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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on Socket angled M8, cable length: 5 m



Key Commercial Data

| Packing unit | 1 STK |
|--------------|-----------------|
| GTIN | 4 017918 438692 |
| GTIN | 4017918438692 |
| Sales Key | 02 |

Technical data

Dimensions

| Length of cable | 5 m | |
|-----------------|-----|--|
| A 1.1 (1941 | | |

Ambient conditions

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

General

| Rated current at 40°C | 4 A |
|-----------------------|----------------------------|
| Rated voltage | 48 V AC |
| | 60 V DC |
| Number of positions | 3 |
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Coding | A - standard |
| Status display | No |
| Overvoltage category | Ш |
| Degree of pollution | 3 |



Technical data

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 |
| 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 (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. 0.5 mm |
| External cable diameter D | 3.6 mm ±0.15 mm |
| Smallest bending radius, fixed installation | 18 mm |
| Smallest bending radius, movable installation | 36 mm |
| Number of bending cycles | 10000000 |
| Bending radius | 44 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s² |
| Cable weight | 18 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 |
| | 07/10/00/0 P 0/5 |



Technical data

Cable

| Special properties | Flexible cable conduit capable | |
|---------------------------------|---|--|
| | Silicone-free | |
| | Free of substances which would hinder coating with paint or varnish | |
| Flame resistance | in accordance with UL 758/1581 FT2 | |
| | DIN EN 60332-2-2 (20 s) | |
| 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) | |

Environmental Product Compliance

| China RoHS | Environmentally Friendly Use Period = 50 | |
|------------|---|--|
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" | |

Drawings

Schematic diagram



Schematic diagram



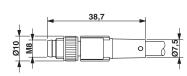
Pin assignment M8 plug, 3-pos., view male side

Cable cross section

Pin assignment M8 socket, 3-pos., view female side



Dimensional drawing

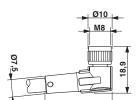


PUR halogen-free black [PUR]

M8 x 1 male plug, straight version



Dimensional drawing



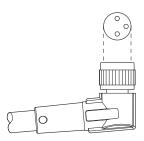
Circuit diagram



Contact assignment of M8 plugs/sockets

Socket M8 x 1, angled

Schematic diagram



Layout of connector pin assignments

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details

| UL Listed | LISTED | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE | | FILE E 221474 |
|--------------------|--------|--|------|---------------|
| | | | | |
| Nominal voltage UN | | | 60 V | |
| Nominal current IN | | | 4 A | |



Approvals

| cUL Listed | CUL | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | | FILE E 221474 |
|--------------------|-----|---|------|---------------|
| | | | | |
| Nominal voltage UN | | | 60 V | |
| Nominal current IN | | | 4 A | |

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

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