

Sensor/actuator cable - SAC-3P-MR/1,5-542/M8FRSH SCOBK - 1406028


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Sensor/actuator cable, 3-position, PVC, yellow, shielded, Plug angled M12 SPEEDCON, coding: A, on Socket angled M8, cable length: 1.5 m



Key Commercial Data

| | |
|------------------------|---|
| Packing unit | 1 pc |
| Minimum order quantity | 50 pc |
| GTIN |  4 046356 800020 |
| GTIN | 4046356800020 |

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 |

General

| | |
|-----------------------|-------------------------------|
| Rated current at 40°C | 4 A |
| Rated voltage | 48 V AC |
| | 60 V DC |
| Number of positions | 3 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| | M8 connector IEC 61076-2-104 |

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Technical data

General

| | |
|------------------------------|------------------------|
| Status display | No |
| Protective circuit/component | unwired |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm (M12 connector) |
| | 0.2 Nm (M8 connectors) |

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 |
| | M8 connector IEC 61076-2-104 |
| Flammability rating according to UL 94 | HB |

Cable

| | |
|---|------------------------------|
| Cable type | PVC yellow 105 °C |
| Cable type (abbreviation) | 542 |
| UL AWM style | 2517 (105 °C / 300 V) |
| AWG signal line | 24 |
| Conductor structure signal line | 32x 1.10 mm |
| Core diameter including insulation | 1.12 mm ±0.03 mm |
| Wire colors | brown, blue, black |
| Overall twist | 3 wires, twisted |
| Shielding | Tinned copper braided shield |
| Optical shield covering | 85 % |
| External sheath, color | yellow |
| External cable diameter D | 4.7 mm ±0.2 mm |
| Minimum bending radius, flexible installation | 12 x D |
| Cable weight | 33 kg/km |
| Outer sheath, material | PVC |
| Material conductor insulation | PVC |
| Conductor material | Tin-plated Cu litz wires |
| Insulation resistance | ≥ (550 M Ohms/m @ 500V) |

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Technical data

Cable

| | |
|---------------------------------|---|
| Conductor resistance | max. 79.7 Ω /km (20 °C) |
| Nominal voltage, cable | 300 V |
| Flame resistance | FT4 |
| Other resistance | UV resistant |
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation) |
| | -5 °C ... 105 °C (cable, flexible installation) |

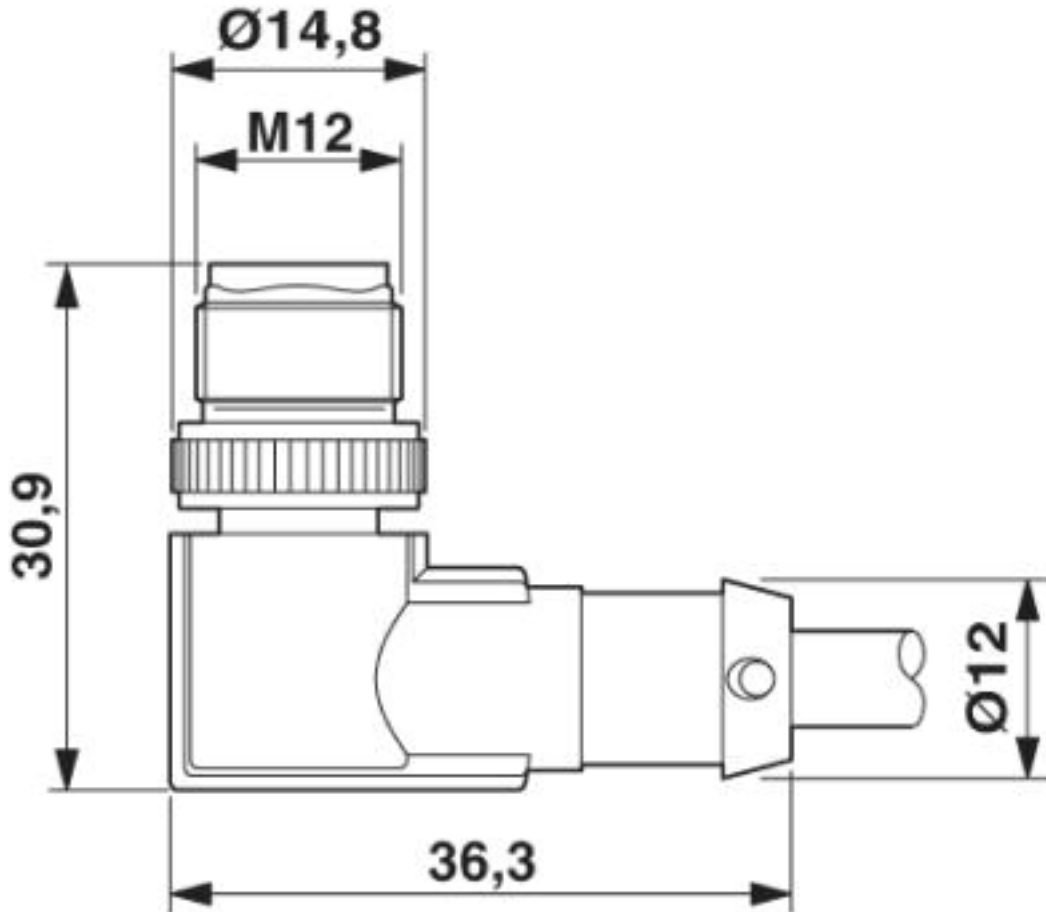
Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Sensor/actuator cable - SAC-3P-MR/1,5-542/M8FRSH SCOBK - 1406028

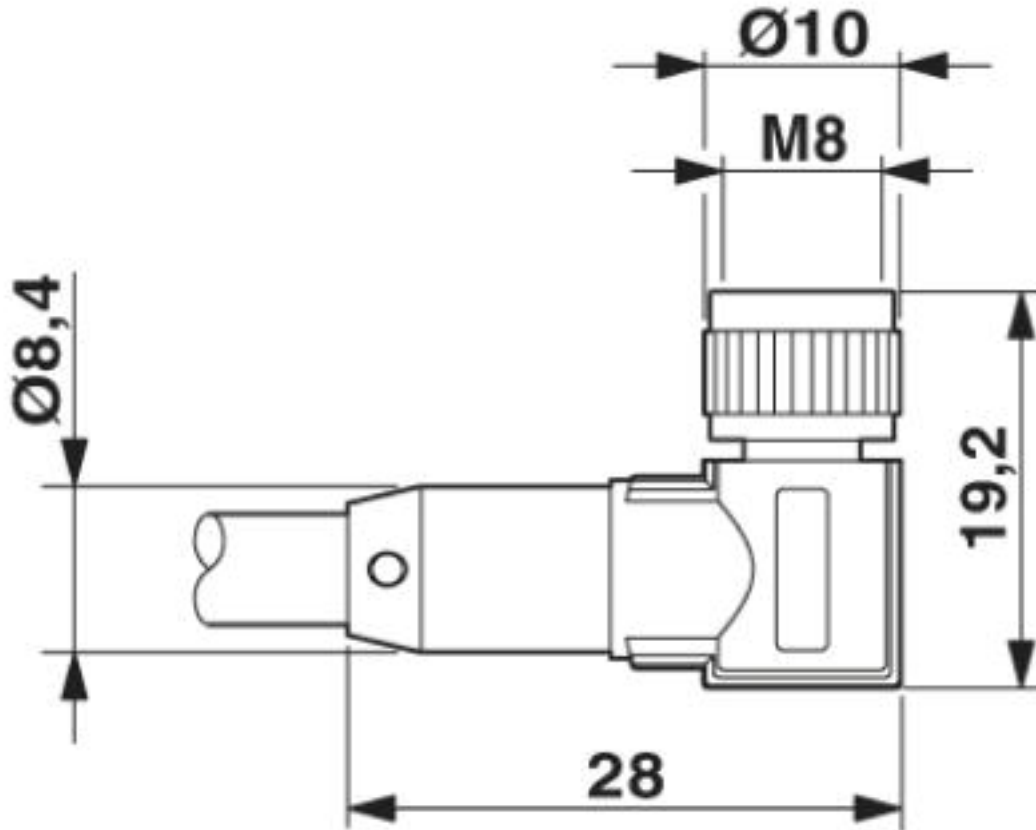
Dimensional drawing



M12 x 1 male plug, angled, shielded

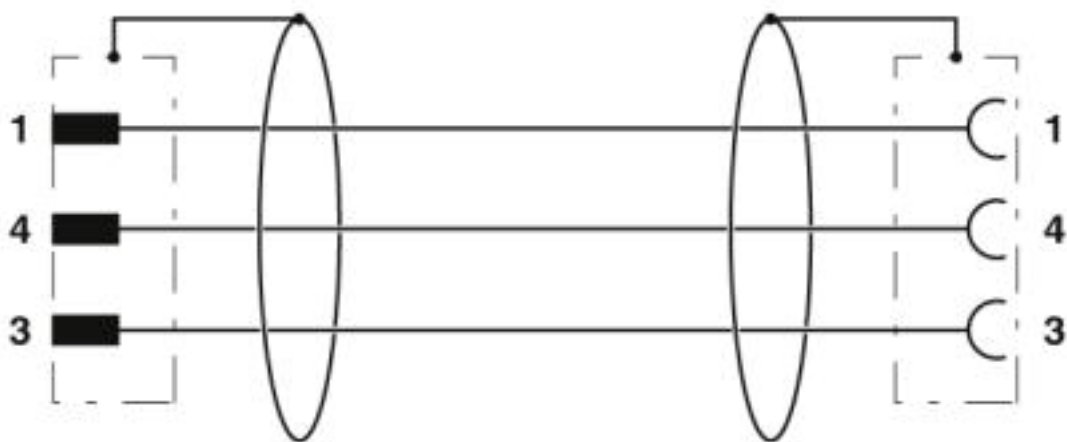
Sensor/actuator cable - SAC-3P-MR/1,5-542/M8FRSH SCOBK - 1406028

Dimensional drawing



Socket M8 x 1, angled, shielded

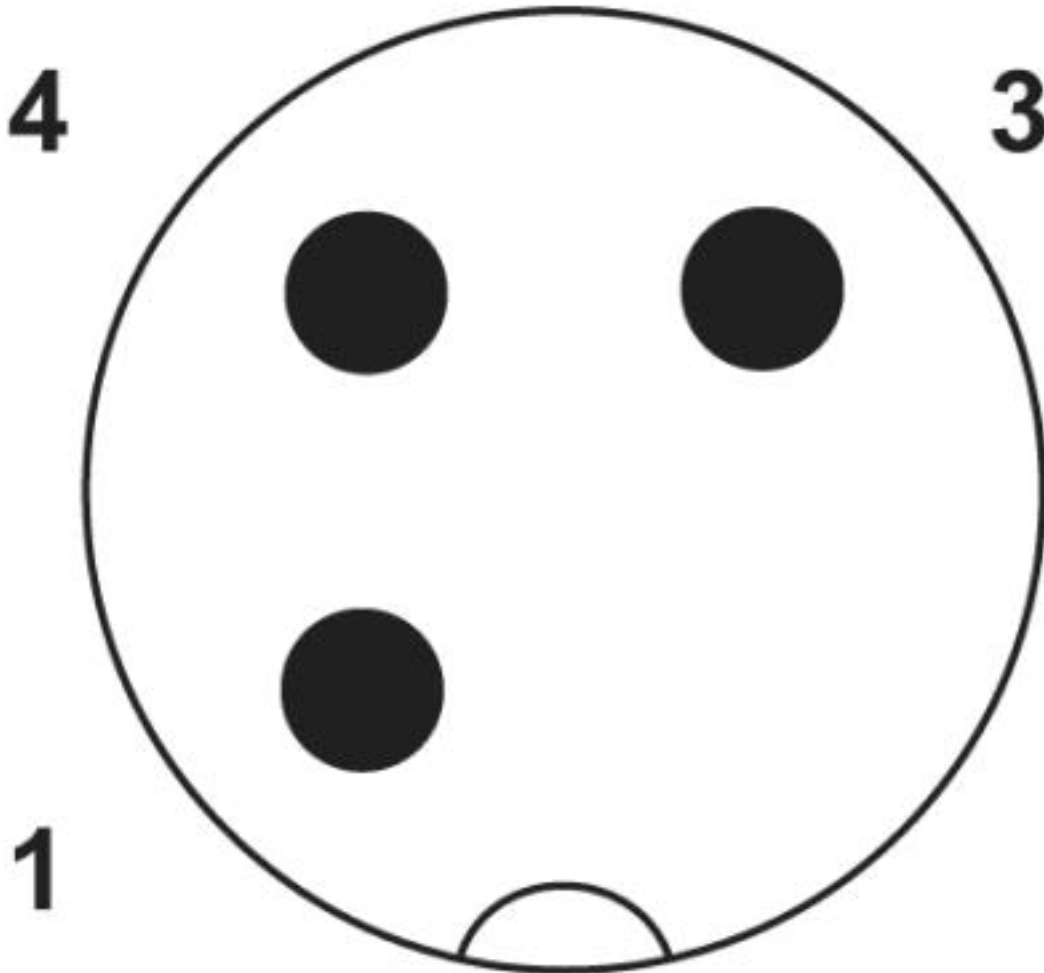
Circuit diagram



Contact assignment of M8 plugs / M12 sockets

Sensor/actuator cable - SAC-3P-MR/1,5-542/M8FRSH
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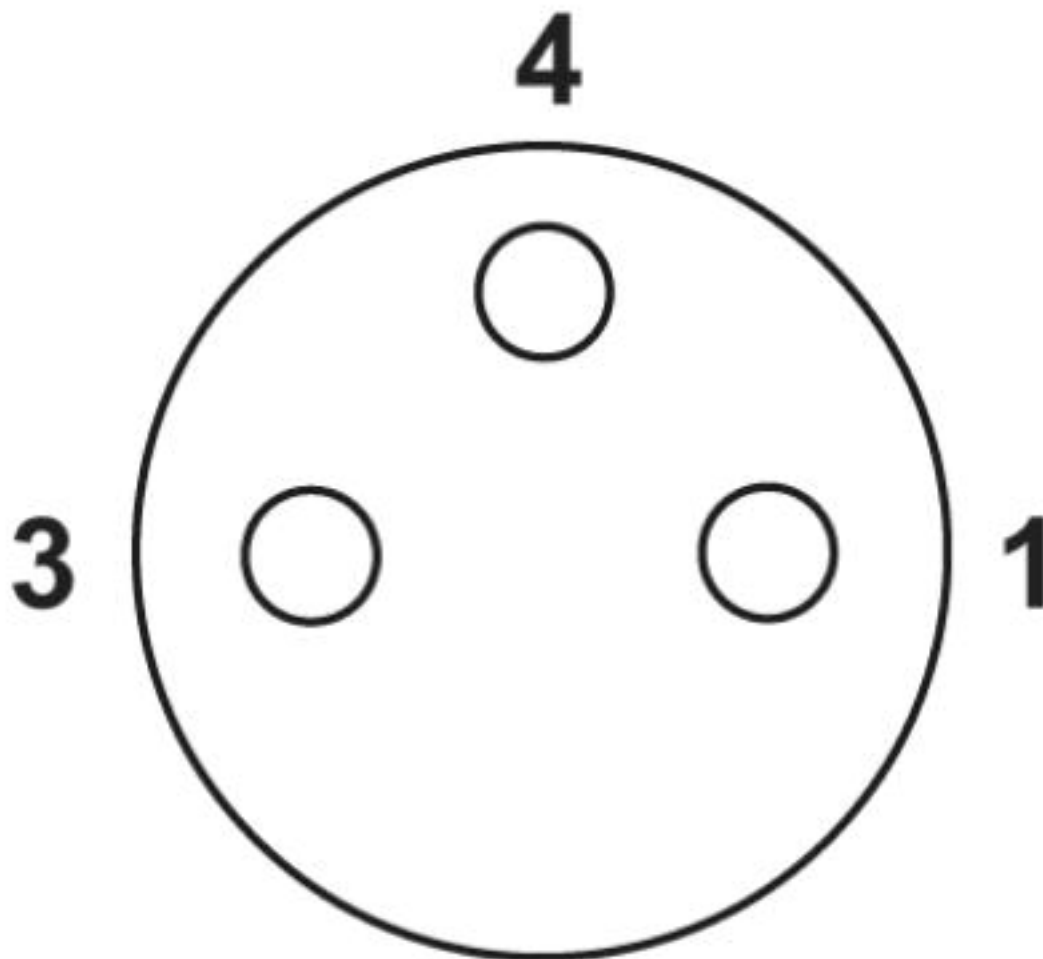
Schematic diagram



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

Sensor/actuator cable - SAC-3P-MR/1,5-542/M8FRSH SCOBK - 1406028

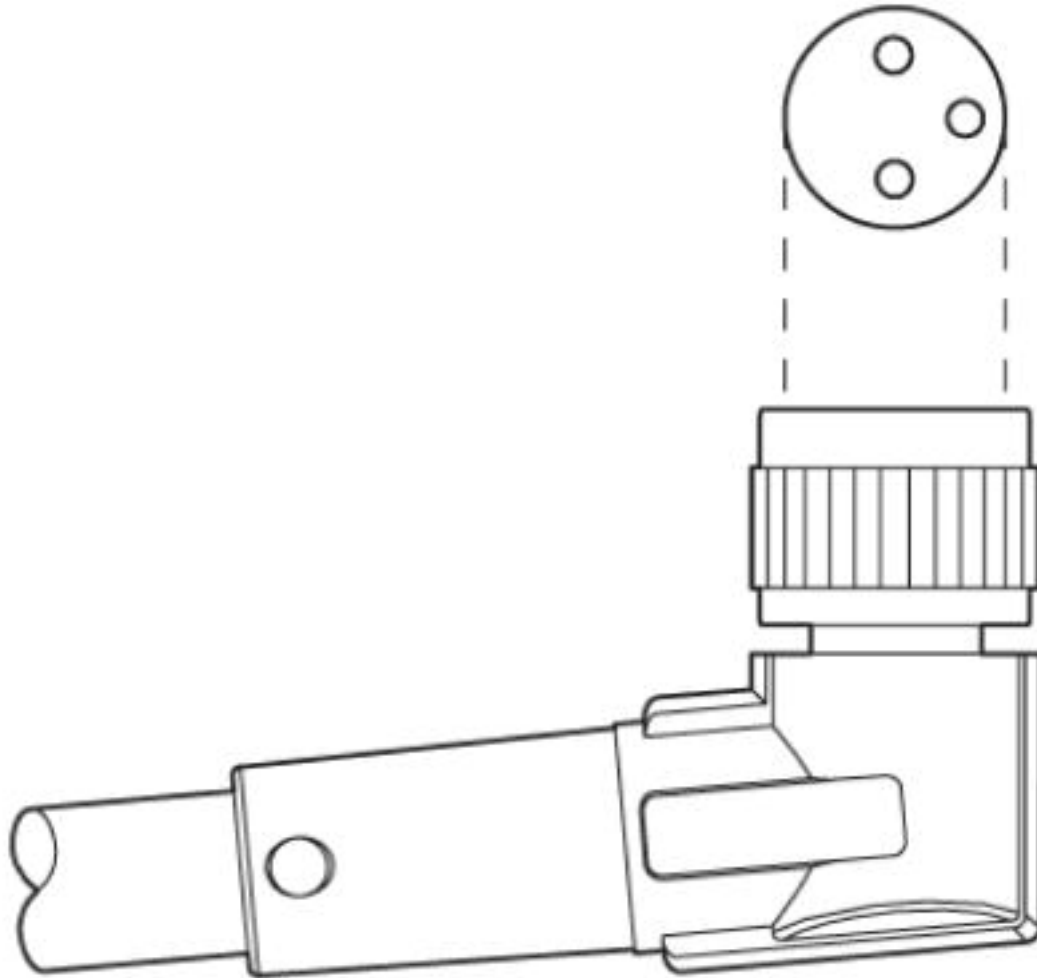
Schematic diagram



Pin assignment M8 socket, 3-pos., view female side

Sensor/actuator cable - SAC-3P-MR/1,5-542/M8FRSH SCOBK - 1406028

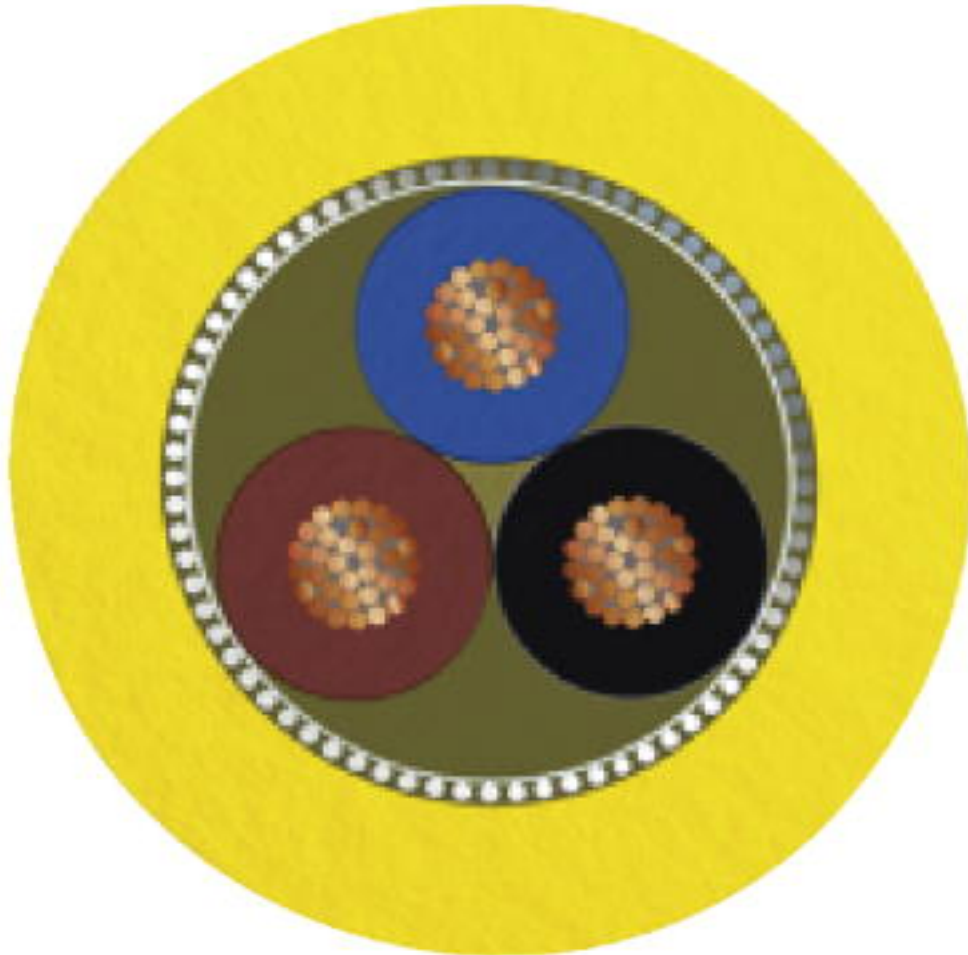
Schematic diagram



Layout of connector pin assignments

Sensor/actuator cable - SAC-3P-MR/1,5-542/M8FRSH SCOBK - 1406028

Cable cross section



PVC yellow 105 °C [542]

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 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 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

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Classifications

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 31251501 |
| UNSPSC 19.0 | 31251501 |
| UNSPSC 20.0 | 31251501 |
| UNSPSC 21.0 | 31251501 |

Approvals


Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details

| | | | |
|--------------------|---|---|---------------|
| UL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |
| Nominal voltage UN | 125 V | | |
| Nominal current IN | 4 A | | |

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Approvals

| | | | |
|--------------------|--|---|---------------|
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| Nominal current IN | | 4 A | |

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

Accessories

Accessories

Conductor marking

Insert label - PABA WH/23 - 1013779



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

Insert label - PABA YE/23 - 1013782



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Plug for cable screw gland

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Accessories

Screw plug - PROT-M 8 MS-PA-CHAIN - 1430860

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



Protective cap

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

Screwdriver tools

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

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 M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

Torque tool

Torque screwdriver - TSD 02 SAC - 1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

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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