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Sensor/Actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, A-coded, on free cable end, Cable length: $5\ m$

Why buy this product



Key Commercial Data

| Packing unit | 1 pc |
|--------------------------------------|-----------------|
| GTIN | 4 017918 957377 |
| Weight per Piece (excluding packing) | 232.3 g |
| Custom tariff number | 85444290 |
| Country of origin | Poland |
| Product key | BF1CFA |

Technical data

Dimensions

| Length of cable | 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 | 2 A |
|-----------------------|------|
| Rated voltage | 30 V |
| Number of positions | 8 |



Technical data

General

| Contact resistance | $\leq 5 \text{ m}\Omega$ |
|------------------------------|-------------------------------|
| Insulation resistance | \geq 100 M Ω |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Protective circuit/component | Unwired |
| Overvoltage category | II |
| Pollution degree | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm (M12 connector) |

Material

| Inflammability class according to UL 94 | НВ |
|---|---|
| Contact material | CuZn |
| 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 |

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 | 8x 0.25 mm ² |
| AWG signal line | 24 |
| Conductor structure signal line | 32x 0.10 mm |
| Core diameter including insulation | 1.17 mm ±0.02 mm |
| Thickness, insulation | ≥ 0.21 mm |
| Wire colors | white, brown, green, yellow, gray, pink, blue, red |
| Overall twist | 8 wires around filler to the core |
| External sheath, color | black-gray RAL 7021 |
| Outer sheath thickness | approx. 0.8 mm |
| External cable diameter D | 5.9 mm ±0.15 mm |
| Minimum bending radius, fixed installation | 8 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Number of bending cycles | 4000000 |
| Bending radius | 59 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s² |
| Cable weight | 46 kg/km |



Technical data

Cable

| Outer sheath, material | PUR |
|---------------------------------|---|
| Material, filler | PE |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Conductor resistance | \leq 78 Ω /km |
| 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 |
| | partly UV-resistant in accordance with DIN EN ISO 4892-2-A |
| | Low adhesion |
| | 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 | 27279218 |

ETIM

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

UNSPSC

| UNSPSC 6.01 | 31251501 |
|-------------|----------|



Classifications

UNSPSC

| UNSPSC 7.0901 | 31251501 |
|---------------|----------|
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 31251501 |

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Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approvals submitted

Approval details

| UL Listed (II) | | | |
|--------------------|------|--|--|
| | | | |
| Nominal current IN | 2 A | | |
| Nominal voltage UN | 30 V | | |

| cUL Listed • | | | | |
|--------------------|------|--|--|--|
| | | | | |
| Nominal current IN | 2 A | | | |
| Nominal voltage UN | 30 V | | | |

| EAC | | |
|-----|--|--|
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| cULus Listed ^E W ^{US} | | |
|---|--|--|

Drawings



Schematic diagram



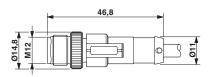
Pin assignment M12 plug, 8-pos., view plug side

Cable cross section



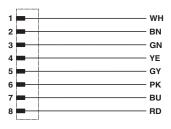
PUR halogen-free black [PUR]

Dimensional drawing



M12 x 1 plug, straight

Circuit diagram



Contact assignment of the M12 plug

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