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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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Bus system cable, CANopen[®], DeviceNet[™], 5-position, PUR halogen-free, violet RAL 4001, shielded, free cable end, on Socket angled M12, A-coded, cable length: 0.5 m



Key Commercial Data

| Packing unit | 1 STK |
|--------------|-----------------|
| GTIN | 4 017918 938710 |
| GTIN | 4017918938710 |

Technical data

Dimensions

| Length of cable | 0.5 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 |
| Number of positions | 5 |
| Insulation resistance | \geq 100 M Ω |
| Signal type/category | CANopen [®] |
| | DeviceNet™ |
| Status display | No |
| Overvoltage category | II |
| Degree of pollution | 3 |



Technical data

General

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

Material

| Flammability rating according to UL 94 | НВ |
|--|---|
| 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 |
| Sealing material | NBR |

Standards and Regulations

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

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) |
| 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 |



Technical data

Cable

| Acceleration 3 m/s² Cable weight 90 kg/km Outer sheath, material PUR Material conductor insulation Foamed PE (Data cable) E (Power supply) Foamed PE (Data cable) Conductor material Tin-plated Cu litz wires Insulation resistance ≥ 5 GΩ*km (Data cable) Loop resistance ≤ 181.80 Ω/km (Power supply) Loop resistance ≤ 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) Attenuation ≤ 16.4 dB/km (At 500 kHz) Sonial 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.) |
|---|
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| 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



Schematic diagram



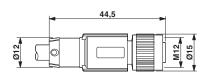
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section

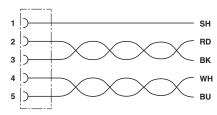


CAN Bus/DeviceNet [920]

Dimensional drawing



Circuit diagram



M12 x 1 socket, straight, shielded

Contact assignment of the M12 socket

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