

## Sensor/Actuator cable - SAC-4P-FRS/ 5,0-PUR PE SH SCO - 1424102

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Sensor/Actuator cable, 4-position, PUR halogen-free, Orange (RAL 2003), matt, shielded, Free cable end, on Socket angled M12 SPEEDCON, S-coded, Cable length: 5 m

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ High-performance: AC connectors for up to 12 A and 630 V AC
- ✓ Protection against incorrect connection using special S-coding
- ✓ Shield power reliably – 360° shielding to reduce electromagnetic loads
- ✓ Save time, thanks to installation with SPEEDCON rapid interlock system
- ✓ Our standard: robust halogen-free PUR cable



### Key commercial data

Packing unit	1 1
Custom tariff number	85444290
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	5 m
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#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
Degree of protection	IP65
	IP67

#### General

Rated current at 40°C	12 A
Rated voltage	630 V

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### Technical data

#### General

Number of positions	4
Contact resistance	≤ 3 mΩ
Insulation resistance	≤ 10 GΩ
Coding	S power
Standards/regulations	M12 connector
Status display	No
Surge voltage category	III
Pollution degree	3
Insertion/withdrawal cycles	> 100

#### Material

Inflammability class according to UL 94	VO
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated

#### Cable

Cable type	PUR halogen-free orange shielded
Cable type (abbreviation)	PUR
Cable abbreviation	9YSLC11Y-JZ
UL AWM style	20234 / 10492 (80°C/1000 V)
Conductor cross section	4x 1.5 mm <sup>2</sup>
AWG power supply	16
Conductor structure, voltage supply	78x 0.15 mm
Core diameter including insulation	≤ 2.5 mm
Thickness, insulation	0.4 mm
Wire colors	Black 1, black 2, black 3, green/yellow
Overall twist	4 wires optimally twisted
Shielding	Tinned copper-braided shield, approx. 85% covering
External sheath, color	orange RAL 2003
Outer sheath thickness	1.2 mm
External cable diameter D	9.7 mm ±0.3 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	7.5 x D
Number of bending cycles	4000000
Minimum bending radius, drag chain applications	10 x D

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### Technical data

#### Cable

Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Torsion force	± 25 °/m
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 10 MΩ*km (at 20 °C)
Conductor resistance	≤ 13.3 Ω/km (at 20 °C)
Nominal voltage, cable	1000 V AC
Test voltage, cable	4260 V AC (5 min.)
Flame resistance	According to EN 60332-1-2
	According to UL 1581 VW1
	According to CSA C 22.2 No. 210-05 FT1
Halogen-free	According to VDE 0282-13 Appendix C
Resistance to oil	in accordance with DIN EN 60811-2-1
	According to DIN EN 50363-10-2
Other resistance	UV resistant
	Low adhesion
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation)
	-30 °C ... 90 °C (cable, flexible installation)

### Classifications

#### eCl@ss

eCl@ss 4.0	27140815
eCl@ss 4.1	27140815
eCl@ss 5.0	27143423
eCl@ss 5.1	27143423
eCl@ss 6.0	27143423
eCl@ss 7.0	27449001
eCl@ss 8.0	27449001

#### ETIM

ETIM 3.0	EC002061
ETIM 4.0	EC001855
ETIM 5.0	EC001855

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## Classifications

### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

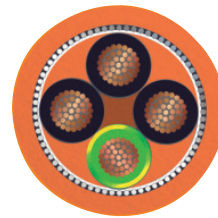
## Drawings

Schematic diagram



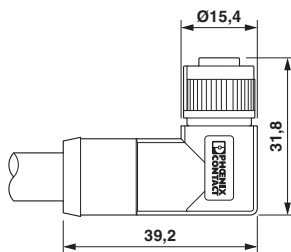
Connector pin assignment of M12 socket, 4-pos., S-coded, view of socket side

Cable cross section



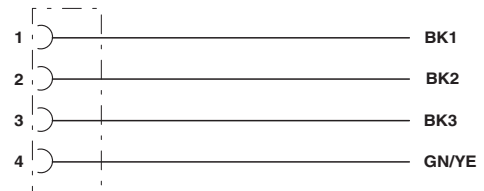
PUR halogen-free orange shielded [PUR]

Dimensioned drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 socket