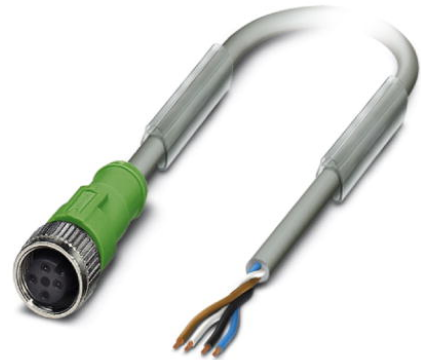



SAC-4P- 1,5-800/M12FS

Order No.: 1456938



<http://catalog.phoenixcontact.net/phoenix/treeViewClick.do?UID=1456938>

Sensor/Actuator cable, 4-position, PUR halogen-free, welding sputter-resistant, highly flexible, Gray RAL 7001, free cable end, on Socket straight M12, A-coded, Cable length: 1.5 m, for robots and drag chains

| Commercial data | |
|--------------------------|--|
| EAN |  4 046356 593298 |
| Note | Made-to-order |
| sales group | D111 |
| Pack | 1 Pcs. |
| Customs tariff | 85444290 |
| Gross weight in pieces | 0.0614 KG |
| Net weight per piece | 0.0614 KG |
| Catalog page information | Page 165 (C-4-2013) |

Product notes

WEEE/RoHS-compliant since:
07/06/2010



<http://www.download.phoenixcontact.com>
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

| Technical data | |
|---------------------------------|----------------------------------|
| Dimensions | |
| Length of cable | 1.5 m |
| Ambient conditions | |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |

General

| | |
|------------------------------|-------------------------------|
| Rated current at 40°C | 4 A |
| Rated voltage | 250 V |
| Number of positions | 4 |
| Contact resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Protective circuit/component | Unwired |
| Surge voltage category | II |
| Pollution degree | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm (M12 connector) |

Material

| | |
|---|---|
| Inflammability class 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 |

Cable

| | |
|------------------------------------|--|
| Note | Due to the extremely robust outer sheath, this cable should only be stripped in 5 cm increments. |
| Cable type | Gray, highly flexible PUR |
| Cable type (abbreviation) | 800 |
| Cable abbreviation | Li12YYTPE-HF |
| Conductor cross section | 4x 0.34 mm ² (signal line) |
| AWG signal line | 22 |
| Conductor structure signal line | 42x 0.10 mm |
| Core diameter including insulation | 1.3 mm ±0.05 mm (signal line) |
| Wire colors | brown, white, blue, black |
| Overall twist | 4 wires, twisted |
| External sheath, color | Gray RAL 7001 |

| | |
|---|--|
| External cable diameter D | 4.8 mm ±0.2 mm |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 5 x D |
| Number of bending cycles | 15000000 |
| Bending radius | 50 mm |
| Traversing path | 0.9 m |
| Traversing rate | 5 m/s |
| Acceleration | 30 m/s ² |
| Torsion force | ± 360 °/m |
| Outer sheath, material | PUR |
| Material conductor insulation | PES |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 20 MΩ*km |
| Conductor resistance | approx. 53 Ω/km |
| Nominal voltage, cable | 300 V |
| Test voltage, cable | 2000 V |
| Special properties | Sheath resistant to welding beads, can be recycled, matt, without adhesion, wear-resistant, flame resistant and self-extinguishing |
| | Free from silicone and cadmium |
| | Free of substances which would hinder coating with paint or varnish |
| Flame resistance | DIN VDE 0472 part 804, test type B |
| | IEC 60332-1 |
| | in accordance with FT1 as per UL 758 |
| Halogen-free | The cable is halogen-free |
| Resistance to oil | Excellent oil-resistance (as per DIN VDE 0250 T.407) |
| Other resistance | Highly resistant to acids, alkaline solutions and solvents |
| Ambient temperature (operation) | -40 °C ... 90 °C (cable, fixed installation) |
| | -30 °C ... 90 °C (cable, flexible installation) |
| | to 120 °C (for 3000 h) |

Certificates / Approvals



Certification

GOST

Certifications applied for:

Certification Ex:

Accessories

| Item | Designation | Description |
|------|-------------|-------------|
|------|-------------|-------------|

Protection and sealing elements

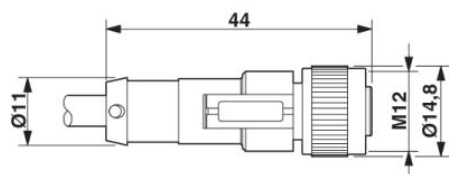
| | | |
|---------|----------------------|---|
| 1430899 | PROT-M12 MS-PA-CHAIN | M12 sealing cap with fixing band, for sensor cables, for free M12 sockets |
|---------|----------------------|---|

Tools

| | | |
|---------|-----------------|---|
| 1208432 | SAC BIT M12-D15 | Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive |
| 1208429 | TSD 04 SAC | Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors |

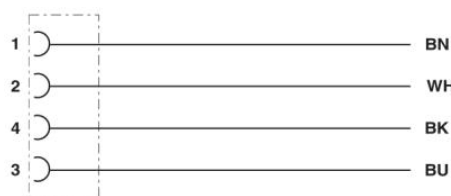
Drawings

Dimensioned drawing



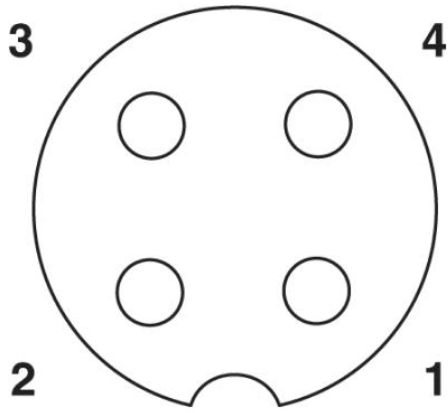
M12 x 1 socket, straight

Circuit diagram

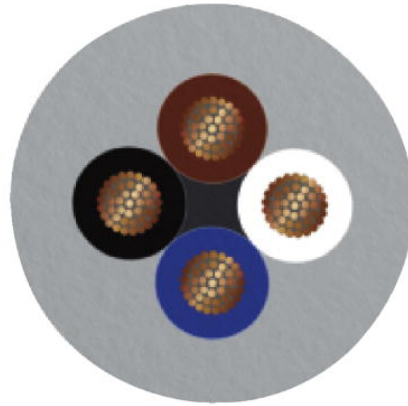


Contact assignment of the M12 plug and the M12 socket

Schematic diagram



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



Gray, highly flexible PUR [800]

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