

Sensor/actuator cable - SAC-4P-M 8MS/3,0-PUR - 1681790

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on free cable end, cable length: 3 m

Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our standard: robust halogen-free PUR cable

Key Commercial Data

| | |
|--------------|---|
| Packing unit | 1 pc |
| GTIN |  4 017918 158453 |
| GTIN | 4017918158453 |
| Sales Key | 02 |

Technical data

Dimensions

| | |
|--|-------|
| Length of cable | 3 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 |

General

| | |
|-----------------------|--------------|
| Rated current at 40°C | 4 A |
| Rated voltage | 48 V AC |
| | 60 V DC |
| Number of positions | 4 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |

Sensor/actuator cable - SAC-4P-M 8MS/3,0-PUR - 1681790

Technical data

General

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

| | |
|--|-----------------|
| Standard designation | M8 connector |
| Standards/regulations | IEC 61076-2-104 |
| Flammability rating according to UL 94 | HB |

Cable

| | |
|---|---------------------------------------|
| Cable type | PUR halogen-free black |
| Cable type (abbreviation) | PUR |
| Cable abbreviation | Li9Y11Y-HF |
| 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) |
| | approx. 0.5 mm (Outer cable sheath) |
| Wire colors | brown, white, blue, black |
| Overall twist | 4 wires, twisted |
| External sheath, color | black-gray RAL 7021 |
| External cable diameter D | 3.95 mm ±0.15 mm |
| Smallest bending radius, fixed installation | 20 mm |
| Smallest bending radius, movable installation | 40 mm |
| Number of bending cycles | 10000000 |
| Bending radius | 44 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |

Sensor/actuator cable - SAC-4P-M 8MS/3,0-PUR - 1681790

Technical data

Cable

| | |
|---------------------------------|---|
| Acceleration | 5 m/s ² |
| Cable weight | 23 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 | max. 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 | 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) |

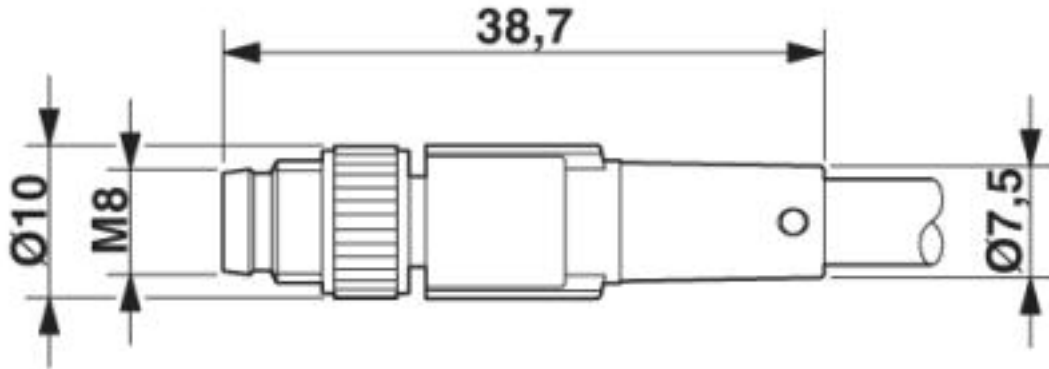
Environmental Product Compliance

| | |
|------------|---|
| | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

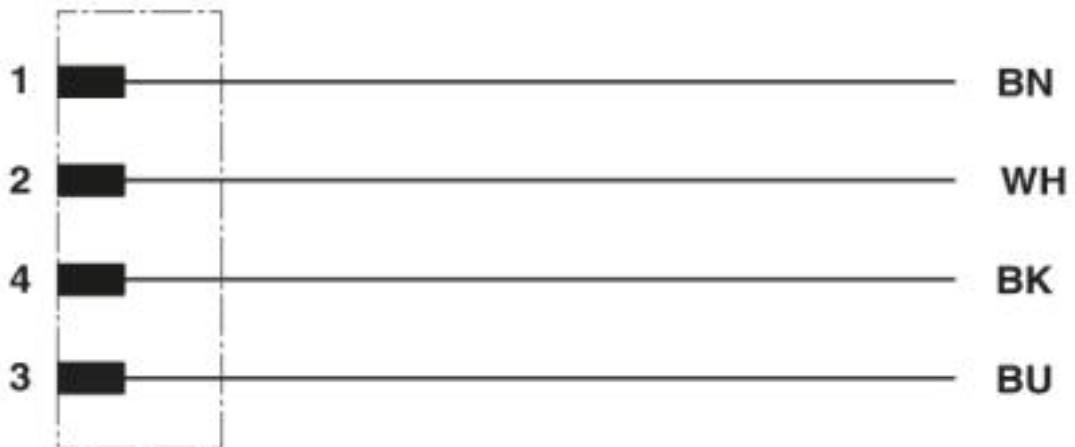
Sensor/actuator cable - SAC-4P-M 8MS/3,0-PUR - 1681790

Dimensional drawing



M8 x 1 male plug, straight version

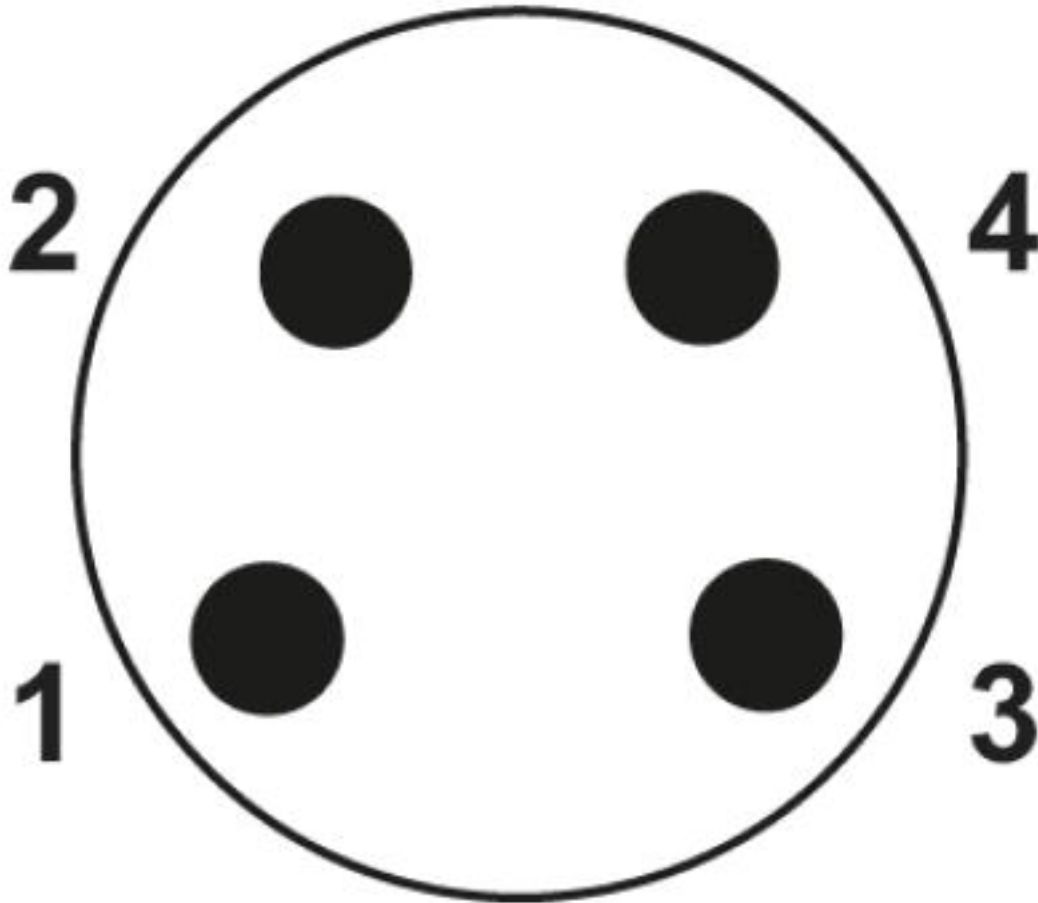
Circuit diagram



Contact assignment of the M12 plug

Sensor/actuator cable - SAC-4P-M 8MS/3,0-PUR - 1681790

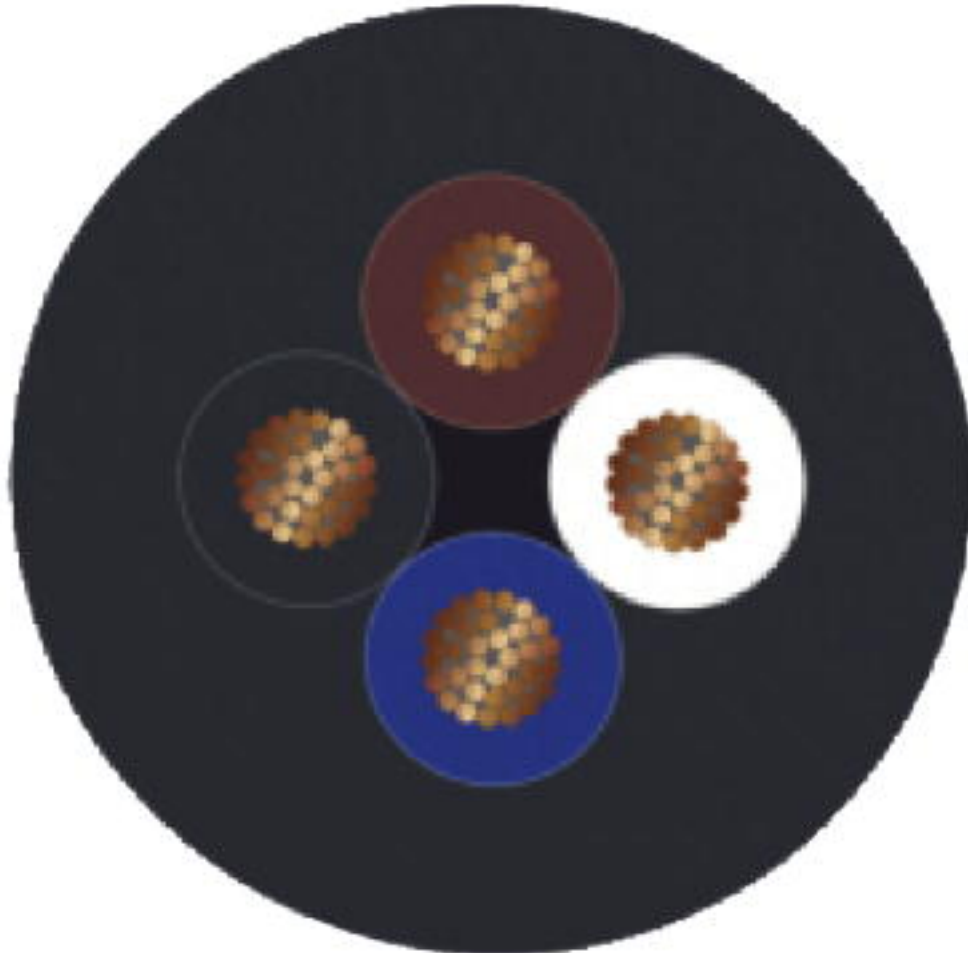
Schematic diagram



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

Sensor/actuator cable - SAC-4P-M 8MS/3,0-PUR - 1681790

Cable cross section



PUR halogen-free black [PUR]

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approval details

Sensor/actuator cable - SAC-4P-M 8MS/3,0-PUR - 1681790

Approvals

| | | | |
|--------------------|--|---|---------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |
| | | | |
| Nominal voltage UN | | 30 V | |
| Nominal current IN | | 4 A | |

| | | | |
|--------------------|--|---|---------------|
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |
| | | | |
| Nominal voltage UN | | 30 V | |
| Nominal current IN | | 4 A | |

| | | |
|-----|--|---------------|
| EAC | | EAC-Zulassung |
|-----|--|---------------|

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

Phoenix Contact 2019 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>