

Sensor/Actuator cable - SAC-3P-10,0-PVC/M12FR B-L - 1431759

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Sensor/Actuator cable, 3-position, PVC, Black RAL 9005, Free cable end, on Socket angled M12, A-coded, Cable length: 10 m

Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our PVC cable for average mechanical strain



Key commercial data

| | |
|--------------------------------------|-----------|
| Packing unit | 1 1 |
| Weight per Piece (excluding packing) | 380.0 GRM |
| Custom tariff number | 85444290 |
| Country of origin | China |

Technical data

Dimensions

| | |
|-----------------|------|
| Length of cable | 10 m |
|-----------------|------|

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 | 250 V |
| Number of positions | 3 |
| Contact resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |

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Technical data

General

| | |
|-----------------------------|-------------------------------|
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| 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 |

Cable

| | |
|---|---------------------------------------|
| Cable type | PVC black |
| Cable type (abbreviation) | PVC |
| Cable abbreviation | LiYY |
| UL AWM style | 2464 / 1729 (80°C/300 V) |
| Conductor cross section | 3x 0.34 mm ² (signal line) |
| AWG signal line | 22 |
| Conductor structure signal line | 42x 0.10 mm |
| Core diameter including insulation | 1.45 mm ±0.02 mm |
| Thickness, insulation | ≥ 0.23 mm (Core insulation) |
| Wire colors | brown, blue, black |
| Overall twist | 3 wires, twisted |
| External sheath, color | Black RAL 9005 |
| Outer sheath thickness | ≥ 0.76 mm |
| External cable diameter D | 5.2 mm ± 0.2 mm |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Cable weight | 40 kg/km |
| Outer sheath, material | PVC |
| Material conductor insulation | PVC |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 100 MΩ*km (at 20 °C) |

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Technical data

Cable

| | |
|---------------------------------|---|
| Conductor resistance | max. 58 Ω/km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V |
| Test voltage, cable | ≥ 3000 V |
| Flame resistance | As per UL-Style 2464 |
| Resistance to oil | According to DIN EN 60811-2-1, 168 h at 90°C |
| 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 |

ETIM

| | |
|----------|----------|
| 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

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UL Listed / cUL Listed / cULus Listed

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Approvals

Ex Approvals

Approvals submitted

Approval details

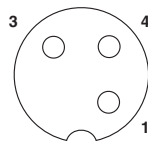
| | |
|--------------------------------|-------|
| UL Listed | |
| Nominal current I _N | 4 A |
| Nominal voltage U _N | 300 V |

| | |
|--------------------------------|-------|
| cUL Listed | |
| Nominal current I _N | 4 A |
| Nominal voltage U _N | 300 V |

| | |
|--------------|--|
| cULus Listed | |
|--------------|--|

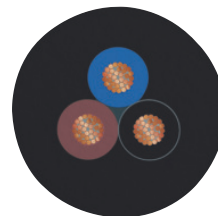
Drawings

Schematic diagram



Pin assignment M12 socket, 3-pos., A-coded, view female side

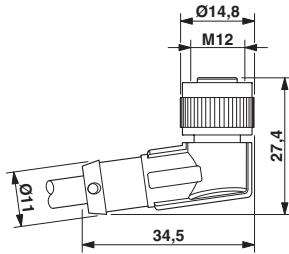
Cable cross section



PVC black [PVC]

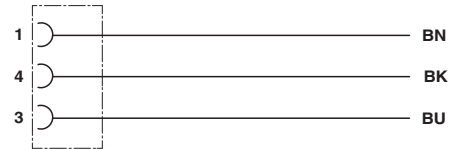
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Dimensioned drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 socket