

## Sensor/actuator cable - SAC-12P-68,6-35T/FR SH SCO - 1406389

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Sensor/actuator cable, 12-position, PUR, black RAL 9005, shielded, free cable end, on Socket angled M12 SPEEDCON, A-coded, cable length: 68.6 m



### Key Commercial Data

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit           | 1 pc                                                                                                    |
| Minimum order quantity | 4 pc                                                                                                    |
| GTIN                   | <br>4 046356 762915 |
| GTIN                   | 4046356762915                                                                                           |

### Technical data

#### Dimensions

|                                            |        |
|--------------------------------------------|--------|
| Length of cable                            | 68.6 m |
| Stripping length of the free conductor end | 50 mm  |

#### Ambient conditions

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

#### General

|                       |                               |
|-----------------------|-------------------------------|
| Rated current at 40°C | 1.5 A                         |
| Rated voltage         | 30 V                          |
| Number of positions   | 12                            |
| Insulation resistance | ≥ 100 MΩ                      |
| Coding                | A - standard                  |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display        | No                            |
| Overvoltage category  | II                            |
| Degree of pollution   | 3                             |

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## Technical data

### General

|        |                        |
|--------|------------------------|
| Torque | 0.4 Nm (M12 connector) |
|--------|------------------------|

### Material

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Flammability rating according to UL 94 | V0                                          |
| Contact material                       | CuZn                                        |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | PA 6.6                                      |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Material, knurls                       | Zinc die-cast, nickel-plated                |
| Sealing material                       | NBR                                         |

### Standards and Regulations

|                                        |                 |
|----------------------------------------|-----------------|
| Standard designation                   | M12 connector   |
| Standards/regulations                  | IEC 61076-2-101 |
| Flammability rating according to UL 94 | V0              |

### Cable

|                                               |                                                                                  |
|-----------------------------------------------|----------------------------------------------------------------------------------|
| Cable type                                    | Black PUR/PVC twisted pair                                                       |
| Cable type (abbreviation)                     | 35T                                                                              |
| Cable abbreviation                            | LSPYwC11Y                                                                        |
| UL AWM style                                  | 20233 / 1061 (80°C/300 V)                                                        |
| 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/pink-red/blue |
| Twisted pairs                                 | 2 cores to the pair                                                              |
| 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 D                     | 8.5 mm ±0.2 mm                                                                   |
| Minimum bending radius, fixed installation    | 5 x D                                                                            |
| Minimum bending radius, flexible installation | 10 x D                                                                           |
| 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>                                                              |
| Cable weight                                  | 87 kg/km                                                                         |
| Outer sheath, material                        | PUR                                                                              |
| Material, inner sheath                        | PVC                                                                              |

## Sensor/actuator cable - SAC-12P-68,6-35T/FR SH SCO - 1406389

### Technical data

#### Cable

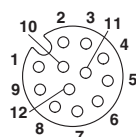
|                                 |                                                        |
|---------------------------------|--------------------------------------------------------|
| Material conductor insulation   | PVC                                                    |
| Conductor material              | Tin-plated Cu litz wires                               |
| Insulation resistance           | $\geq 10 \text{ M}\Omega \cdot \text{km}$ (at 20 °C)   |
| Conductor resistance            | $\leq 142 \text{ }\Omega/\text{km}$ (at 20 °C)         |
| Nominal voltage, cable          | 42 V AC                                                |
| Test voltage, cable             | 1500 V AC                                              |
| Special properties              | Flexible cable conduit capable                         |
| Flame resistance                | According to DIN EN 60332-1-2                          |
|                                 | According to VW-1                                      |
| Halogen-free                    | According to EN 50267-2-1                              |
| Resistance to oil               | in accordance with DIN EN 60811-2-1                    |
| Other resistance                | hydrolysis and microbe resistant according to EN 50396 |
| Ambient temperature (operation) | -30 °C ... 80 °C (cable, fixed installation)           |
|                                 | -5 °C ... 80 °C (cable, flexible installation)         |

#### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| China RoHS | Environmentally Friendly Use Period = 50                                                            |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

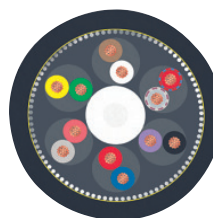
### Drawings

Schematic diagram



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

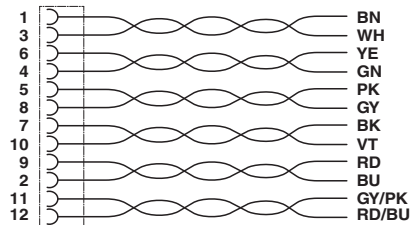
Cable cross section



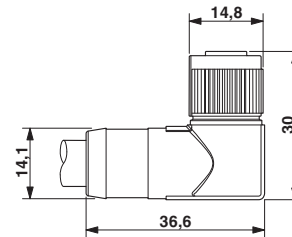
Black PUR/PVC twisted pair [35T]

## Sensor/actuator cable - SAC-12P-68,6-35T/FR SH SCO - 1406389

Circuit diagram



Dimensional drawing



Contact assignment of the M12 socket

Socket M12-SPEEDCON, angled, shielded

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