

## Sensor/Actuator cable - SAC-5P-MR/ 0,5-542/ FR SCO BK - 1406163


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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: 0.5 m



### Key commercial data

|                      |   |
|----------------------|---|
| Packing unit         | 1 PCE   |
| GTIN                 | <br>4 046356 798877 |
| Custom tariff number | 85444290  |
| Country of origin    | UNITED STATES   |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 0.5 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                              |
| Standards/regulations | M12 plug-in connector IEC 61076-2-101 |

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### Technical data

#### General

|                             |   |
|-----------------------------|---|
| Coding                      | A - standard                                |
| Surge voltage category      | II  |
| Pollution degree            | 3   |
| Insertion/withdrawal cycles | ≥ 100                                       |
| Torque                      | 0.4 Nm (M12 plug-in connector)              |
| 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   |
| Status display              | No  |

#### Line characteristics

|   |   |
|---|---|
| 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, cabel                        | 300 V   |
| Special properties                            | UL standards PLTC and ITC                     |
| Other resistance                              | UV resistant                                  |
| Ambient temperature (operation)               | -30 °C ... 105 °C (cable, fixed installation) |

### Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
|------------|----------|

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## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |

### ETIM

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

## Approvals

### Approvals

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#### Approvals

UL Listed / cUL Listed / cULus Listed

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#### Ex Approvals

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#### Approvals submitted

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### Approval details

|                    |     |
|--------------------|-----|
| UL Listed          |     |
| Nominal current IN | 4 A |

## Sensor/Actuator cable - SAC-5P-MR/ 0,5-542/ FR SCO BK - 1406163

### Approvals

|                    |       |
|--------------------|-------|
| Nominal voltage UN | 125 V |
|--------------------|-------|

|                    |       |
|--------------------|-------|
| cUL Listed         |       |
| Nominal current IN | 4 A   |
| Nominal voltage UN | 125 V |

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

### Accessories

#### Accessories

#### Fuse

Fuse clip - SAC-M12-EXCLIP-M - 1558988



Fuse clip for the pin side of various M12 sensor/actuator connectors prevents plug-in connections being interrupted without using a tool

Fuse clip - SAC-M12-EXCLIP-F - 1558991



Fuse clip for the socket side of various M12 sensor/actuator connectors prevents plug-in connections being interrupted without using a tool

#### Protection and sealing elements

## Sensor/Actuator cable - SAC-5P-MR/ 0,5-542/ FR SCO BK - 1406163

### Accessories

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 sockets



Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



### Tools

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

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## Accessories

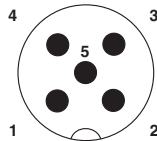
Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

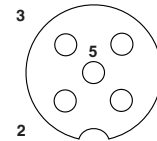
## Drawings

Schematic diagram



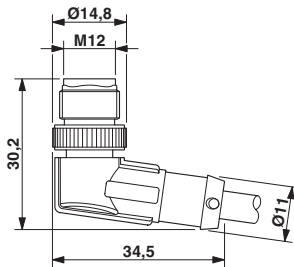
Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



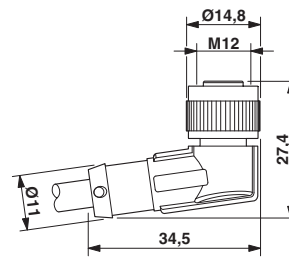
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Dimensioned drawing



M12 x 1 male plug, angled

Dimensioned drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 plug and the M12 socket



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