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Sensor/actuator cable, 5-position, PE-X halogen-free, black-gray RAL 7021, Plug straight M12, A-coded, on free cable end, cable length: 5 m, for outdoor applications, with high-grade steel knurl

Your advantages

- Robust throughout: resistant to oil, UV, and ozone, withstands temperatures from -40°C to +105°C



Key Commercial Data

| Packing unit | 1 pc | | |
|--------------|-----------------|--|--|
| GTIN | 4 046356 773737 | | |
| GTIN | 4046356773737 | | |

Technical data

Dimensions

| Length of cable | 5 m |
|-----------------|-----|
| 3 | |

Ambient conditions

| Ambient temperature (operation) | -40 °C 105 °C (Plug / socket) | | | |
|---------------------------------|---|--|--|--|
| | -40 °C 85 °C (On sudden changes in temperature (according to IEC 60512-11-4)) | | | |
| Degree of protection | IP65/IP68/IP69K | | | |

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 |
| Coding | A - standard |



Technical data

General

| Standards/regulations | M12 connector IEC 61076-2-101 |
|------------------------------|-------------------------------|
| Status display | No |
| Protective circuit/component | unwired |
| Degree of pollution | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm (M12 connector) |

Material

| Flammability rating according to UL 94 | V0 |
|--|-----------------|
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | PP |
| Material of grip body | PP |
| Material, knurls | Stainless steel |

Standards and Regulations

| Standard designation | M12 connector | | |
|--|-----------------|--|--|
| Standards/regulations | IEC 61076-2-101 | | |
| Flammability rating according to UL 94 | V0 | | |

Cable

| Cable type | PE-X black |
|---|-----------------------------------|
| Cable type (abbreviation) | 28X |
| Cable abbreviation | Li2X2X |
| Conductor cross section | 5x 0.5 mm² |
| AWG signal line | 20 |
| Conductor structure signal line | 28x 0.15 mm |
| Core diameter including insulation | 1.6 mm ±0.5 mm |
| Thickness, insulation | approx. 0.3 mm (Core insulation) |
| Wire colors | Brown, white, blue, black, gray |
| Overall twist | 5 wires around filler to the core |
| Length of twist, overall twist | 68 mm |
| External sheath, color | black-gray RAL 7021 |
| Outer sheath thickness | approx. 1.25 mm |
| External cable diameter D | 6.8 mm ±0.2 mm |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Number of bending cycles | 2000000 |
| Minimum bending radius, drag chain applications | 10 x D |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s² |



Technical data

Cable

| Cable weight | 70 kg/km |
|---------------------------------|---|
| Outer sheath, material | PE-X |
| Material, filler | PP yarn |
| Material conductor insulation | PE-X |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 100 MΩ*km (at 20 °C) |
| Conductor resistance | \leq 39 Ω /m (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V AC |
| Test voltage, cable | ≥ 3000 V AC (Spark test) |
| Special properties | Irradiated |
| Flame resistance | According to DIN EN 60332-1-2 |
| | according to DIN EN 50266-2-5 |
| | according to IEC 60332-3-25 (bunched fire test) |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| | in accordance with DIN EN 50267-2-1 |
| Resistance to oil | According to DIN EN 60811-2-1, 168 h at 100°C |
| | According to DIN EN 50306 |
| Other resistance | Resistance to fuels according to IEC 60811, 168 h at 70°C |
| | UV resistant according to DIN VDE 0276-605 |
| Ambient temperature (operation) | -40 °C 105 °C (cable, fixed installation) |
| | -15 °C 105 °C (cable, flexible installation) |
| | 20 °C ±5 °C (cable, drag chain applications) |

Environmental Product Compliance

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

Approvals

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Approvals

DNV GL / EAC

Ex Approvals

Approval details



Approvals

| DNV GL | TIV. | https://approvalfinder.dnvgl.com/ | TAE00002K4 |
|--------|------|-----------------------------------|--------------------------|
| EAC | ERC | | RU C- DE.BL08.B.00286 |

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