

**SAC-5P-M12MS/ 0,3-920/M12FS**

Order No.: 1507528

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1507528>

Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 0.3 m



CANopen

**Product notes**

WEEE/RoHS-compliant since:  
03/17/2006



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**Commercial data**

|                          |                    |
|--------------------------|--------------------|
| GTIN (EAN)               | 4017918900311      |
| sales group              | D117               |
| Pack                     | 1 pcs.             |
| Customs tariff           | 85444290           |
| Weight/Piece             | 0.0559 KG          |
| Catalog page information | Page 279 (PC-2009) |

**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                 | 0.3 m  |
| 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)              |
| Sealing material            | NBR   |
| 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

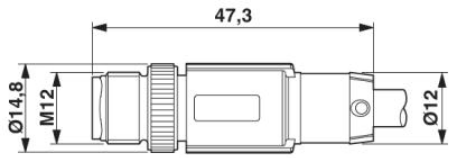


Certification

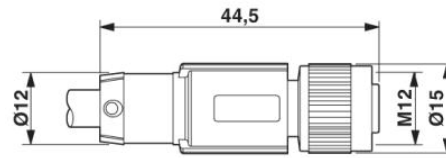
GOST

**Diagrams/Drawings**

Dimensioned drawing

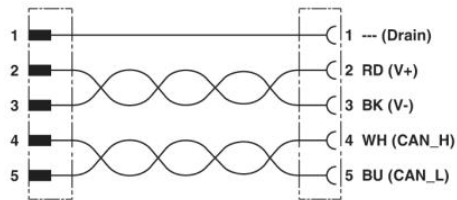


M12 x 1 male connector, straight, shielded



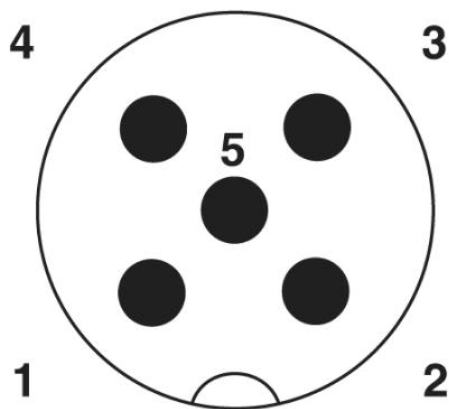
M12 x 1 female connector, straight, shielded

Circuit diagram

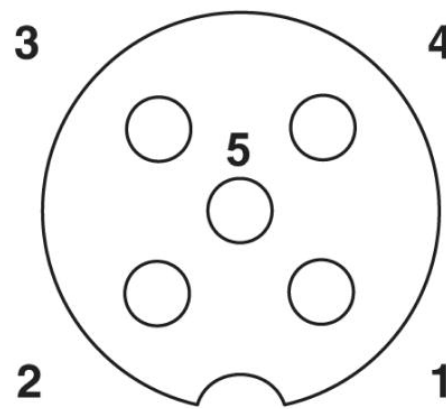


Contact assignment of the M12 connector and the M12 socket

Schematic diagram



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



Pin assignment M12 socket, 5-pos., A-coded, socket side view

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