


# 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, A-coded, on Socket angled M8, Cable length: 1.5 m



## Key commercial data

|                      |   |
|----------------------|---|
| Packing unit         | 1   |
| GTIN                 | <br>4 046356 800020 |
| Custom tariff number | 85444290  |

## 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                | 60 V                          |
| Number of positions          | 3                             |
| Contact resistance           | ≤ 5 mΩ                        |
| Insulation resistance        | ≥ 100 MΩ                      |
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
|                              | M8 connector IEC 61076-2-104  |
| Status display               | No                            |
| Protective circuit/component | Unwired                       |

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## Technical data

### General

|                             |                        |
|-----------------------------|------------------------|
| Surge voltage category      | II                     |
| Pollution degree            | 3                      |
| Insertion/withdrawal cycles | ≥ 100                  |
| Torque                      | 0.4 Nm (M12 connector) |
|                             | 0.2 Nm (M8 connectors) |

### 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                               | 24  |
| 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                      |
| Nominal voltage, cable                        | 300 V   |
| 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 |
| eCl@ss 8.0 | 27449203 |

### 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   |
| Nominal voltage UN | 125 V |

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## Approvals

|                                |       |
|--------------------------------|-------|
| cUL Listed                     |       |
| Nominal current I <sub>N</sub> | 4 A   |
| Nominal voltage U <sub>N</sub> | 125 V |

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

## Accessories

### Accessories

#### Conductor marking

Insert label - PABA WH/15 - 1013151



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

Insert label - PABA YE/15 - 1013698



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

Insert label - PABA RD/15 - 1013944



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

#### Marker carrier cable

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

### Accessories

Conductor marker carrier - PATO 2/15 - 1013122



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 2.8-4.4 mm, Lettering field: 4 x 15 mm

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Conductor marker carrier - PATO 3/15 - 1013135



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 4.4-6.7 mm, Lettering field: 4 x 15 mm

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Conductor marker carrier - PATO 4/15 - 1013148



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 6.7-10 mm, Lettering field: 4 x 15 mm

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### 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

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### 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 sockets



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

### 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



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### Safety locking

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



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### Screwdriver tools

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling sensor/actuator cables with M8 connector and for M8 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

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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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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

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### Torque tool

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

## Accessories

Torque screwdriver - TSD 02 SAC - 1208487



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

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Torque screwdriver - TSD 04 SAC - 1208429



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

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

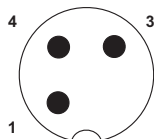


Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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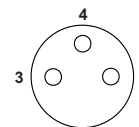
## Drawings

Schematic diagram



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

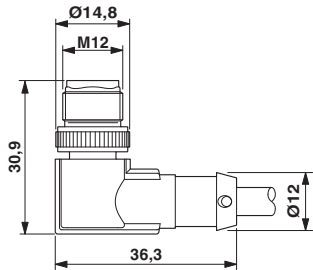
Schematic diagram



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

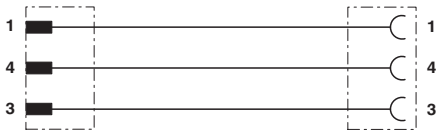
# Sensor/Actuator cable - SAC-3P-MR/1,5-542/M8FRSH SCOBK - 1406028

Dimensioned drawing



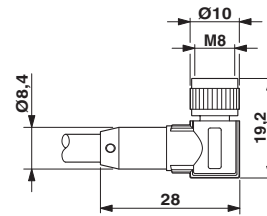
M12 x 1 male plug, angled, shielded

Circuit diagram



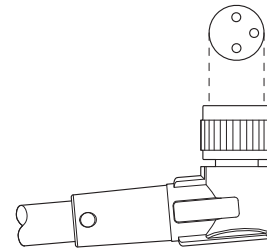
Contact assignment of M8 plugs / M12 sockets

Dimensioned drawing



Socket M8 x 1, angled, shielded

Schematic diagram



Layout of connector pin assignments