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catalog

## SAC-2P-MSB/ 0,5-910/FSB SCO

Order No.: 1518119



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1518119>

Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 0.5 m



### Commercial data

|                          |                    |
|--------------------------|--------------------|
| EAN                      | 4017918968236      |
| Pack                     | 1 pcs.             |
| Customs tariff           | 85444290           |
| Weight/Piece             | 0.0711 KG          |
| Catalog page information | Page 272 (PC-2009) |

### Product notes

WEEE/RoHS-compliant since:  
01/01/2008



<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

|                       |                          |
|-----------------------|--------------------------|
| Nominal current $I_N$ | 4 A                      |
| Nominal voltage $U_N$ | 250 V                    |
| Number of positions   | 2                        |
| Volume resistance     | $\leq 5 \text{ m}\Omega$ |

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|                       |                            |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Length of cable       | 0.5 m                      |

**General characteristics**

|                          |                                             |
|--------------------------|---------------------------------------------|
| Coding                   | B - inverse                                 |
| Surge voltage category   | II                                          |
| Pollution degree         | 3                                           |
| Degree of protection     | IP65/IP67/IP69K                             |
| Contact material         | CuSn                                        |
| Contact surface material | Ni/Au                                       |
| Contact carrier material | PA 66                                       |
| 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                         | PROFIBUS                                          |
| Cable type (abbreviation)          | 910                                               |
| Conductor cross section            | $0.25 \text{ mm}^2$                               |
| AWG signal line                    | 24                                                |
| Conductor structure, signal line   | 19x 0.13 mm                                       |
| Core diameter including insulation | $2.55 \text{ mm} \pm 0.07 \text{ mm}$             |
| External cable diameter            | 7.80 mm                                           |
| Wire colors                        | Red, green                                        |
| External sheath, color             | Violet, RAL 4001                                  |
| Insulation resistance              | $\geq 5 \text{ G}\Omega \cdot \text{km}$          |
| Conductor resistance               | $\leq 78.4 \text{ }\Omega/\text{km}$              |
| Working capacitance                | 32 pF (core-core)                                 |
| Wave impedance                     | Nom. $150 \text{ }\Omega \pm 10 \%$               |
| Nominal voltage, conductor         | 30 V                                              |
| Test voltage Core/Core             | 1500 V                                            |
| Type of pair shielding             | Aluminum-lined polyester foil                     |
| Overall twist                      | 2 cores with 2 fillers to the core                |
| Shielding                          | Braided shielding made of tin-plated copper wires |
| Optical shield covering            | 80 %                                              |

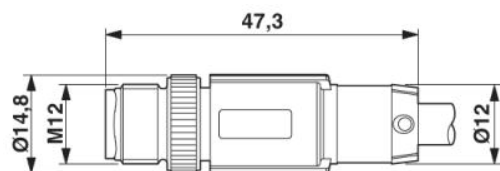
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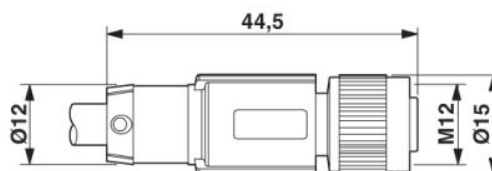
|                                               |                                                 |
|-----------------------------------------------|-------------------------------------------------|
| Outer sheath, material                        | PUR                                             |
| Material conductor insulation                 | Foamed PE                                       |
| Conductor material                            | Tin-plated Cu litz wires                        |
| Smallest bending radius, fixed installation   | min. 78 mm                                      |
| Smallest bending radius, movable installation | min. 78 mm                                      |
| Number of bending cycles                      | 5000000                                         |
| Bending radius                                | 78 mm                                           |
| Traversing path                               | 10 m                                            |
| Traversing rate                               | 3 m/s                                           |
| Acceleration                                  | 7 m/s <sup>2</sup>                              |
| Ambient temperature (operation)               | -20 °C ... 80 °C (cable, fixed installation)    |
|                                               | -20 °C ... 80 °C (cable, flexible installation) |
| Flame resistance                              | IEC 60332-1                                     |
|                                               | DIN EN 50265-2-1                                |

## Diagrams/Drawings

### Dimensioned drawing

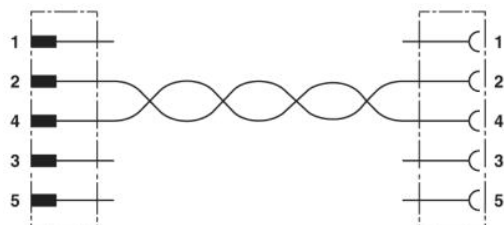


M12 x 1 male connector, straight, shielded



M12 x 1 female connector, straight, shielded

### Circuit diagram

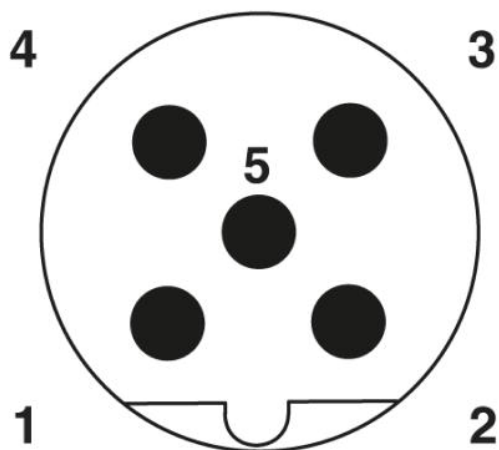


Contact assignment of the M12 plug and the M12 socket

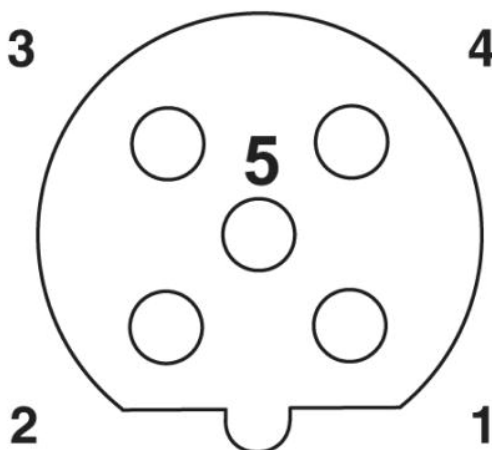
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#### Schematic diagram



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



Pin assignment M12 female connector, 5-pos., B-coded, female side

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#### Address

PHOENIX CONTACT Deutschland GmbH  
Flachsmarktstr. 8  
32825 Blomberg, Germany  
Phone +49 5235 3 12000  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.de>



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