

SAC-5P-M12MS/ 0,2-920/M12MS - Bus system cable



1533770

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Bus system cable, CANopen®, DeviceNet™, 5-position, PUR halogen-free, red lilac RAL 4001, shielded, Plug straight M12, coding: A, on Plug straight M12, coding: A, cable length: 0.2 m

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1533770 |
| Packing unit | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF04 |
| Product key | AF1CKD |
| GTIN | 4017918992804 |
| Weight per piece (including packing) | 47.8 g |
| Weight per piece (excluding packing) | 47.8 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

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Technical data

Product properties

| | |
|----------------------|-------------------------|
| Product type | Data cable preassembled |
| Number of positions | 5 |
| No. of cable outlets | 1 |
| Shielded | yes |
| Coding | A |

Insulation characteristics

| | |
|----------------------|----|
| Overvoltage category | II |
| Degree of pollution | 3 |

Interfaces

| | |
|----------------------|------------------------|
| Bus system | CANopen®/DeviceNet™ |
| Signal type/category | CANopen® DeviceNet™ |

Signaling

| | |
|------------------------|----|
| Status display | no |
| Status display present | no |

Electrical properties

| | |
|-----------------------|--------------------|
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage U_N | 48 V AC 60 V DC |
| Nominal current I_N | 4 A |

Mechanical properties

Mechanical data

| | |
|-----------------------------|-------|
| Insertion/withdrawal cycles | ≥ 100 |
|-----------------------------|-------|

Material specifications

| | |
|--|---|
| Flammability rating according to UL 94 | HB |
| Seal material | NBR |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | TPU GF |
| Material for screw connection | Zinc die-cast, nickel-plated |

Connector

Connection 1

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| | |
|---------------------|-------------------|
| Type | Plug straight M12 |
| Number of positions | 5 |
| Coding type | A (Standard) |


Connection 2

| | |
|---------------------|-------------------|
| Type | Plug straight M12 |
| Number of positions | 5 |
| Coding type | A (Standard) |

Cable/line

| | |
|--------------|-------|
| Cable length | 0.2 m |
|--------------|-------|

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

| | |
|-------------------------------------|--|
| Dimensional drawing |  |
| Cable weight | 90 kg/km |
| UL AWM Style | 21198 (80°C/300 V) |
| Number of positions | 4 |
| Shielded | yes |
| Cable type | CANopen®/DeviceNet™, PUR, violet [920] |
| Conductor structure | 2xAWG24/19+2xAWG22/19 |
| Conductor structure signal line | 19x 0.13 mm |
| AWG signal line | 24 |
| Conductor structure, voltage supply | 19x 0.15 mm |
| AWG power supply | 22 |
| Conductor cross-section | 2x 0.25 mm ² (Data cable) 2x 0.34 mm ² (Power supply) 1x 0.34 mm ² (Drain wire) |
| Wire diameter incl. insulation | 1.95 mm ±0.05 mm (Data cable) 1.4 mm ±0.05 mm (Power supply) |
| External cable diameter | 6.70 mm ±0.3 mm |
| Outer sheath, material | PUR |
| External sheath, color | red lilac RAL 4001 |
| Conductor material | Tin-plated Cu litz wires |
| Material wire insulation | Foamed PE (Data cable) PE (Power supply) |
| Single wire, color | red-black, blue-white |
| Twisted pairs | 2 cores to the pair |
| Type of pair shielding | Plastic-coated aluminum foil, aluminum side outside |

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| | |
|---|---|
| Overall twist | 2 pairs around a drain wire in the center to the core |
| Optical shield covering | 80 % |
| 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) |
| Wave impedance | 120 Ω ±10 % (with 1 MHz) |
| Cable capacity | nom. 40 nF/km (Data cable) |
| 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 | 2000.00 V (50 Hz, 1 min.) |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Smallest bending radius, fixed installation | 34 mm |
| Smallest bending radius, movable installation | 67 mm |
| Dynamic load capacity (bending) | Max. bending cycles: 5000000, Bending radius: 70 mm, Bending radius: 10 x D, Traversing path: 4.5 m, Traversing rate: 3 m/s, Acceleration: 3 m/s ² , Ambient temperature: -20 °C ... 60 °C |
| Shield attenuation | ≤ 22.9 dB/km (with 1 MHz) |
| | ≤ 16.4 dB/km (At 500 kHz) |
| | ≤ 9.5 dB/km (At 125 kHz) |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| | according to IEC 60754-1 |
| Flame resistance | IEC 60332-1-2 |
| | in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01) |
| Other resistance | Low adhesion |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) |
| | -30 °C ... 70 °C (Cable, flexible installation) |
| | -20 °C ... 60 °C (for installation) |
| | -20 °C ... 60 °C (cable, drag chain applications) |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|---|
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| | -40 °C ... 80 °C (cable, fixed installation) |
| | -20 °C ... 75 °C (Cable, flexible installation) |

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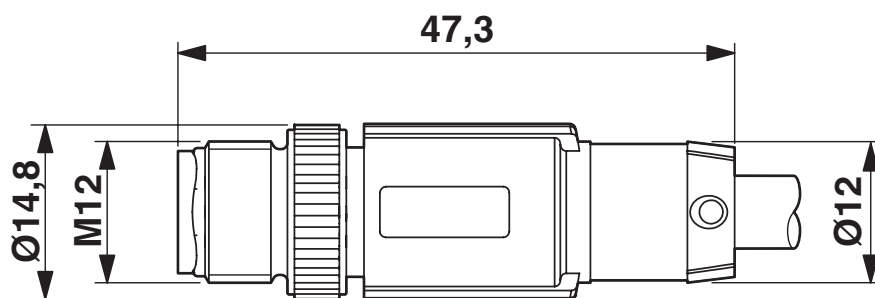
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



Plug, M12 x 1, straight, shielded

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Schematic diagram



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

Schematic diagram



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

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27060307 |
| ECLASS-15.0 | 27060307 |

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Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

China RoHS

| | |
|--|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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