

Sensor/Actuator cable - SAC-4P-10,0-PUR/M12FS SH - 1500716

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Sensor/Actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, shielded, free cable end, on Socket straight M12, A-coded, Cable length: 10 m

Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Our standard: robust halogen-free PUR cable
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference



Key commercial data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 017918 610777 |
| Weight per Piece (excluding packing) | 482.3 g |
| Custom tariff number | 85444290 |
| Country of origin | India |
| Product key | BF1CJA |

Technical data

Dimensions

| | |
|--|-------|
| Length of cable | 10 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 | 250 V |
| Number of positions | 4 |
| Contact resistance | ≤ 5 mΩ |

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Technical data

General

| | |
|------------------------------|-------------------------------|
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Protective circuit/component | Unwired |
| Surge voltage category | II |
| Pollution degree | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| 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, hardly inflammable, self-extinguishing |
| Material, knurls | Zinc die-cast, nickel-plated |
| Sealing material | NBR |

Cable

| | |
|---|---------------------------------------|
| Cable type | PUR halogen-free black shielded |
| Cable type (abbreviation) | PUR |
| Cable abbreviation | Li9Y-V1-C-V1-11Y |
| UL AWM style | 20549 / 10493 (80°C/300 V) |
| Conductor cross section | 4x 0.34 mm ² (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 |
| Overall twist | 4 wires, twisted |
| Shielding | Tinned copper braided shield |
| Optical shield covering | 85 % |
| External sheath, color | black-gray RAL 7021 |
| Outer sheath thickness | approx. 1 mm |
| External cable diameter D | 5.9 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 |

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Cable

| | |
|---------------------------------|---|
| Acceleration | 10 m/s ² |
| Cable weight | 46 kg/km |
| Outer sheath, material | PUR |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 100 GΩ*km (at 20 °C) |
| Conductor resistance | max. 58 Ω/km (at 20 °C) |
| Working capacitance | ≤ 80 pF (Conductor-Conductor) |
| | ≤ 135 pF (Wire/shield) |
| Wave impedance | ≥ 62 Ω (f = 10 MHz) |
| Inductance | approx. 0.75 mH (f = 1 kHz) |
| 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 |
| | Low adhesion surface |
| Flame resistance | In accordance with UL FT-2 |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| | in accordance with DIN EN 50267-2-1 |
| 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 |
| | abrasion-resistant |
| 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 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27061801 |

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Classifications

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 |
| UNSPSC 13.2 | 31251501 |

Approvals

Approvals

Approvals

UL Listed / cUL Listed / GOST / GOST / cULus Listed

Ex Approvals

Approvals submitted

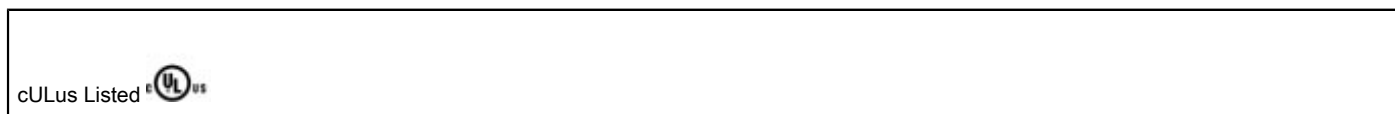
Approval details

| | |
|--------------------|-------|
| UL Listed | |
| Nominal current IN | 4 A |
| Nominal voltage UN | 300 V |

| | |
|--------------------|-------|
| cUL Listed | |
| Nominal current IN | 4 A |
| Nominal voltage UN | 300 V |

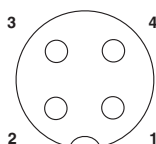
Sensor/Actuator cable - SAC-4P-10,0-PUR/M12FS SH - 1500716

Approvals



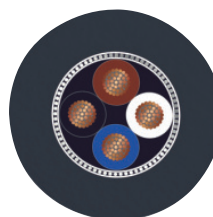
Drawings

Schematic diagram



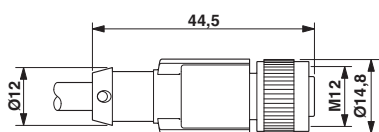
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



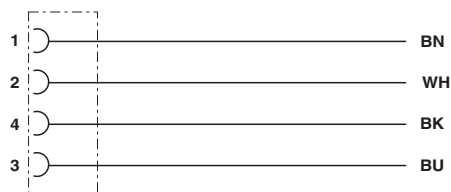
PUR halogen-free black shielded [PUR]

Dimensioned drawing



M12 x 1 socket, straight, shielded

Circuit diagram



Contact assignment of the M12 socket

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Diagram

