

## Bus system cable - SAC-2P-M12MSB/12,0-910/M12FSB - 1572896

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Bus system cable, PROFIBUS, 2-position, PUR halogen-free, Violet, RAL 4001, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, Cable length: 12 m



### Key commercial data

|                                      |           |
|--------------------------------------|-----------|
| Packing unit                         | 1 pc      |
| Minimum order quantity               | 50 pc     |
| Weight per Piece (excluding packing) | 816.8 GRM |
| Custom tariff number                 | 85444290  |
| Country of origin                    | Poland    |

### Technical data

#### Dimensions

|                 |      |
|-----------------|------|
| Length of cable | 12 m |
|-----------------|------|

#### Ambient conditions

|                      |      |
|----------------------|------|
| Degree of protection | IP65 |
|                      | IP67 |
|                      | IP68 |

#### General

|                       |             |
|-----------------------|-------------|
| Rated current at 40°C | 4 A         |
| Rated voltage         | 250 V       |
| Number of positions   | 2           |
| Contact resistance    | ≤ 5 mΩ      |
| Insulation resistance | ≥ 100 MΩ    |
| Coding                | B - inverse |
| Signal type/category  | PROFIBUS    |
| Status display        | No          |

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### Technical data

#### General

|                             |       |
|-----------------------------|-------|
| Surge voltage category      | II    |
| Pollution degree            | 3     |
| Insertion/withdrawal cycles | ≥ 100 |

#### Material

|   |   |
|---|---|
| Inflammability class according to UL 94 | V0  |
| 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   |

#### Cable

|                                    |  |
|------------------------------------|--|
| Cable type                         | PROFIBUS   |
| Cable type (abbreviation)          | 910  |
| UL AWM style                       | 21198 (80°C/300 V)   |
| Conductor cross section            | 2x 0.25 mm <sup>2</sup> (signal line)                      |
| AWG signal line                    | 24   |
| Conductor structure signal line    | 19x 0.13 mm  |
| Core diameter including insulation | 2.55 mm ±0.07 mm   |
| Wire colors                        | Red, green   |
| Overall twist                      | 2 cores with 2 fillers to the core                         |
| Shielding                          | Plastic-coated aluminum foil, tinned copper braided shield |
| Optical shield covering            | 85 %   |
| External sheath, color             | Violet, RAL 4001   |
| External cable diameter D          | 7.8 mm ±0.2 mm   |
| Number of bending cycles           | 4000000  |
| Bending radius                     | 65 mm  |
| Traversing path                    | 4.5 m  |
| Traversing rate                    | 3 m/s  |
| Acceleration                       | 3 m/s <sup>2</sup>   |
| Max. bending cycles                | 5000000  |
| Bending radius                     | 80 mm  |
| Traversing path                    | 4.5 m  |
| Traversing rate                    | 3 m/s  |
| Acceleration                       | 3 m/s <sup>2</sup>   |
| Outer sheath, material             | PUR  |

## Bus system cable - SAC-2P-M12MSB/12,0-910/M12FSB - 1572896

### Technical data

#### Cable

|                                 |   |
|---------------------------------|---|
| Material conductor insulation   | Foamed PE                                       |
| Conductor material              | Tin-plated Cu litz wires                        |
| Insulation resistance           | ≥ 5 GΩ*km                                       |
| Conductor resistance            | 157.2 Ω/km                                      |
| Working capacitance             | 30 nF   |
| Wave impedance                  | nom. 150 Ω ±10 % (3 MHz ... 20 MHz)             |
| Shield attenuation              | ≤ 4.9 dB (at 16 MHz)                            |
| Nominal voltage, cable          | 30 V  |
| Test voltage Core/Core          | 1500 V (50 Hz, 1 min.)                          |
| Test voltage Core/Shield        | 1500 V (50 Hz, 1 min.)                          |
| Flame resistance                | UL 1581, Sec. 1060 (FT-1)                       |
|                                 | IEC 60332-1                                     |
| Other resistance                | Low adhesion                                    |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)    |
|                                 | -30 °C ... 70 °C (cable, flexible installation) |

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27061801 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

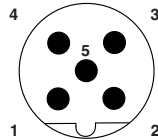
#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |

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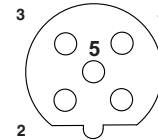
## Drawings

Schematic diagram



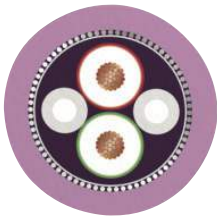
Pin assignment M12 male connector, 5-pos., B-coded, male side

Schematic diagram

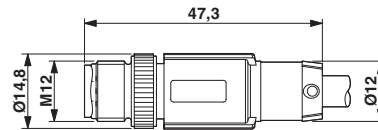


Pin assignment M12 socket, 5-pos., B-coded, female side

Cable cross section



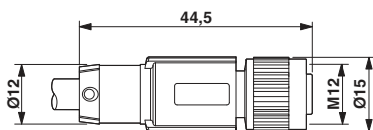
Dimensioned drawing



PROFIBUS [910]

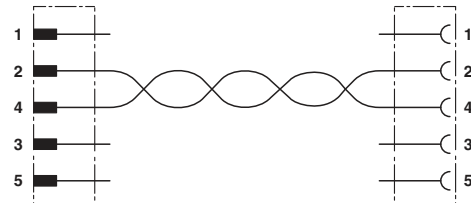
Plug, M12 x 1, straight, shielded

Dimensioned drawing



M12 x 1 socket, straight, shielded

Circuit diagram



Contact assignment of the M12 connector and the M12 socket