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Sensor/Actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, A-coded, on free cable end, Cable length: 1.5 m, with plastic knurl

Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Our standard: robust halogen-free PUR cable
- Save weight our connectors with light plastic knurl

Key Commercial Data

| Packing unit | 1 STK |
|--------------|---------------------------|
| GTIN | 4 0 4 6 3 5 6 5 3 4 9 7 0 |

Technical data

Dimensions

| Length of cable | 1.5 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 |
| | IP68 |

General

| Rated current at 40°C | 4 A |
|------------------------------|-------------------------------|
| Rated voltage | 60 V |
| Number of positions | 5 |
| Insulation resistance | \geq 10 M Ω |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Protective circuit/component | Unwired |
| Overvoltage category | Ш |



Technical data

General

| Degree of pollution | 3 |
|-----------------------------|------------------------|
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm (M12 connector) |

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 | Polyamide |

Standards and Regulations

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

Cable

| Cable type | PUR halogen-free black |
|---|---|
| Cable type (abbreviation) | PUR |
| Cable abbreviation | Li9Y11Y |
| UL AWM style | 20549 / 10493 (80°C/300 V) |
| Conductor cross section | 5x 0.34 mm² (Signal line) |
| AWG signal line | 22 |
| Conductor structure signal line | 42x 0.10 mm |
| Core diameter including insulation | 1.27 mm ±0.02 mm (Signal line) |
| Thickness, insulation | ≥ 0.21 mm |
| Wire colors | brown, white, blue, black, green-yellow |
| Overall twist | 5 wires around filler to the core |
| External sheath, color | black-gray RAL 7021 |
| Outer sheath thickness | approx. 0.7 mm |
| External cable diameter D | 5 mm ±0.15 mm |
| Smallest bending radius, fixed installation | 25 mm |
| Smallest bending radius, movable installation | 50 mm |
| Number of bending cycles | 4000000 |
| Bending radius | 50 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s ² |
| Cable weight | 35 kg/km |
| Outer sheath, material | PUR |
| Material conductor insulation | PP |



Technical data

Cable

| Conductor material | Bare Cu litz wires |
|---------------------------------|---|
| Insulation resistance | ≥ 16 GΩ*km (at 20 °C) |
| Conductor resistance | max. 58 Ω/km (at 20 °C) |
| Nominal voltage, cable | 300 V |
| Test voltage, cable | 3000 V |
| Special properties | Flexible cable conduit capable |
| | Silicone-free |
| | Free of substances which would hinder coating with paint or varnish |
| | Flexible |
| Flame resistance | in accordance with DIN UL-Style 20549 |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | Highly resistant to acids, alkaline solutions and solvents |
| | hydrolysis and microbe resistant |
| | Resistant to salt water |
| | partly UV-resistant in accordance with DIN EN ISO 4892-2-A |
| Ambient temperature (operation) | -40 °C 80 °C (cable, fixed installation) |
| | -25 °C 80 °C (cable, flexible installation) |

Classifications

eCl@ss

| eCl@ss 4.0 | 27060306 |
|------------|----------|
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27279218 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 8.0 | 27279218 |

ETIM

| ETIM 2.0 | EC000830 |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

UNSPSC

| UNSPSC 6.01 | 31251501 |
|---------------|----------|
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |



Classifications

UNSPSC

| UNSPSC 13.2 | 31251501 |
|---------------------|----------|
| Approvals | |
| Approvals | |
| Approvals | |
| EAC | |
| Ex Approvals | |
| Approvals submitted | |
| Approval details | |

Drawings

EAC

Schematic diagram



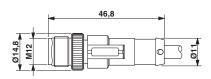
Pin assignment M12 male connector, 5-pos., A-coded, male side

Cable cross section

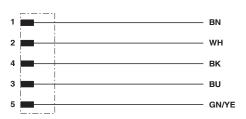


PUR halogen-free black [PUR]

Dimensional drawing



Circuit diagram



M12 x 1 plug, straight

Contact assignment of the M12 plug



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