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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M8, cable length: 2 m

Your advantages



Key Commercial Data

| Packing unit | 1 pc |
|--------------------------------------|-----------------|
| GTIN | 4 017918 845513 |
| GTIN | 4017918845513 |
| Weight per Piece (excluding packing) | 63.870 g |
| Custom tariff number | 85444290 |
| Country of origin | Germany |

Technical data

Dimensions

| Length of cable | 2 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 |



Technical data

General

| Rated current at 40°C | 4 A |
|------------------------------|------------------------------|
| Rated voltage | 48 V AC |
| | 60 V DC |
| Number of positions | 3 |
| Insulation resistance | \geq 100 M Ω |
| Coding | A - standard |
| Standards/regulations | M8 connector IEC 61076-2-104 |
| Status display | No |
| Protective circuit/component | unwired |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.2 Nm (M8 connectors) |

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

| Standard designation | M8 connector |
|--|-----------------|
| Standards/regulations | IEC 61076-2-104 |
| 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 / 10493 (80°C/300 V) |
| Conductor cross section | 3x 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 (Core insulation) |
| Wire colors | brown, blue, black |



Technical data

Cable

| Cabio | |
|---|---|
| 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 | ≥ 100 GΩ*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 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) |
| | |

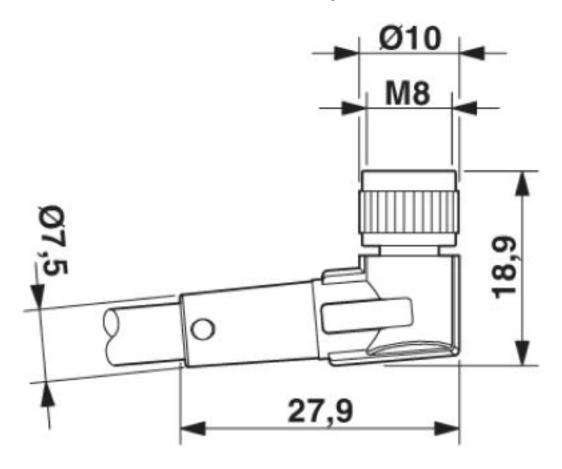
Environmental Product Compliance

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



Drawings

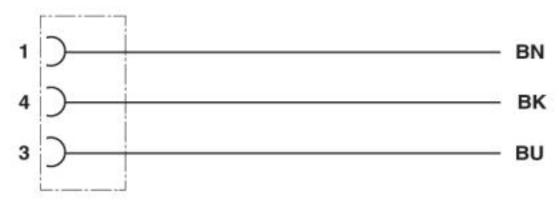
Dimensional drawing



Socket M8 x 1, angled



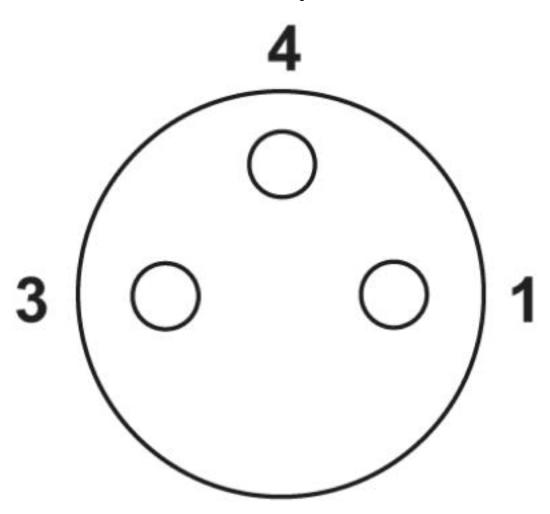
Circuit diagram



Contact assignment of M8 socket



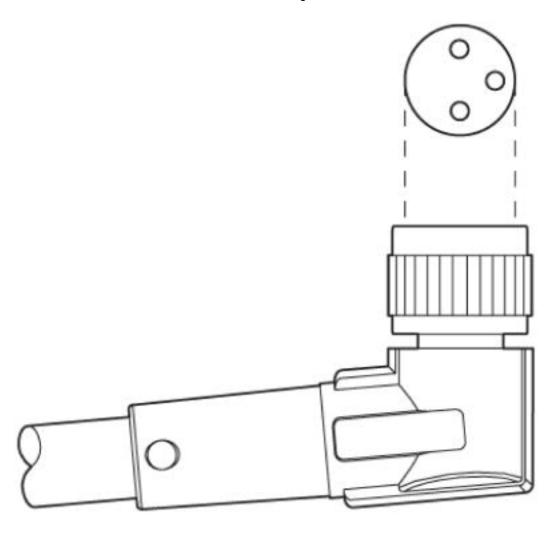
Schematic diagram



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



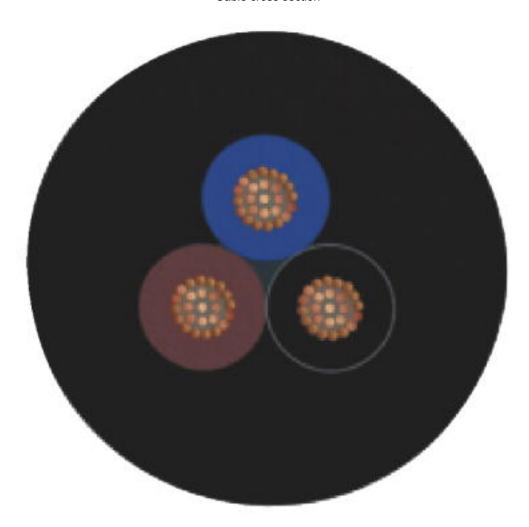
Schematic diagram



Layout of connector pin assignments



Cable cross section



PUR halogen-free black [PUR]

Classifications

eCl@ss

| eCl@ss 4.0 | 27060300 |
|------------|----------|
| eCl@ss 4.1 | 27060300 |
| eCl@ss 5.0 | 27061800 |
| eCl@ss 5.1 | 27061800 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 8.0 | 27279218 |



Classifications

| \sim | $\overline{}$ |
|--------|---------------|
| | @ss |
| | |
| | |

eCl@ss 9.0

| ETIM | · | |
|----------|----------|--|
| ETIM 2.0 | EC000830 | |
| ETIM 3.0 | EC001855 | |
| ETIM 4.0 | EC001855 | |
| ETIM 5.0 | EC001855 | |
| ETIM 6.0 | EC001855 | |
| ETIM 7.0 | EC001855 | |

27060311

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

Approval details

| UL Listed | UL | 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 | |



Approvals

| cUL Listed | C UL | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | | FILE E 221474 |
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| cULus Listed | c UL US | | | |
|--------------|---------|--|--|--|
|--------------|---------|--|--|--|

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