

Sensor/actuator cable - SAC-4P-M 8MR/0,6-PUR/M12FR - 1682511


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Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug angled M8, on Socket angled M12, coding: A, cable length: 0.6 m

RoHS

Key Commercial Data

| | |
|----------------------|---|
| Packing unit | 1 |
| GTIN |  4 017918 159177 |
| GTIN | 4017918159177 |
| Custom tariff number | 85444290 |

Technical data

Dimensions

| | |
|-----------------|-------|
| Length of cable | 0.6 m |
|-----------------|-------|

Ambient conditions

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

General

| | |
|-----------------------|--------------|
| Rated current at 40°C | 4 A |
| Rated voltage | 30 V |
| Number of positions | 4 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Status display | No |

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Technical data

General

| | |
|-----------------------------|-------|
| Overvoltage category | II |
| Degree of pollution | 3 |
| Insertion/withdrawal cycles | ≥ 100 |

Material

| | |
|--|---|
| Flammability rating 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 |
| Sealing material | NBR |

Standards and Regulations

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

Cable

| | |
|---|---------------------------------------|
| Cable type | PUR halogen-free black |
| Cable type (abbreviation) | PUR |
| Cable abbreviation | Li9Y11Y-HF |
| UL AWM style | 20549 |
| Conductor cross section | 4x 0.25 mm ² (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 | ≥ 0.21 mm (Core insulation) |
| Wire colors | brown, white, blue, black |
| Overall twist | 4 wires, twisted |
| External sheath, color | black-gray RAL 7021 |
| Outer sheath thickness | approx. 0.7 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 |
| Number of bending cycles | 4000000 |
| Bending radius | 44 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 5 m/s ² |
| Cable weight | 25 kg/km |

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Technical data

Cable

| | |
|---------------------------------|---|
| Outer sheath, material | PUR |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | $\geq 100 \text{ G}\Omega \cdot \text{km}$ (at 20 °C) |
| Conductor resistance | max. 78 Ω/km (at 20 °C) |
| Nominal voltage, cable | $\leq 300 \text{ V}$ |
| Test voltage, cable | $\geq 3000 \text{ V}$ |
| 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 | Highly resistant to acids, alkaline solutions and solvents |
| | hydrolysis and microbe resistant |
| | 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) |

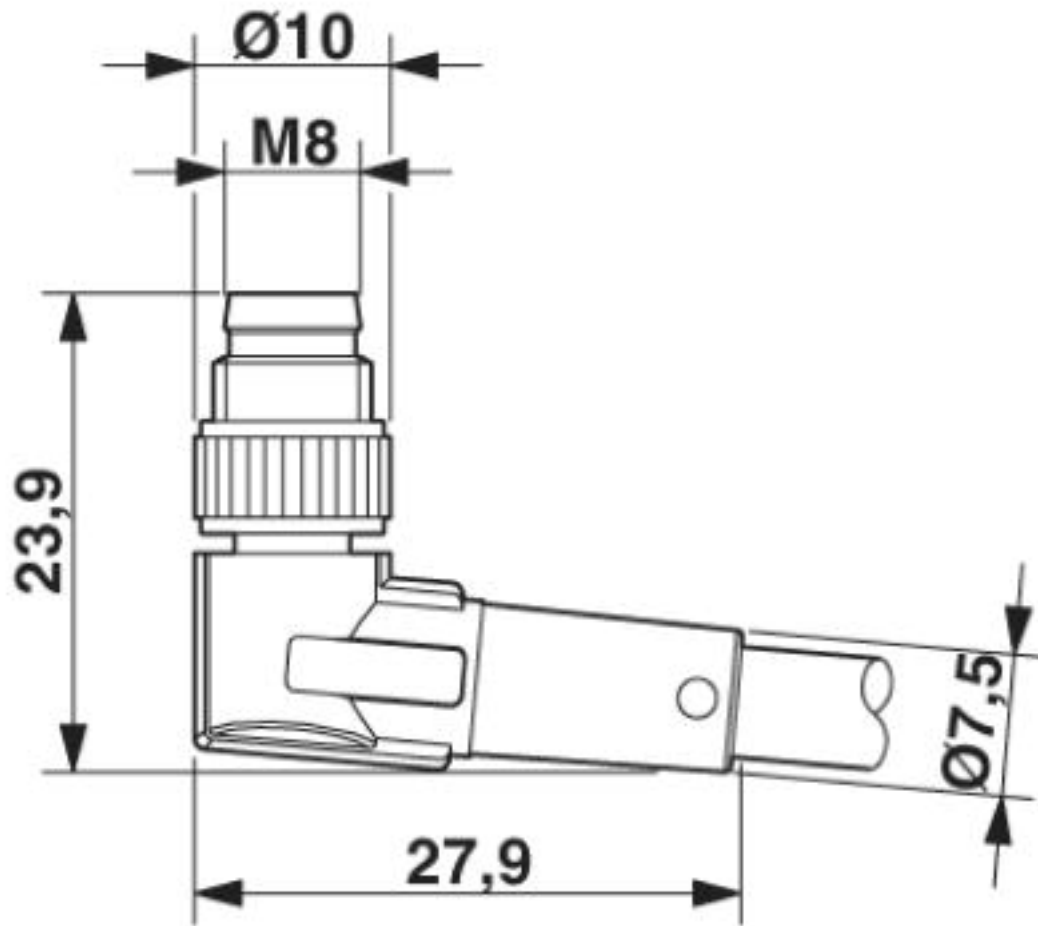
Environmental Product Compliance

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

Drawings

Sensor/actuator cable - SAC-4P-M 8MR/0,6-PUR/M12FR - 1682511

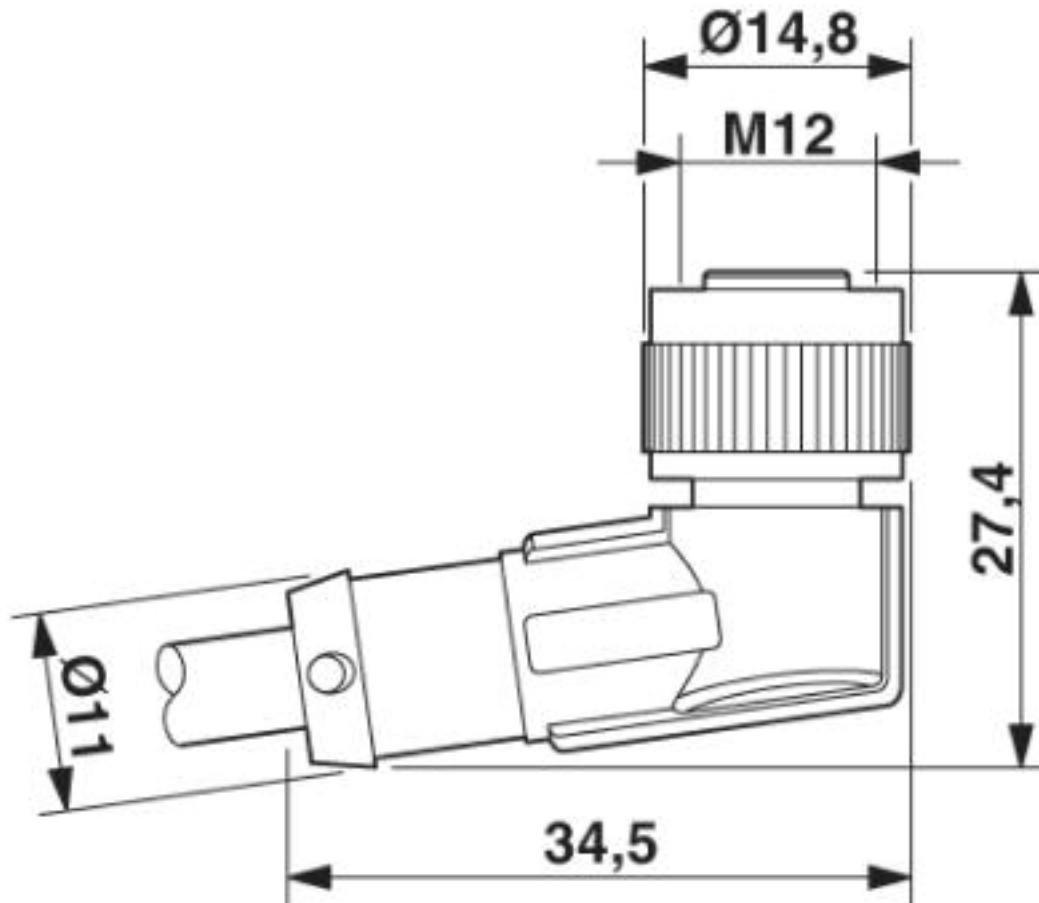
Dimensional drawing



M8 x 1 male plug, angled version

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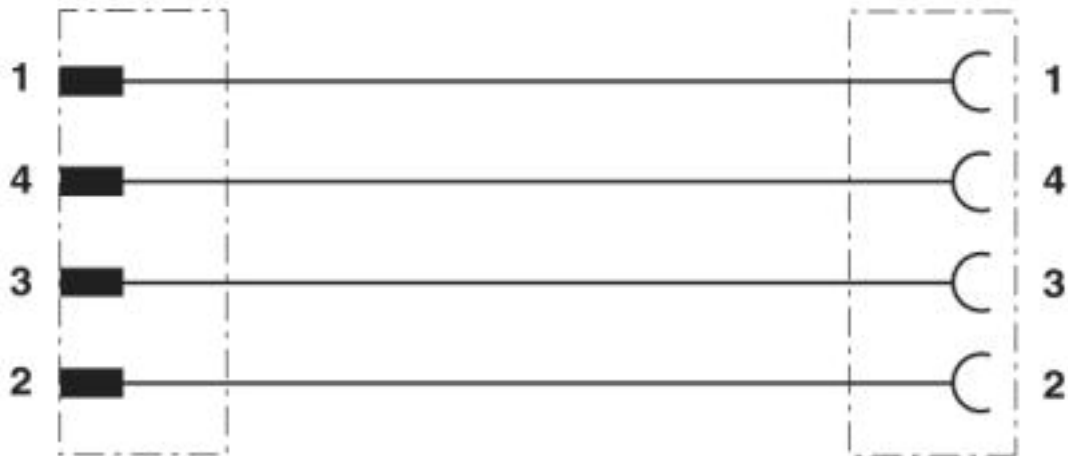
Dimensional drawing



M12 x 1 socket, angled

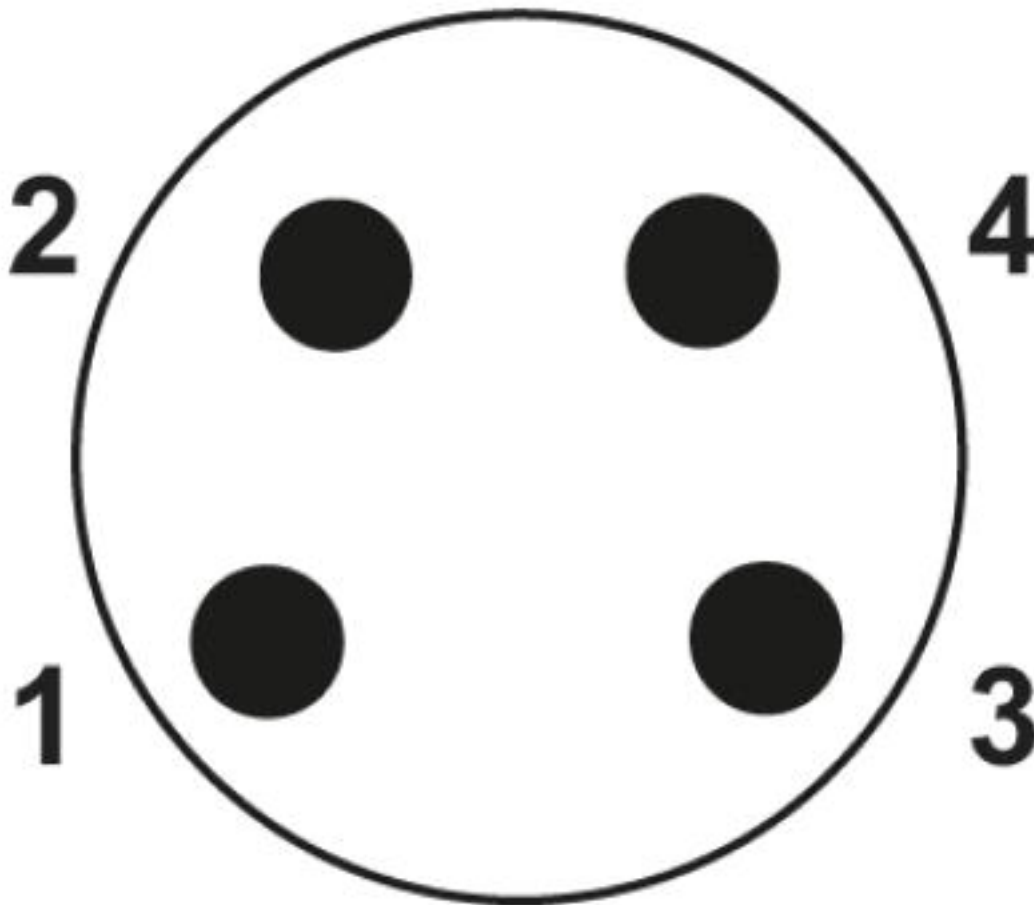
Sensor/actuator cable - SAC-4P-M 8MR/0,6-PUR/M12FR - 1682511

Circuit diagram



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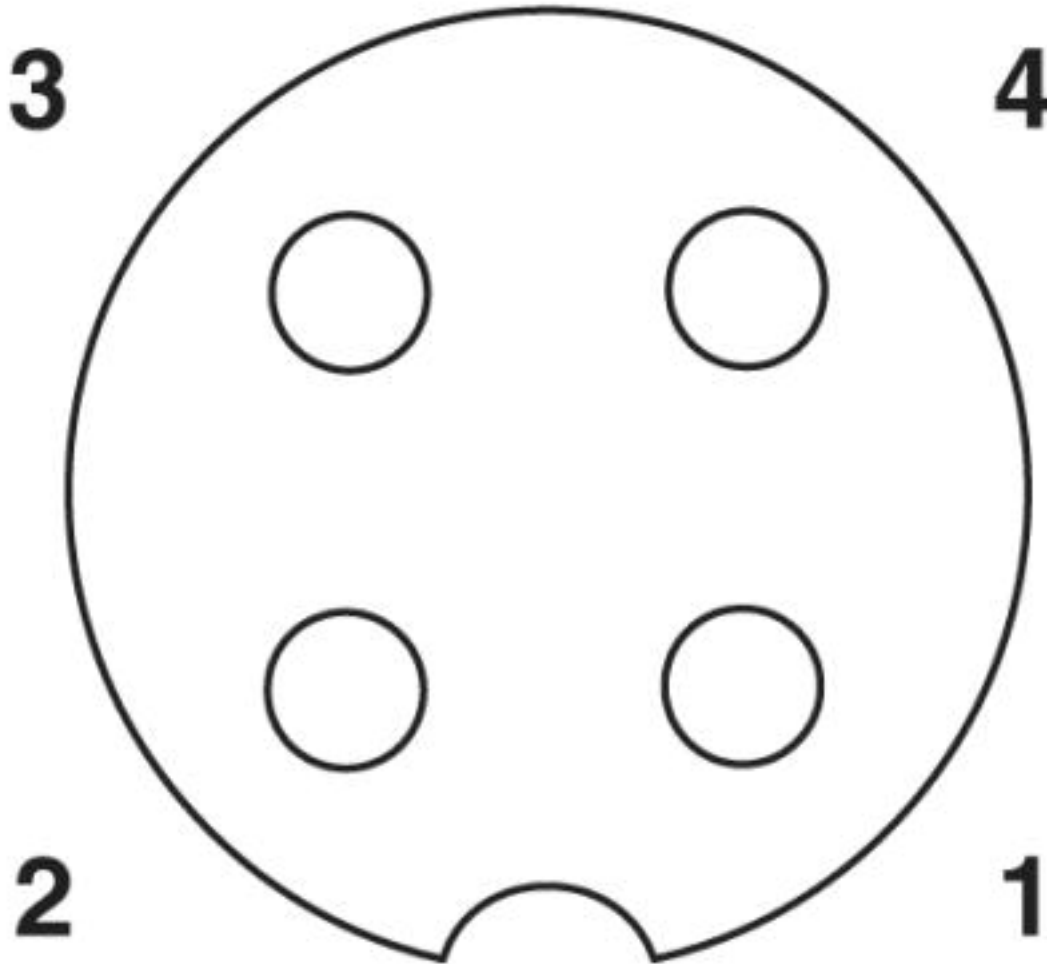
Schematic diagram



Pin assignment M8 plug, 4-pos., view male side

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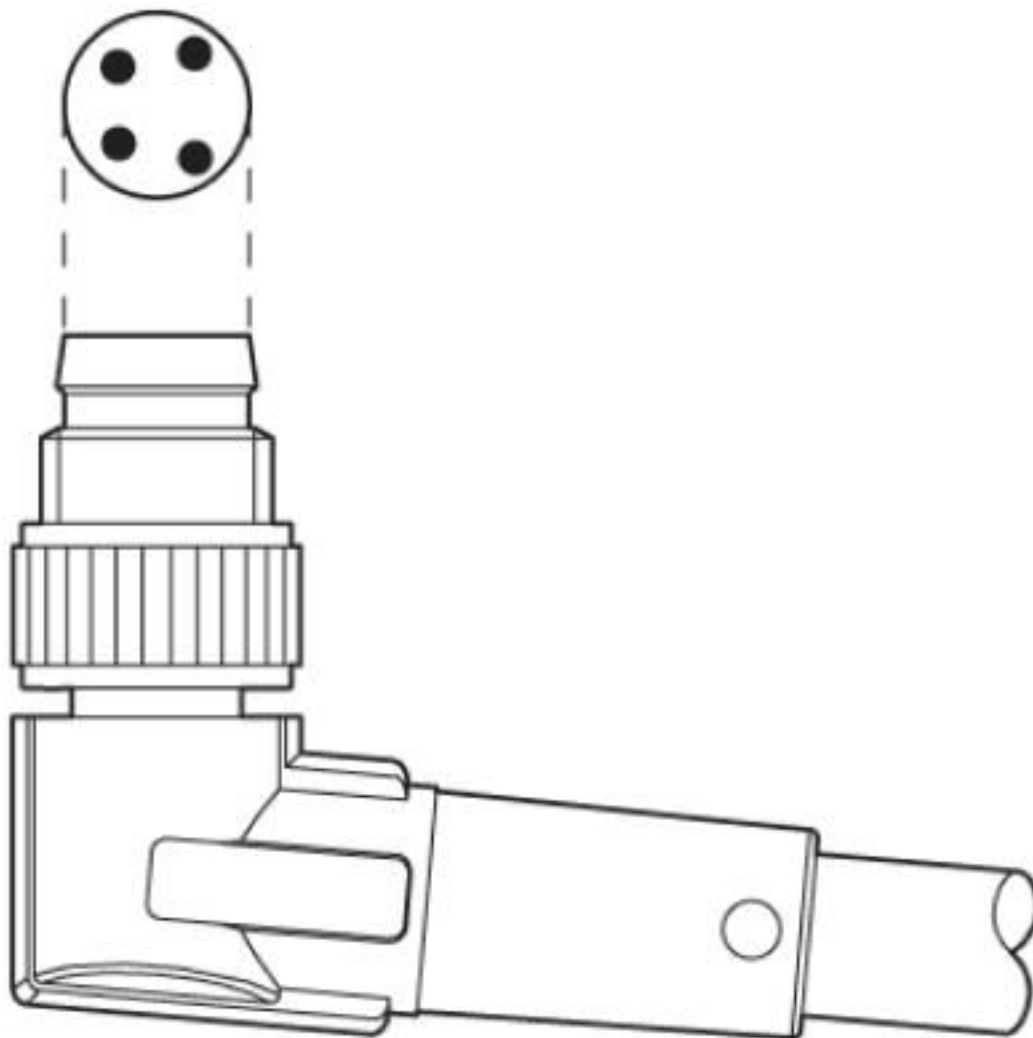
Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

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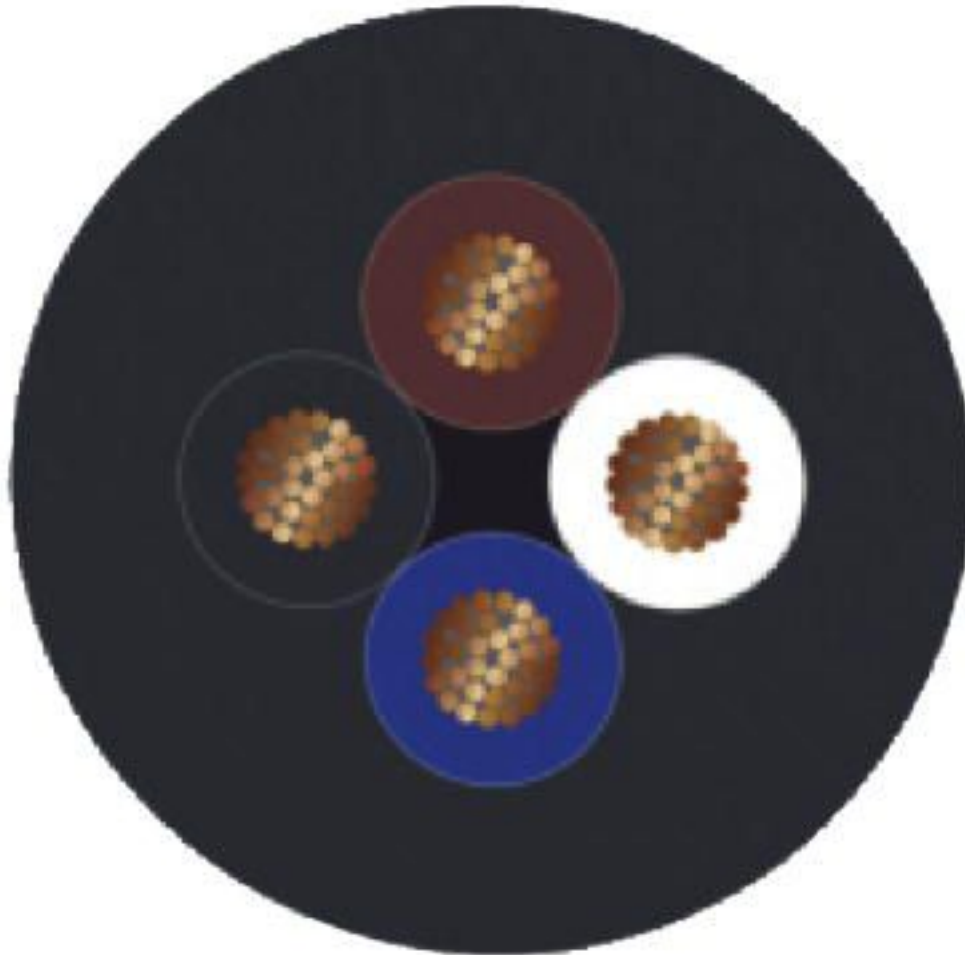
Schematic diagram



Layout of connector pin assignments

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Cable cross section



PUR halogen-free black [PUR]

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 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

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Classifications

ETIM

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