

## Sensor/Actuator cable - SAC-8P- 2,0-542/ FR SCO BK - 1406108

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Sensor/Actuator cable, 8-position, PVC, yellow, Free cable end, on Socket angled M12-SPEEDCON, A-coded, Cable length: 2 m



### Key commercial data

|                      |                 |
|----------------------|-----------------|
| Packing unit         | 1 PCE           |
| GTIN                 | 4 046356 799416 |
| Custom tariff number | 85444290        |
| Country of origin    | UNITED STATES   |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 2 m |
|-----------------|-----|

#### Ambient conditions

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

#### General

|                       |                                       |
|-----------------------|---------------------------------------|
| Rated current at 40°C | 2 A                                   |
| Rated voltage         | 30 V                                  |
| Number of positions   | 8                                     |
| 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            | CuZn  |
| 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                               | 24   |
| Core diameter including insulation            | 1.12 mm ±0.03 mm                                   |
| Wire colors                                   | white, brown, green, yellow, gray, pink, blue, red |
| Overall twist                                 | 8 wires around filler to the core                  |
| External sheath, color                        | yellow   |
| External cable diameter D                     | 5.7 mm ± 0.2 mm                                    |
| Minimum bending radius, flexible installation | 8 x D  |
| Cable weight                                  | 44 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  |
| Other resistance                              | UV resistant                                       |
| Ambient temperature (operation)               | -30 °C ... 105 °C (cable, fixed installation)      |

### Classifications

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |

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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC001855 |
|----------|----------|

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |

### eCl@ss

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

## 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  | 2 A  |
| Nominal voltage UN  | 30 V |

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## Approvals

|                    |      |
|--------------------|------|
| cUL Listed         |      |
| Nominal current IN | 2 A  |
| Nominal voltage UN | 30 V |

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

## Accessories

### Accessories

#### Fuse

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

## 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

## Sensor/Actuator cable - SAC-8P- 2,0-542/ FR SCO BK - 1406108

### Accessories

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

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Conductor marker carrier - PATG 2/15 - 1013038



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 15 mm

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Conductor marker carrier - PATG 3/15 - 1013041



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 15 mm

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Conductor marker carrier - PATG 4/15 - 1013054



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 15 mm

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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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### Protection and sealing elements

## Sensor/Actuator cable - SAC-8P- 2,0-542/ FR SCO BK - 1406108

### Accessories

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

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



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### Tools

Cable-cutting tool - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

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Stripping tool - WIREFOX SAC - 1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from  $\varnothing$  of 4.4 to 7 mm, any stripping length

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Stripping tool - WIREFOX 10 - 1212150



Stripping tool, for cables and conductors from 0.02 - 10 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

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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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## Accessories

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

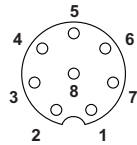
Tool - SAC BIT M12-D15 - 1208432



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

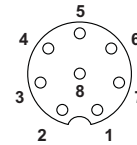
## Drawings

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

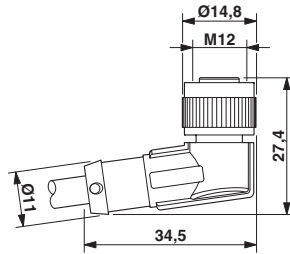
Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

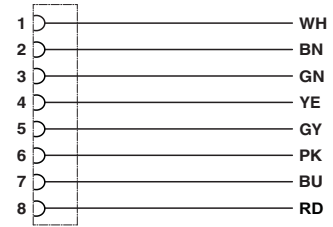
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Dimensioned drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 socket