

SAC-5P-MS/ 2,0-923 CAN SCO

Order No.: 1419039




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Bus system cable, CANopen[®], DeviceNet[™], 5-position, PUR halogen-free, Gray RAL 7001, shielded, Plug straight M12 SPEEDCON, A-coded, on free cable end, Cable length: 2 m, Connector, unshielded

CANopen



Commercial data

| | |
|--------------------------|--------------------------------------------------------------------------------------------------------|
| EAN |  4 046356 542821 |
| Note | Made-to-order |
| sales group | D117 |
| Pack | 1 Pcs. |
| Customs tariff | 85444290 |
| Gross weight in pieces | 0.1425 KG |
| Net weight per piece | 0.1377 KG |
| Catalog page information | Page 343 (C-4-2013) |

Product notes

WEEE/RoHS-compliant since:
10/21/2009



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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 | 60 V |
| Number of positions | 5 |
| Contact resistance | < 5 mΩ |
| Coding | A - standard |
| Signal type/category | CANopen® |
| | DeviceNet™ |
| Status display | No |
| Surge voltage category | II |
| Pollution degree | 3 |
| Torque | 0.4 Nm (M12 connector) |

Material

| | |
|-----------------------------------------|------------------------------|
| Inflammability class according to UL 94 | HB |
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | TPU GF |
| Material of grip body | TPU |
| 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) |

Cable

| | |
|---------------------------|----------------------------------------|
| Cable type | CAN Bus/DeviceNet drop cable |
| Cable type (abbreviation) | 923 |
| UL AWM style | 21198 (80°C/300 V) |
| Cable structure | 2xAWG24/19+2xAWG22/19 |
| Conductor cross section | 2x 0.25 mm ² (signal line) |
| | 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 \pm 0.05 mm (signal line) 1.4 mm \pm 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 | Silver-gray RAL 7001 |
| External cable diameter D | 6.7 mm \pm 0.3 mm |
| Minimum bending radius, flexible installation | 10 x D |
| Number of bending cycles | 2000000 |
| Minimum bending radius, drag chain applications | 10 x D |
| Traversing path | 4.5 m |
| Traversing rate | 3 m/s |
| Acceleration | 3 m/s ² |
| Outer sheath, material | PUR |
| Material conductor insulation | Foamed PE (Data pair) PE (Power supply) |
| Conductor material | Tin-plated Cu litz wires |
| Insulation resistance | \geq 5 G Ω *km (signal line) \geq 5 G Ω *km (Power supply) |
| Working capacitance | nom. 40 nF (per kilometer) |
| Wave impedance | 120 Ω \pm 12 Ω (f = 1 MHz) |
| Shield attenuation | \leq 0.95 dB (f = 125 kHz) \leq 1.64 dB (f = 500 kHz) \leq 2.29 dB (f = 1 MHz) |
| Coupling resistance | \leq 181.80 Ω /km (Data pair) \leq 114.80 Ω /km (Power supply) |
| Nominal voltage, cable | \leq 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 |
| Halogen-free | Yes |
| Other resistance | Low adhesion |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) |
| | -20 °C ... 75 °C (cable, flexible installation) |

Certificates / Approvals



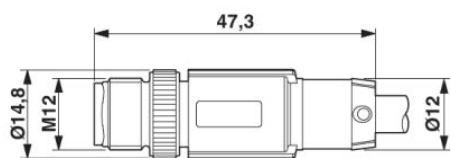
Certification GOST

Certifications applied for:

Certification Ex:

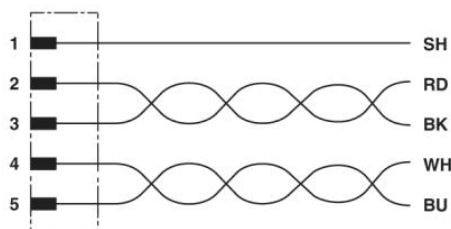
Drawings

Dimensioned drawing



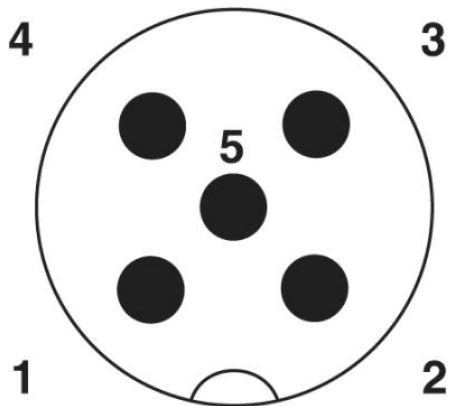
M12 x 1 plug, straight

Circuit diagram



Contact assignment of the M12 plug

Schematic diagram



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



CAN Bus/DeviceNet [923]

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