


Sensor/actuator cable - SAC-HZ-3P-MS/0,5-542/FS SCO BK - 1409519

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Sensor/actuator cable, 3-position, PVC, yellow, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 0.5 m



Key Commercial Data

| | |
|------------------------|---|
| Packing unit | 1 pc |
| Minimum order quantity | 10 pc |
| GTIN |  4 055626 017730 |
| GTIN | 4055626017730 |

Technical data

Dimensions

| | |
|-----------------|-------|
| Length of cable | 0.5 m |
|-----------------|-------|

Ambient conditions

| | |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |

General

| | |
|-----------------------|---|
| Note | These cable assemblies are UL/cUL listed for use in Class I, Division 2 (CID2) hazardous locations. |
| Rated current at 40°C | 4 A |
| Rated voltage | 250 V AC |
| | 250 V DC |
| Number of positions | 3 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |

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Technical data

General

| | |
|------------------------------|-------------------------------|
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Protective circuit/component | unwired |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Torque | 0.4 Nm (M12 connector) |

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

| | |
|--|------------------------------------|
| Standards/specifications | M12 connector IEC 61076-2-101 |
| Flammability rating according to UL 94 | HB |
| UL, USA/Canada | Class I, Div. 2, Groups A, B, C, D |

Cable

| | |
|---|---------------------------|
| Cable type | PVC yellow 105 °C |
| Cable type (abbreviation) | 542 |
| UL AWM style | 2517 (105 °C / 300 V) |
| AWG signal line | 22 |
| Conductor structure signal line | 30x 1.30 mm |
| Core diameter including insulation | 1.27 mm ±0.03 mm |
| Wire colors | brown, blue, black |
| Overall twist | 3 wires, twisted |
| External sheath, color | yellow |
| External cable diameter D | 4.7 mm ±0.2 mm |
| Minimum bending radius, flexible installation | 8 x D |
| Cable weight | 30 kg/km |
| Outer sheath, material | PVC |
| Material conductor insulation | PVC |
| Conductor material | Tin-plated Cu litz wires |
| Insulation resistance | ≥ (550 M Ohms/m @ 500V) |
| Conductor resistance | max. 50.5 Ω/km (20 °C) |
| Nominal voltage, cable | 300 V |
| Special properties | UL standards PLTC and ITC |
| Other resistance | UV resistant |

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Technical data

Cable

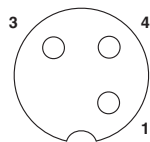
| | |
|---------------------------------|---|
| Flame resistance | FT4 |
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation) |
| | -5 °C ... 105 °C (cable, flexible installation) |

Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

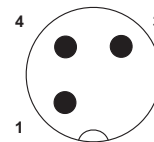
Drawings

Schematic diagram



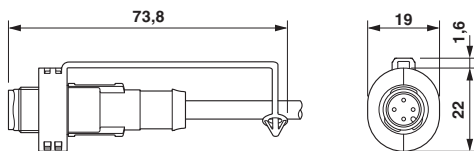
Pin assignment M12 socket, 3-pos., A-coded, view female side

Schematic diagram



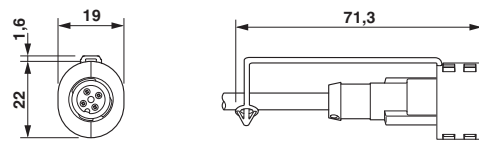
Pin assignment M12 plug, 3-pos., A-coded, view male side

Dimensional drawing



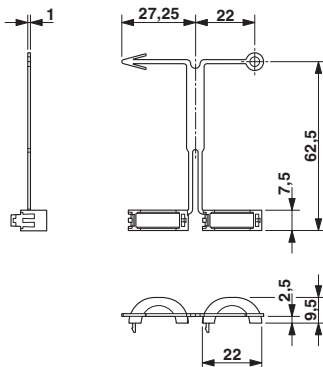
EXCLIP mounted plug

Dimensional drawing



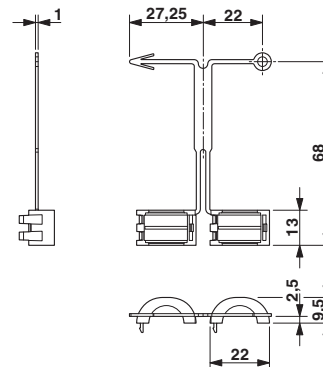
EXCLIP mounted plug

Dimensional drawing



EXCLIP plug

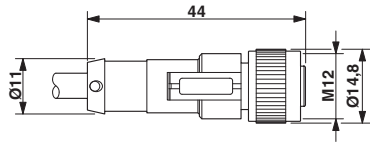
Dimensional drawing



EXCLIP socket

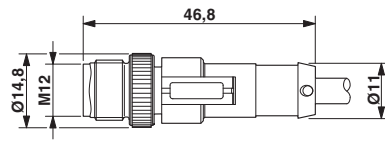
Sensor/actuator cable - SAC-HZ-3P-MS/0,5-542/FS SCO BK - 1409519

Dimensional drawing



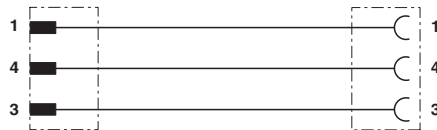
M12 x 1 socket, straight

Dimensional drawing



Plug, M12 x 1, straight, shielded

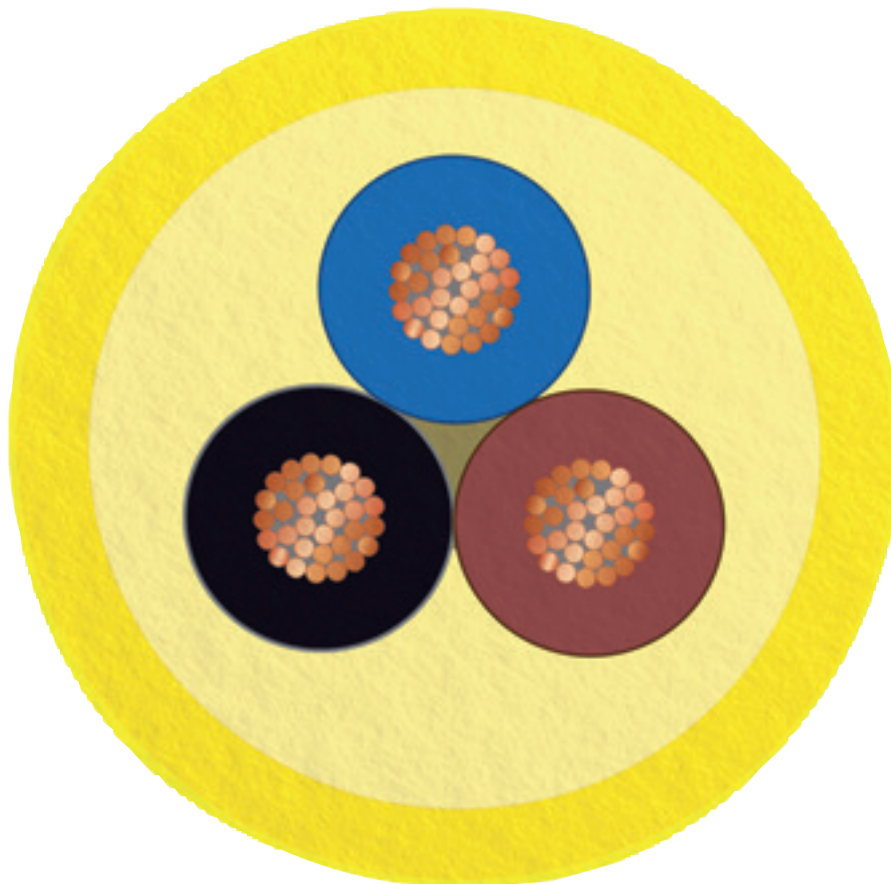
Circuit diagram



Contact assignment of the M12 plug and the M12 socket

Sensor/actuator cable - SAC-HZ-3P-MS/0,5-542/FS SCO BK - 1409519

Cable cross section



PVC yellow 105 °C [542]

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27060311 |
| eCl@ss 11.0 | 27060311 |
| eCl@ss 4.0 | 27060300 |
| eCl@ss 4.1 | 27060300 |
| eCl@ss 5.0 | 27061800 |
| eCl@ss 5.1 | 27061800 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

ETIM

| | |
|----------|----------|
| ETIM 4.0 | EC001855 |
|----------|----------|

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Classifications

ETIM

| | |
|----------|----------|
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

UNSPSC

| | |
|-------------|----------|
| UNSPSC 13.2 | 31251501 |
| UNSPSC 19.0 | 31251501 |
| UNSPSC 20.0 | 31251501 |
| UNSPSC 21.0 | 31251501 |

Approvals

Approvals

Approvals

EAC-RoHS

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

| | | |
|----------|--|--------------------------|
| EAC-RoHS | | RU D- DE.HB35.B.00387 |
|----------|--|--------------------------|

Accessories

Accessories

Plug for cable screw gland

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

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



Protective cap

Sensor/actuator cable - SAC-HZ-3P-MS/0,5-542/FS SCO BK - 1409519

Accessories

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

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



Safety locking

Locking clip - SAC-M12-EXCLIP-M - 1558988



Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

Locking clip - SAC-M12-EXCLIP-F - 1558991



Locking clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

Screwdriver tools

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

Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

Torque tool

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Accessories

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

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