

# SAC-5P-MR/ 1,5-542/ FR SCO BK

Order No.: 1406162



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Sensor/Actuator cable, 5-position, Variable cable type, Plug angled M12 SPEEDCON, A-coded, on Socket angled M12 SPEEDCON, A-coded, Cable length: 1.5 m



## Product notes

WEEE/RoHS-compliant since: 04/03/2012



| Commercial data        |  |
|------------------------|--|
| EAN                    | <br>4 046356 798884 |
| Note                   | Made-to-order  |
| sales group            | D112   |
| Pack                   | 1 Pcs.   |
| Customs tariff         | 85444290   |
| Gross weight in pieces | 0.02222 KG   |
| Net weight per piece   | 0.02222 KG   |

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## 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                | 60 V                          |
| Number of positions          | 5                             |
| 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

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Cable type                         | PVC yellow 105 °C                 |
| Cable type (abbreviation)          | 542                               |
| UL AWM style                       | 2517 (105°C/300 V)                |
| AWG signal line                    | 22                                |
| Core diameter including insulation | 1.27 mm ±0.03 mm                  |
| Wire colors                        | Brown, blue, black, white, gray   |
| Overall twist                      | 5 wires around filler to the core |
| External sheath, color             | yellow                            |

|   |   |
|---|---|
| External cable diameter D                     | 5.4 mm ±0.2 mm                                |
| Minimum bending radius, flexible installation | 8 x D   |
| Cable weight                                  | 43 kg/km                                      |
| Outer sheath, material                        | PVC   |
| Material, filler                              | PP  |
| Material conductor insulation                 | PVC   |
| Conductor material                            | Tin-plated Cu litz wires                      |
| Nominal voltage, cable                        | 300 V   |
| Special properties                            | UL standards PLTC and ITC                     |
| Other resistance                              | UV resistant                                  |
| Ambient temperature (operation)               | -30 °C ... 105 °C (cable, fixed installation) |

### Certificates / Approvals



Certification cULus Listed

Certifications applied for:

Certification Ex:

### Accessories

| Item                                   | Designation          | Description   |
|--|----------------------|---|
| <b>Fuse</b>                            |                      |   |
| 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    |
| <b>Protection and sealing elements</b> |                      |   |
| 1430873                                | PROT-M12 FS-PA-CHAIN | M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 sockets   |

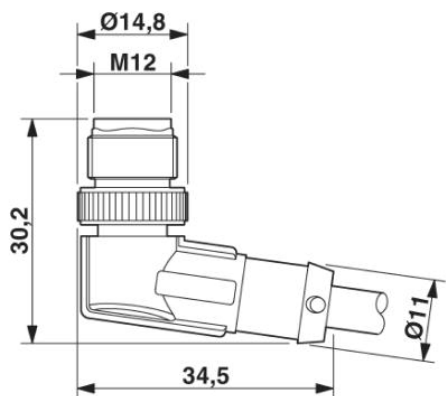
|         |                      |   |
|---------|----------------------|---|
| 1430899 | PROT-M12 MS-PA-CHAIN | M12 sealing cap with fixing band, for sensor cables, for free M12 sockets |
|---------|----------------------|---|

**Tools**

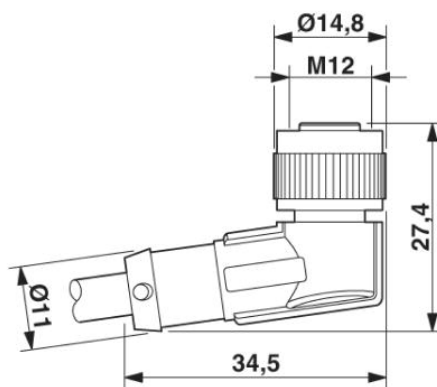
|         |                       |   |
|---------|-----------------------|---|
| 1208432 | SAC BIT M12-D15       | Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive |
| 1208429 | TSD 04 SAC          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

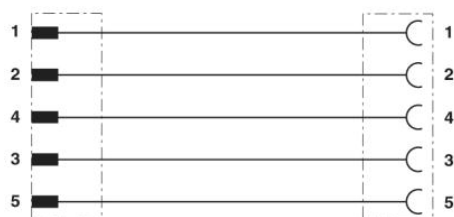


M12 x 1 male plug, angled



M12 x 1 socket, angled

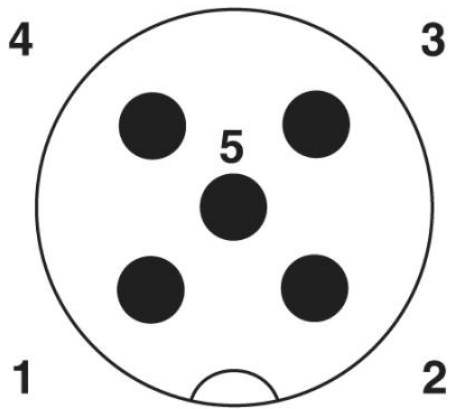
Circuit diagram



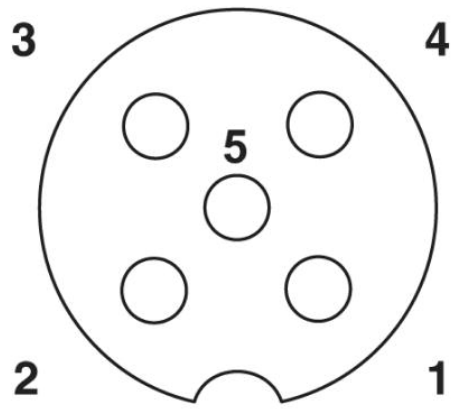
Contact assignment of the M12 plug and the M12 socket

Schematic diagram

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



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

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