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Sensor/Actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, Acoded, on Socket straight M8, Cable length: 1 m



Key Commercial Data

| Packing unit | 1 pc |
|--------------------------------------|----------|
| Minimum order quantity | 50 pc |
| Weight per Piece (excluding packing) | 44.39 g |
| Custom tariff number | 85444290 |
| Country of origin | Poland |

Technical data

Dimensions

| Length of cable | 1 m |
|-----------------|-----|

Ambient conditions

| Degree of protection | IP65 |
|----------------------|------|
| | IP67 |
| | IP68 |

General

| Rated current at 40°C | 4 A |
|-----------------------|-----------------------|
| Rated voltage | 60 V |
| Number of positions | 3 |
| Insulation resistance | \geq 100 M Ω |
| Coding | A - standard |
| Status display | No |
| Overvoltage category | II |



Technical data

General

| Degree of pollution | 3 |
|---------------------|---|

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 | Zinc die-cast, nickel-plated | |
| Sealing material | NBR | |

Standards and Regulations

| Flammability rating according to UL 94 | НВ |
|--|----|
|--|----|

Cable

| Cable type | PUR halogen-free black | |
|---|--------------------------------|--|
| Cable type (abbreviation) | PUR | |
| Cable abbreviation | Li9Y11Y-HF | |
| UL AWM style | 20549 | |
| Conductor cross section | 3x 0.25 mm² (Signal line) | |
| AWG signal line | 24 | |
| Conductor structure signal line | 32x 0.10 mm | |
| Core diameter including insulation | 1.17 mm ±0.02 mm (Signal line) | |
| Thickness, insulation | ≥ 0.38 mm (Core insulation) | |
| Wire colors | brown, blue, black | |
| Overall twist | 3 wires, twisted | |
| Length of twist, overall twist | 40 mm | |
| External sheath, color | black-gray RAL 7021 | |
| Outer sheath thickness | approx. 0.9 mm | |
| External cable diameter D | 4.4 mm ±0.15 mm | |
| Smallest bending radius, fixed installation | 22 mm | |
| Smallest bending radius, movable installation | 44 mm | |
| Minimum bending radius, fixed installation | 5 x D | |
| Minimum bending radius, flexible installation | 10 x D | |
| Number of bending cycles | 4000000 | |
| Bending radius | 44 mm | |
| Traversing path | 10 m | |
| Traversing rate | 3 m/s | |
| Acceleration | 10 m/s² | |



Technical data

Cable

| Cable weight | 24 kg/km |
|---------------------------------|---|
| Outer sheath, material | PUR |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | \geq 100 G Ω *km (at 20 °C) |
| Conductor resistance | \leq 78 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 |
| 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 | hydrolysis and microbe resistant |
| | Highly resistant to acids, alkaline solutions and solvents |
| | 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 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

ETIM

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



Classifications

| 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 / cULus Listed

Ex Approvals

Approvals submitted

Approval details

| UL Listed (II) | |
|--------------------|-------|
| | |
| Nominal current IN | 4 A |
| Nominal voltage UN | 125 V |

| cUL Listed • • • • • • • • • • • • • • • • • • • | | |
|--|-------|--|
| | | |
| Nominal current IN | 4 A | |
| Nominal voltage UN | 125 V | |



Approvals



Drawings

Schematic diagram



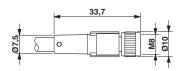
Pin assignment M12 plug, 3-pos., A-coded, view male side

Cable cross section



PUR halogen-free black [PUR]

M12 x 1 plug, straight



Dimensional drawing

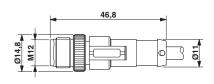
Socket M8 x 1, straight

Schematic diagram

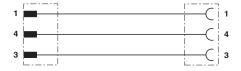


Pin assignment M8 socket, 3-pos.

Dimensional drawing



Circuit diagram



Contact assignment of M12 plugs / M8 sockets