

Bus system cable - SAC-5P-MS/ 2,0-920 SCO - 1518177


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Bus system cable, CANopen®, DeviceNet™, 5-position, PUR halogen-free, violet RAL 4001, shielded, Plug straight M12 SPEEDCON, coding: A, on free cable end, cable length: 2 m



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 1 pc |
| GTIN |  4 017918 968298 |
| GTIN | 4017918968298 |

Technical data

Dimensions

| | |
|--|-------|
| Length of cable | 2 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 | 48 V AC |
| | 60 V DC |
| Number of positions | 5 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Status display | No |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Torque | 0.4 Nm (M12 connector) |

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Technical data

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 |

Standards and Regulations

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

Cable

| | |
|---|--|
| Cable type | CANopen [®] /DeviceNet [™] , PUR, violet |
| Cable type (abbreviation) | 920 |
| UL AWM style | 21198 (80°C/300 V) |
| Cable structure | 2xAWG24/19+2xAWG22/19 |
| Conductor cross section | 2x 0.25 mm ² (Data cable) |
| | 2x 0.34 mm ² (Power supply) |
| | 1x 0.34 mm ² (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) |
| 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, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Number of bending cycles | 5000000 |
| Bending radius | 70 mm |
| Minimum bending radius, drag chain applications | 10 x D |
| Traversing path | 4.5 m |
| Traversing rate | 3 m/s |
| Acceleration | 3 m/s ² |
| Cable weight | 90 kg/km |
| Outer sheath, material | PUR |

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Technical data

Cable

| | |
|---------------------------------|---|
| 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) |
| Loop resistance | ≤ 181.80 Ω/km (Data cable) |
| | ≤ 114.80 Ω/km (Power supply) |
| Cable capacity | nom. 40 nF/km (Data cable) |
| Wave impedance | 120 Ω ±10 % (with 1 MHz) |
| Attenuation | ≤ 22.9 dB/km (with 1 MHz) |
| | ≤ 16.4 dB/km (At 500 kHz) |
| | ≤ 9.5 dB/km (At 125 kHz) |
| 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) |

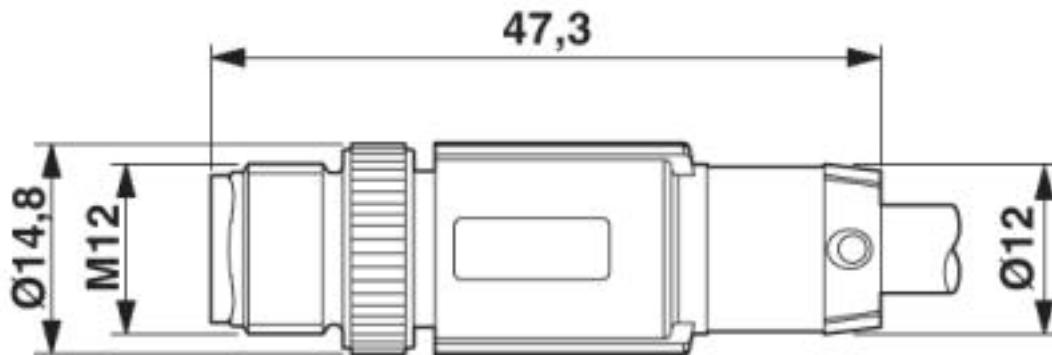
Environmental Product Compliance

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

Drawings

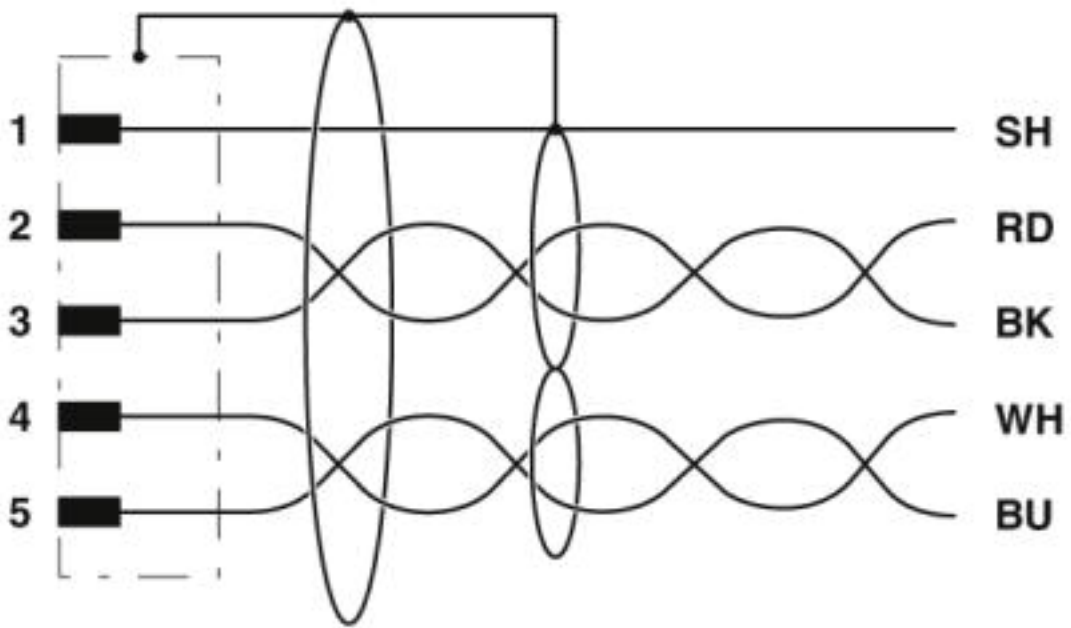
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Dimensional drawing



Plug, M12 x 1, straight, shielded

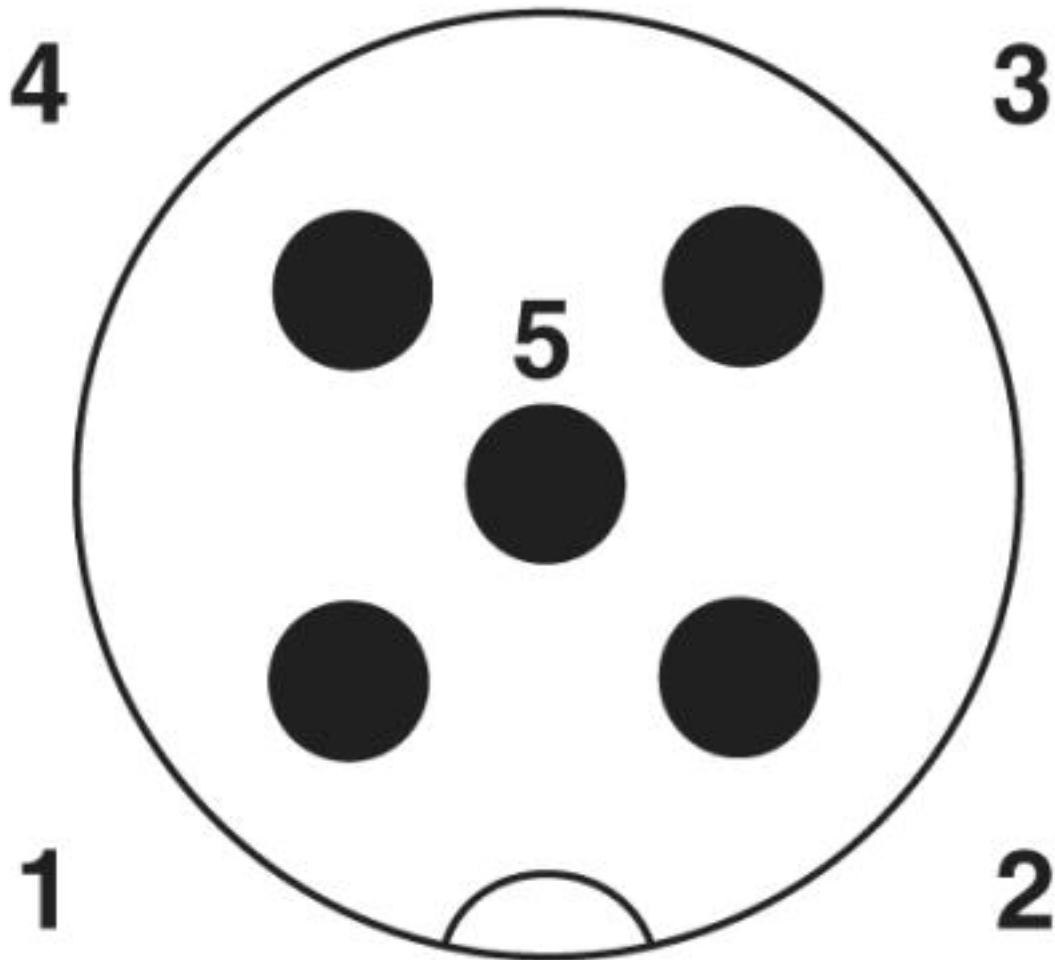
Circuit diagram



Contact assignment of the M12 plug

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Schematic diagram



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

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Cable cross section



CANopen[®]/DeviceNet[™], PUR, violet [920]

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27060308 |
| eCl@ss 4.0 | 27060300 |
| eCl@ss 4.1 | 27060300 |
| eCl@ss 5.0 | 27061800 |
| eCl@ss 5.1 | 27061800 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060308 |

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Classifications

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000830 |
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC002599 |
| ETIM 6.0 | EC001262 |
| ETIM 7.0 | EC001262 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 31251501 |
| UNSPSC 18.0 | 26121604 |
| UNSPSC 19.0 | 26121604 |
| UNSPSC 20.0 | 26121604 |
| UNSPSC 21.0 | 26121604 |

Approvals


Approvals

Approvals

UL Listed / cUL Listed / cULus Listed


Ex Approvals

Approval details

| | | | |
|--------------------|---|---|---------------|
| UL Listed |  | http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |
| Nominal voltage UN | 125 V | | |
| Nominal current IN | 4 A | | |

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Approvals

| | | | |
|--------------------|---|---|---------------|
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| Nominal current IN | | 4 A | |

| | |
|--------------|---|
| cULus Listed |  |
|--------------|---|

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