

## Sensor/Actuator cable - SAC-12P-MS/1,0-35T/M23FS SHSCO - 1437339

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Sensor/Actuator cable, 12-position, PUR/PVC, Black RAL 9005, shielded, Plug straight M12 SPEEDCON, A-coded, on Socket straight M23, Cable length: 1 m

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Save time, thanks to installation with SPEEDCON fast locking system
- ✓ Save space – with high-pos. connectors
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference



### Key commercial data

|                                      |            |
|--------------------------------------|------------|
| Packing unit                         | 1 pc       |
| Weight per Piece (excluding packing) | 222.22 GRM |
| Custom tariff number                 | 85444290   |
| Country of origin                    | Germany    |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 1 m |
|-----------------|-----|

#### Ambient conditions

|                                 |                                   |
|---------------------------------|-----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket)  |
|                                 | -40 °C ... 125 °C (Plug / socket) |
| Degree of protection            | IP65                              |
|                                 | IP67                              |

#### 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

|                          |                     |
|--------------------------|---------------------|
| Contact material         | CuZn                |
| Contact surface material | Ni/Au               |
| Contact carrier material | PBT / PA 66         |
| Material of grip body    | PUR                 |
| Material, knurls         | Nickel-plated brass |
| Sealing material         | FKM                 |

#### Cable

|                                    |  |
|------------------------------------|--|
| Cable type                         | Black PUR/PVC twisted pair   |
| Cable type (abbreviation)          | 35T  |
| Conductor cross section            | 0.14 mm <sup>2</sup>   |
| AWG signal line                    | 26   |
| Conductor structure signal line    | 18x 0.10 mm  |
| Core diameter including insulation | 1 mm ±0.05 mm  |
| Wire colors                        | White-brown, green-yellow, gray-pink, blue-red, black-violet, gray/pink-red/blue |
| Overall twist                      | Six pairs around the filler to the core  |
| Shielding                          | Tinned copper braided shield   |
| Optical shield covering            | 85 %   |
| External sheath, color             | Black RAL 9005   |
| External cable diameter            | 8.50 mm  |
| Number of bending cycles           | 2000000  |
| Bending radius                     | 85 mm  |
| Traversing path                    | 10 m   |
| Traversing rate                    | 3 m/s  |
| Acceleration                       | 10 m/s <sup>2</sup>  |
| Outer sheath, material             | PUR  |

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## Technical data

### Cable

|                                 |   |
|---------------------------------|---|
| Material, inner sheath          | PVC   |
| Material conductor insulation   | PVC   |
| Conductor material              | Tin-plated Cu litz wires                                    |
| Conductor resistance            | 142 Ω/km  |
| Flame resistance                | DIN VDE 0472 part 804, test type B                          |
| Resistance to oil               | DIN VDE 0472 Part 803, test type B                          |
| Other resistance                | Hydrolysis and microbe resistant as per VDE 0282 section 10 |
| 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 | 27061801 |

### 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

# Sensor/Actuator cable - SAC-12P-MS/1,0-35T/M23FS SHSCO - 1437339

## Approvals

Approvals

GOST

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Ex Approvals

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Approvals submitted

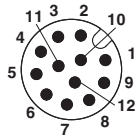
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## Approval details



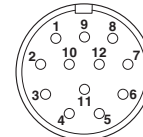
## Drawings

Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view

Schematic diagram



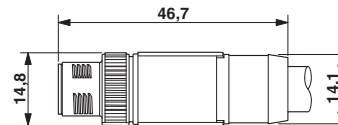
Pin assignment M23 socket, 12-pos., female side view

Cable cross section



Black PUR/PVC twisted pair [35T]

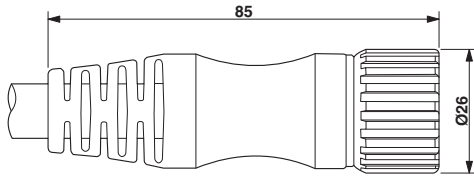
Dimensioned drawing



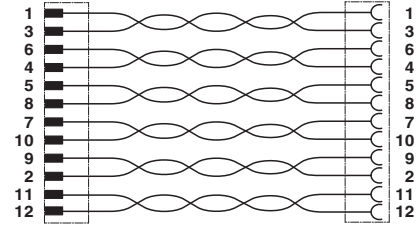
M12 SPEEDCON plug, straight, shielded

# Sensor/Actuator cable - SAC-12P-MS/1,0-35T/M23FS SHSCO - 1437339

Dimensioned drawing



Circuit diagram



M23 socket, straight, shielded

Contact assignment of the M12 plug and the M23 socket