

## Sensor/Actuator cable - SAC-12P- 5,0-PUR/FR SCO - 1430679

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Sensor/Actuator cable, 12-position, PUR halogen-free, Black RAL 9005, free cable end, on Socket angled M12 SPEEDCON, A-coded, Cable length: 5 m

### Why buy this product

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Save time, thanks to installation with SPEEDCON fast locking system
- ✓ Our standard: robust halogen-free PUR cable
- ✓ Save space – with high-pos. connectors



### Key commercial data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| GTIN                                 | <br>4 046356 456487 |
| Weight per Piece (excluding packing) | 310.5 g   |
| Custom tariff number                 | 85444290  |
| Country of origin                    | Germany   |

### Technical data

#### Dimensions

|  |       |
|--|-------|
| Length of cable                            | 5 m   |
| Stripping length of the free conductor end | 35 mm |

#### Ambient conditions

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

#### General

|                       |       |
|-----------------------|-------|
| Rated current at 40°C | 1.5 A |
| Rated voltage         | 30 V  |

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## Technical data

### General

|                              |                               |
|------------------------------|-------------------------------|
| Number of positions          | 12                            |
| Contact resistance           | ≤ 5 mΩ                        |
| Insulation resistance        | ≥ 100 MΩ                      |
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | No                            |
| Protective circuit/component | Unwired                       |
| Surge voltage category       | II                            |
| Pollution degree             | 3                             |
| Torque                       | 0.4 Nm (M12 connector)        |

### Material

|   |   |
|---|---|
| Inflammability class according to UL 94 | V0  |
| Contact material                        | CuZn  |
| Contact surface material                | Ni/Au                                       |
| Contact carrier material                | PA 66                                       |
| Material of grip body                   | TPU, hardly inflammable, self-extinguishing |
| Material, knurls                        | Zinc die-cast, nickel-plated                |
| Sealing material                        | NBR   |

### Cable

|                                    |  |
|------------------------------------|--|
| Conductor cross section            | 12x 0.14 mm <sup>2</sup> (signal line)   |
| AWG signal line                    | 26   |
| Conductor structure signal line    | 18x 0.10 mm  |
| Core diameter including insulation | 1 mm ±0.05 mm (signal line)  |
| Wire colors                        | White, brown, green, yellow, gray, pink, blue, red, black, violet, gray/<br>pink, red/blue |
| Overall twist                      | 12 wires twisted in layers   |
| External sheath, color             | Black RAL 9005   |
| External cable diameter D          | 7.2 mm   |
| Number of bending cycles           | 4000000  |
| Bending radius                     | 54 mm  |
| Traversing path                    | 10 m   |
| Traversing rate                    | 3 m/s  |
| Acceleration                       | 10 m/s <sup>2</sup>  |
| Outer sheath, material             | PUR  |
| Material conductor insulation      | PP   |
| Conductor material                 | Tin-plated Cu litz wires   |
| Conductor resistance               | 142 Ω/km   |
| Special properties                 | Low adhesion surface   |
| Resistance to oil                  | DIN VDE 0472 Part 803, test type B   |
| Other resistance                   | Hydrolysis and microbe resistant as per VDE 0282 section 10                                |

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## Technical data

### Cable

|                                 |  |
|---------------------------------|--|
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)   |
|                                 | -5 °C ... 80 °C (cable, flexible installation) |

## Classifications

### 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 |
| eCl@ss 8.0 | 27279218 |

### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 26121616 |
| UNSPSC 7.0901 | 26121616 |
| UNSPSC 11     | 26121604 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 26121616 |

## Approvals

### Approvals

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Approvals

EAC

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Ex Approvals

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Approvals submitted

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Approval details

## Sensor/Actuator cable - SAC-12P- 5,0-PUR/FR SCO - 1430679

### Approvals

EAC

### 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

### Cutting tools

Diagonal cutter - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

### Marker carrier cable

## Sensor/Actuator cable - SAC-12P- 5,0-PUR/FR SCO - 1430679

### Accessories

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

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

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

### 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

### Protective cap

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



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

### Safety locking

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### Accessories

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



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### 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

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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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### Stripping tool

Stripping tool - WIREFOX SAC-1 - 1212757



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 3.2 to 4.4 mm, any stripping length

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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 Ø of 4.4 to 7 mm, any stripping length

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## Accessories

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 tool

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

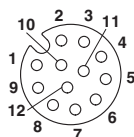


Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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## Drawings

Schematic diagram



Pin assignment M12, 12-pos., female side view

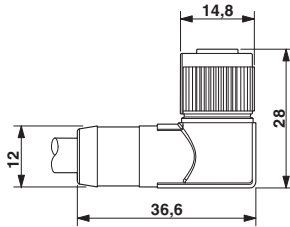
Cable cross section



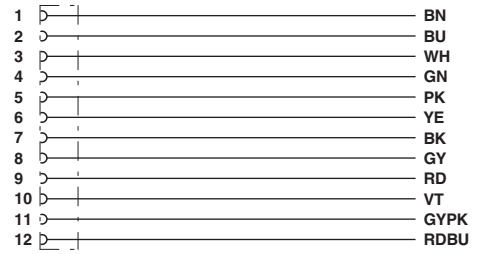
PUR halogen-free black [PUR]

## Sensor/Actuator cable - SAC-12P- 5,0-PUR/FR SCO - 1430679

Dimensioned drawing



Circuit diagram



Contact assignment of the M12 socket

Socket M12-SPEEDCON, angled, shielded