

1669055

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: A, on Socket angled M12, coding: A, with 2 LEDs, PIN 2+4 bridged and Socket angled M12, coding: A, with 2 LEDs, PIN 2+4 bridged, cable length: 1.5 m

Commercial data

| Item number | 1669055 |
|--------------------------------------|---------------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF03 |
| Product key | BF1COA |
| Catalog page | Page 250 (C-2-2019) |
| GTIN | 4017918135980 |
| Weight per piece (including packing) | 98.3 g |
| Weight per piece (excluding packing) | 97 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |



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Technical data

Product properties

| Product type | Distributor with cable |
|----------------------------|------------------------|
| Number of positions | 3 |
| Application | Standard |
| No. of cable outlets | 2 |
| Shielded | no |
| Coding | Α |
| Insulation characteristics | |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Connection data | |

Tightening torque

| Tightening torque | 0.4 Nm (M12 connector) |
|-------------------|------------------------|
| | |

Material specifications

| Flammability rating according to UL 94 | HB |
|--|---|
| Seal material | NBR |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | TPU GF |
| Material for screw connection | Zinc die-cast, nickel-plated |

Electrical properties

| Insulation resistance | ≥ 100 MΩ |
|--------------------------------|----------|
| Nominal voltage U _N | 24 V DC |
| Nominal current I _N | 4 A |

Mechanical properties

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

Signaling

| Status display | 2 LEDs |
|------------------------|--------|
| Status display present | Yes |

Connector

| Connection 1 | |
|--------------|-------------------|
| Туре | Plug straight M12 |
| Coding type | A |



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| Connection 2 | |
|---|--------------------------------------|
| Туре | Socket angled M12 |
| Coding type | A |
| Connection 3 | |
| Туре | Socket angled M12 |
| Coding type | A |
| 3-0F | |
| Cable/line | |
| Cable length | 1.5 m |
| PUR halogen-free black [PUR] | |
| Dimensional drawing | |
| Cable weight | 23 kg/km |
| UL AWM Style | 20549 |
| Number of positions | 3 |
| Shielded | no |
| Cable type | PUR halogen-free black [PUR] |
| Conductor structure signal line | 42x 0.10 mm |
| AWG signal line | 22 |
| Conductor cross section | 3x 0.34 mm² (Signal line) |
| Wire diameter incl. insulation | 1.27 mm ±0.02 mm (Signal line) |
| External cable diameter | 3.85 mm ±0.15 mm |
| Outer sheath, material | PUR |
| External sheath, color | black-gray RAL 7021 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PP |
| Single wire, color | brown, blue, black |
| Thickness, insulation | ≥ 0.21 mm (Core insulation) |
| | approx. 0.50 mm (Outer cable sheath) |
| Overall twist | 3 wires, twisted |
| Max. conductor resistance | max. 58 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 100 GΩ*km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V |
| Test voltage | ≥ 3000 V |
| Smallest bending radius, fixed installation | 19 mm |
| Smallest bending radius, movable installation | 38 mm |



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| Max. bending cycles | 1000000 |
|---------------------------------|---|
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| Flame resistance | in accordance with UL 758/1581 FT2 |
| | DIN EN 60332-2-2 (20 s) |
| 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) |
| Special properties | Flexible cable conduit capable |
| | Silicone-free |
| | Free of substances which would hinder coating with paint or varnish |
| Ambient temperature (operation) | -40 °C 80 °C (cable, fixed installation) |
| | -25 °C 80 °C (Cable, flexible installation) |

Environmental and real-life conditions

| Ambient conditions | |
|---------------------------------|--|
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |
| Ambient temperature (operation) | -25 °C 90 °C (Plug / socket) |
| | -40 °C 80 °C (cable, fixed installation) |
| | -5 °C 80 °C (Cable, flexible installation) |

Standards and regulations

| Standard designation | M12 connector |
|--------------------------|-----------------|
| Standards/specifications | IEC 61076-2-101 |



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Classifications

ECLASS

| ECLASS-11.0 | 27060313 |
|-------------|----------|
| ECLASS-12.0 | 27060313 |
| ECLASS-13.0 | 27060313 |

ETIM

| | ETIM 9.0 | EC001855 | | |
|--------|-------------|----------|--|--|
| UNSPSC | | | | |
| | UNSPSC 21.0 | 26121600 | | |



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Environmental product compliance

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

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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com