


SAC-5P-M12MS/5,0-PUR/M12FS

Order No.: 1533615

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Sensor/Actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 5 m

Commercial data

| | |
|------------------------|--|
| EAN |  4 017918 992156 |
| sales group | D112 |
| Pack | 1 Pcs. |
| Customs tariff | 85444290 |
| Gross weight in pieces | 0.1887 KG |
| Net weight per piece | 0.1835 KG |

Product notes

WEEE/RoHS-compliant since:
08/01/2005



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Technical data**Dimensions**

| | |
|-----------------|-----|
| Length of cable | 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 | 60 V |
| Number of positions | 5 |
| Contact resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Status display | No |
| Surge voltage category | II |
| Pollution degree | 3 |
| Insertion/withdrawal cycles | ≥ 100 |

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

| | |
|------------------------------------|---|
| Cable type | PUR halogen-free black |
| Cable type (abbreviation) | PUR |
| UL AWM style | 20549 |
| Conductor cross section | 5x 0.34 mm ² (signal line) |
| AWG signal line | 22 |
| Conductor structure signal line | 42x 0.10 mm |
| Core diameter including insulation | 1.27 mm ±0.02 mm (signal line) |
| Thickness, insulation | approx. 0.7 mm |
| Wire colors | brown, white, blue, black, green-yellow |
| External sheath, color | black-gray RAL 7021 |
| External cable diameter D | 5 mm ±0.15 mm |

| | |
|---|---|
| Smallest bending radius, fixed installation | 25 mm |
| Smallest bending radius, movable installation | 50 mm |
| Number of bending cycles | 4000000 |
| Bending radius | 50 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s ² |
| Cable weight | 35 kg/km |
| Outer sheath, material | PUR |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 16 GΩ*km (at 20 °C) |
| Conductor resistance | max. 58 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 |
| | Flexible |
| 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 |
| | 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) |

Certificates / Approvals



Certification

cULus Listed

Certifications applied for:

Certification Ex:

Accessories

| Item | Designation | Description |
|-------------|------------------|---|
| Fuse | | |
| 1558991 | SAC-M12-EXCLIP-F | Fuse clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors which can be assembled with QUICKON fast connection technology, prevents the disconnection of plug-in connections without tools |
| 1558988 | SAC-M12-EXCLIP-M | Fuse clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors which can be assembled with QUICKON fast connection technology, prevents the disconnection of plug-in connections without tools |

Marking

| | | |
|---------|------------|---|
| 1051993 | B-STIFT | Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm |
| 1013944 | PABA RD/15 | Insert label, Strip, red, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm |
| 1013151 | PABA WH/15 | Insert label, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm |
| 1013698 | PABA YE/15 | Insert label, Strip, yellow, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm |
| 1013122 | PATO 2/15 | Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 2.8-4.4 mm, Lettering field: 4 x 15 mm |
| 1013135 | PATO 3/15 | Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 4.4-6.7 mm, Lettering field: 4 x 15 mm |
| 1013148 | PATO 4/15 | Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 6.7-10 mm, Lettering field: 4 x 15 mm |

Protection and sealing elements

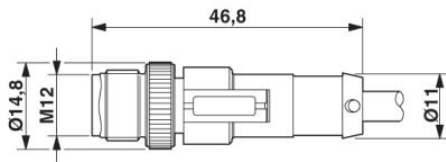
| | | |
|---------|----------------------|---|
| 1430873 | PROT-M12 FS-PA-CHAIN | M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 sockets |
| 1430899 | PROT-M12 MS-PA-CHAIN | M12 sealing cap with fixing band, for sensor cables, for free M12 sockets |

Tools

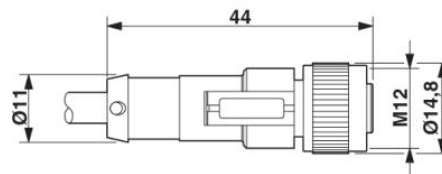
| | | |
|---------|-----------------------|---|
| 1208432 | SAC BIT M12-D15 | Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive |
| 1208429 | TSD 04 SAC | Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors |
| 1212224 | TSD-M 1,2NM | Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm |
| 1212600 | TSD-M SAC-BIT ADAPTER | Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits |

Drawings

Dimensioned drawing



M12 x 1 plug, straight



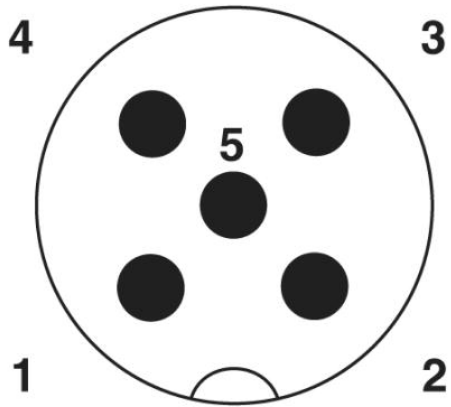
M12 x 1 socket, straight

Circuit diagram

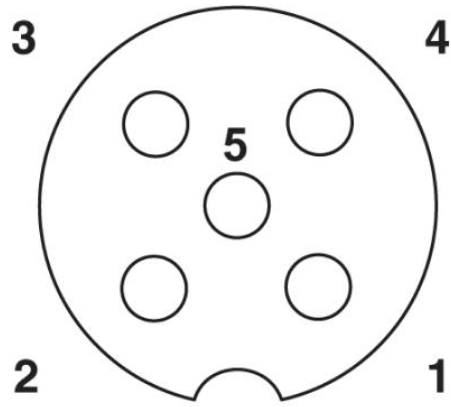


Contact assignment of the M12 plug and the M12 socket

Schematic diagram

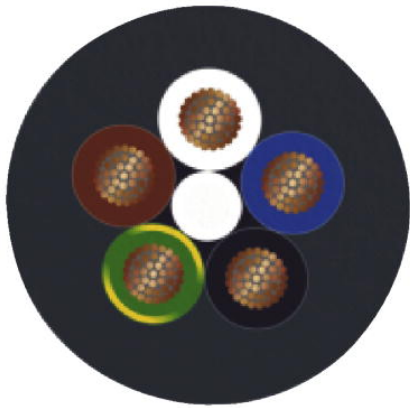


Pin assignment M12 male connector, 5-pos., A-coded, male side



Pin assignment M12 socket, 5-pos., A-coded, socket side view

PUR halogen-free black [PUR]



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