# Bus system cable - SAC-5P-MS/10,0-920 SCO - 1518193

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Bus system cable, CANopen®, DeviceNet™, 5-position, PUR halogen-free, violet RAL 4001, shielded, Plug straight M12 SPEEDCON, A-coded, on free cable end, Cable length: 10 m

## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 pc |
| GTIN | 4 017918 968311 |
| Weight per Piece (excluding packing) | 585.7 g |
| Custom tariff number | 85444290 |
| Country of origin | Poland |

## Technical data

### Dimensions

| | |
|---|---|
| Length of cable | 10 m |
| Stripping length of the free conductor end | 50 mm |

### Ambient conditions

| | |
|---|---|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection | IP65 |
| | IP67 |

### General

| | |
|---|---|
| Rated current at 40°C | 4 A |
| Rated voltage | 60 V |
| Number of positions | 5 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |

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## Technical data

### General

| | |
|---|---|
| Signal type/category | CANopen® |
| | DeviceNet™ |
| Status display | No |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Torque | 0.4 Nm (M12 connector) |

### Material

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

### Pin assignment

| | |
|---|---|
| Position = wire color (signal) = position (optional) | 1 (Plug) = SR (shield) |
| | 2 (Plug) = RD (V+) |
| | 3 (Plug) = BK (V-) |
| | 4 (Plug) = WH (CAN_H) |
| | 5 (Plug) = BU (CAN_L) |

### Standards and Regulations

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

### Cable

| | |
|---|---|
| Cable type | CAN Bus/DeviceNet |
| Cable type (abbreviation) | 920 |
| UL AWM style | 21198 (80°C/300 V) |
| Cable structure | 2xAWG24/19+2xAWG22/19 |
| Conductor cross section | 2x 0.25 mm² (Data cable) |
| | 2x 0.34 mm² (Power supply) |
| | 1x 0.34 mm² (Drain wire) |
| AWG signal line | 24 |
| AWG power supply | 22 |
| Conductor structure signal line | 19x 0.13 mm |
| Conductor structure, voltage supply | 19x 0.15 mm |
| Core diameter including insulation | 1.95 mm ±0.05 mm (Data cable) |
| | 1.4 mm ±0.05 mm (Power supply) |

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## Technical data

### Cable

| | |
|---|---|
| Wire colors | Red-black, blue-white |
| Twisted pairs | 2 cores to the pair |
| Type of pair shielding | Plastic-coated aluminum foil, aluminum side outside |
| Overall twist | 2 pairs around a drain wire in the center to the core |
| Shielding | Tinned copper braided shield |
| Optical shield covering | 80 % |
| External sheath, color | violet RAL 4001 |
| External cable diameter D | 6.7 mm ±0,3 mm |
| Minimum bending radius, flexible installation | 10 x D |
| Number of bending cycles | 5000000 |
| Bending radius | 70 mm |
| Traversing path | 4.5 m |
| Traversing rate | 3 m/s |
| Acceleration | 3 m/s² |
| Outer sheath, material | PUR |
| Material conductor insulation | Foamed PE (Data cable) |
| | PE (Power supply) |
| Conductor material | Tin-plated Cu litz wires |
| Insulation resistance | ≥ 5 GΩ*km (Data cable) |
| | ≥ 5 GΩ*km (Power supply) |
| Conductor resistance | ≤ 90.9 Ω/km (Data cable) |
| | ≤ 57.4 Ω/km (Power supply) |
| Cable capacity | nom. 40 pF/m (Data cable) |
| Wave impedance | 120 Ω ±10 % (with 1 MHz) |
| Wave attenuation | ≥ 0.0229 dB/m (with 1 MHz) |
| Nominal voltage, cable | ≤ 300 V (Peak value, not for high-power applications) |
| Test voltage Core/Core | 2000 V (50 Hz, 1 min.) |
| Test voltage Core/Shield | 2000 V (50 Hz, 1 min.) |
| Flame resistance | UL 1581, Sec. 1060 (FT-1) |
| | IEC 60332-1 |
| | in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01) |
| 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) |
| | -20 °C ... 80 °C (cable, flexible installation) |

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## Technical data

### Cable

| | |
|---|---|
| | ≤ 70 °C (cable, drag chain applications) |

## 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 |

### ETIM

| | |
|---|---|
| ETIM 2.0 | EC000830 |
| 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 |

## Approvals

### Approvals

Approvals

EAC

Ex Approvals

# Bus system cable - SAC-5P-MS/10,0-920 SCO - 1518193

## Approvals

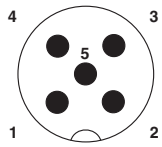
Approvals submitted

## Approval details

EAC

## Drawings

Schematic diagram

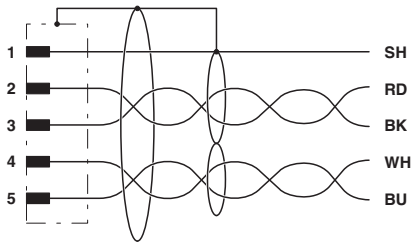



Pin assignment M12 male connector, 5-pos., A-coded, male side

Cable cross section

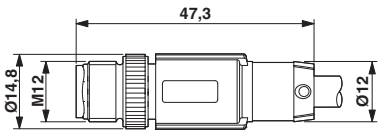
CAN Bus/DeviceNet [920]

Circuit diagram




Contact assignment of the M12 plug

Dimensional drawing




Plug, M12 x 1, straight, shielded

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