 m/s   |
| Acceleration                                  | 7 m/s <sup>2</sup>                                    |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)          |
|   | -20 °C ... 75 °C (cable, flexible installation)       |
| Halogen-free                                  | complying with IEC 60754-1/2                          |

#### Certificates / Approvals

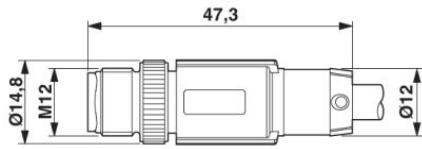


Certification

GOST

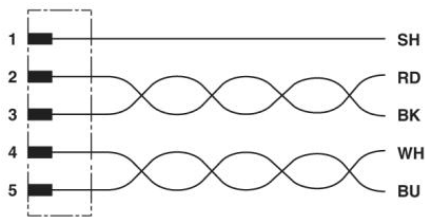
## Diagrams/Drawings

### Dimensioned drawing



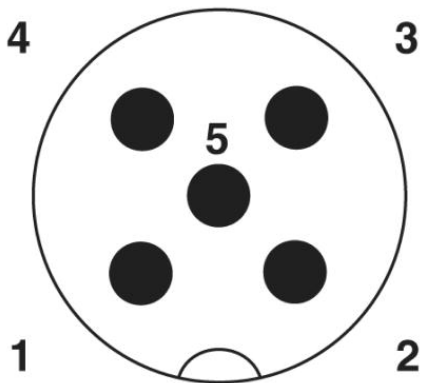
M12 x 1 male connector, straight, shielded

### Circuit diagram



Contact assignment of the M12 plug

### Schematic diagram



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

**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



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