

## Bus system cable - SAC-2P-M12MSB/11,0-910/M12FSB - 1572883

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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: 11 m



### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 STK   |
| Minimum order quantity               | 50 STK  |
| GTIN                                 | <br>4 046356 417631 |
| GTIN                                 | 4046356417631   |
| Weight per Piece (excluding packing) | 755.600 g   |
| Custom tariff number                 | 85444290  |
| Country of origin                    | Poland  |

### Technical data

#### Dimensions

|                 |      |
|-----------------|------|
| Length of cable | 11 m |
|-----------------|------|

#### Ambient conditions

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

#### General

|                       |         |
|-----------------------|---------|
| Rated current at 40°C | 4 A     |
| Rated voltage         | 48 V AC |
|                       | 60 V DC |

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## Technical data

### General

|                             |             |
|-----------------------------|-------------|
| Number of positions         | 2           |
| Insulation resistance       | ≥ 100 MΩ    |
| Coding                      | B - inverse |
| Signal type/category        | PROFIBUS    |
| Status display              | No          |
| Overvoltage category        | II          |
| Degree of pollution         | 3           |
| Insertion/withdrawal cycles | ≥ 100       |

### Material

|  |   |
|--|---|
| Flammability rating according to UL 94 | V0  |
| Contact material                       | CuSn  |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | PA 6.6                                      |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Material, knurls                       | Zinc die-cast, nickel-plated                |
| Sealing material                       | NBR   |

### Standards and Regulations

|  |    |
|--|----|
| Flammability rating according to UL 94 | V0 |
|--|----|

### Cable

|   |  |
|---|--|
| Cable type                                    | PROFIBUS   |
| Cable type (abbreviation)                     | 910  |
| UL AWM style                                  | 21198 (80°C/300 V)   |
| Cable structure                               | 1x2xAWG24/19   |
| 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   |
| Smallest bending radius, fixed installation   | 40 mm  |
| Smallest bending radius, movable installation | 65 mm  |
| Number of bending cycles                      | 4000000  |

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### Technical data

#### Cable

|                                 |   |
|---------------------------------|---|
| Bending radius                  | 65 mm   |
| Traversing path                 | 4.5 m   |
| Traversing rate                 | 3 m/s   |
| Acceleration                    | 3 m/s <sup>2</sup>                              |
| Number of bending cycles        | 5000000   |
| Bending radius                  | 80 mm   |
| Traversing path                 | 4.5 m   |
| Traversing rate                 | 3 m/s   |
| Acceleration                    | 3 m/s <sup>2</sup>                              |
| Cable weight                    | 90 kg/km  |
| Outer sheath, material          | PUR   |
| Material, filler                | PP  |
| Material conductor insulation   | Foam-Skin PP                                    |
| Conductor material              | Tin-plated Cu litz wires                        |
| Insulation resistance           | ≥ 5 GΩ*km                                       |
| Conductor resistance            | ≤ 78.6 Ω/km                                     |
| Cable capacity                  | nom. 30 pF/m                                    |
| Wave impedance                  | 150 Ω ±10 % (3 MHz ... 20 MHz)                  |
| Attenuation                     | ≤ 0.049 dB/m (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 60332-1-2                                   |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815        |
|                                 | According to IEC 60754-1                        |
| Other resistance                | Low adhesion                                    |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)    |
|                                 | -30 °C ... 80 °C (cable, flexible installation) |
|                                 | ≤ 70 °C (cable, drag chain applications)        |

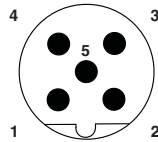
#### Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

#### Drawings

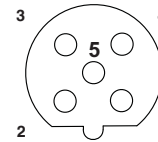
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Schematic diagram



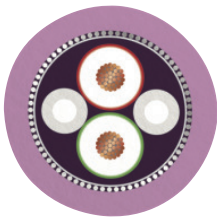
Pin assignment M12 male connector, 5-pos., B-coded, male side

Schematic diagram



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

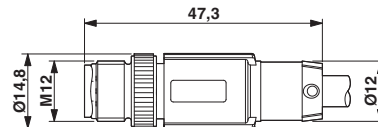
Cable cross section



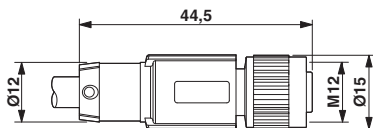
PROFIBUS [910]

Plug, M12 x 1, straight, shielded

Dimensional drawing

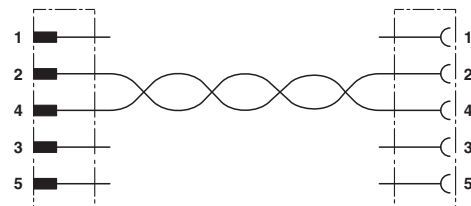


Dimensional drawing



M12 x 1 socket, straight, shielded

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

## 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 | 27279218 |
| eCl@ss 9.0 | 27060311 |

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### Classifications

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |

#### UNSPSC

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