

# SAC-5P-M12FS/ 2,0-920/M12FS

Order No.: 1533783

Bus system cable, 3-position, PUR, halogen-free, Violet, RAL 4001, shielded, Socket, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 2 m

## Commercial data

|                |                                                                                                      |
|----------------|------------------------------------------------------------------------------------------------------|
| EAN            | <br>4 017918 992798 |
| Note           | Made-to-order                                                                                        |
| Pack           | 1                                                                                                    |
| Customs tariff | 85444290                                                                                             |

## Product notes

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



## Technical data

### General data

|                       |                            |
|-----------------------|----------------------------|
| Rated current at 40°C | 4 A                        |
| Rated voltage         | 60 V                       |
| Number of positions   | 3                          |
| Volume resistance     | $\leq 5 \text{ m}\Omega$   |
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Length of cable       | 2 m                        |

### General characteristics

|                        |              |
|------------------------|--------------|
| 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)              |
| Sealing material            | NBR                                         |
| Status display              | No                                          |

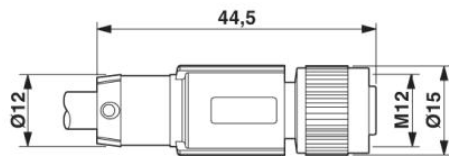
**Conductor data**

|                                     |                                                           |
|-------------------------------------|-----------------------------------------------------------|
| Cable type                          | CAN Bus/DeviceNet                                         |
| 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 $\pm$ 0.1 mm (signal line)                        |
|                                     | 1.4 mm $\pm$ 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               | $\geq 5 \text{ G}\Omega \cdot \text{km}$ (signal line)    |
|                                     | $\geq 100 \text{ M}\Omega \cdot \text{km}$ (Power supply) |
| Conductor resistance                | $\leq 78.4 \text{ }\Omega/\text{km}$ (signal line)        |
|                                     | $\geq 51.6 \text{ }\Omega/\text{km}$ (Power supply)       |
| Working capacitance                 | 39.3 pF (Signal line, Core-Core)                          |
|                                     | 78.7 pF (Signal line, Core-Shield)                        |
| Nominal voltage, conductor          | 300 V (Power supply)                                      |
|                                     | 30 V (signal line)                                        |
| Test voltage, conductor             | 1500 V (signal line)                                      |
|                                     | 2000 V (Power supply)                                     |
| Twisted pairs                       | 2 cores to the pair                                       |

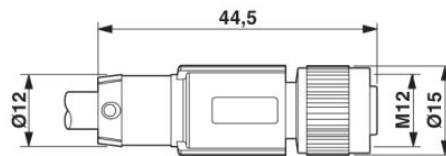
|                                               |                                                       |
|-----------------------------------------------|-------------------------------------------------------|
| Type of pair shielding                        | Aluminum-lined polyester foil                         |
| 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>                                    |

## Drawings

### Dimensioned drawing



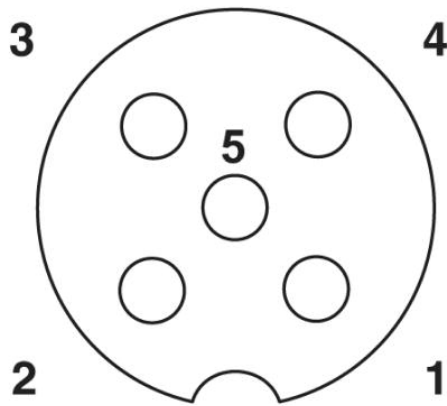
M12 x 1 female connector, straight, shielded



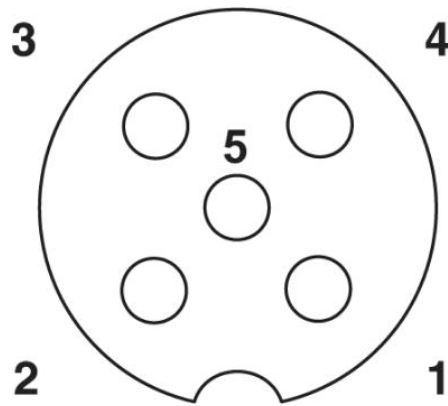
M12 x 1 female connector, straight, shielded

Schematic diagram

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



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