

## Sensor/actuator cable - SAC-3P-MS/ 1,5-PUR/BI-1L-Z SCO - 1435153

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, A-coded, on Valve connector BI (11 mm), with 1 LED, connected with Z diode, cable length: 1.5 m

### Why buy this product

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Robust valve connector with Zener diode as protective circuit
- ✓ Save time, thanks to installation with SPEEDCON fast locking system
- ✓ Convenient: increased machine availability thanks to quick and easy diagnostics
- ✓ Our standard: robust halogen-free PUR cable



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 413503
GTIN	4046356413503

### Technical data

#### Dimensions

Length of cable	1.5 m
Central screw valve connector	M3 x 29

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-20 °C ... 85 °C (valve plug)
Degree of protection	IP65
	IP67

#### General

Rated current at 40 °C	4 A
Rated voltage	24 V AC
	24 V DC

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## Technical data

### General

Number of positions	3
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	1 LED
Protective circuit/component	Z diode
Overvoltage category	III
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100 (M12 connector)
Torque	0.4 Nm (M12 connector)
	0.6 Nm (Valve connector)

### Material

Flammability rating according to UL 94	HB
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU
Valve plug contact material	CuSn
Valve plug contact surface material	Sn
Valve plug contact insert material	PA 6.6
Material housing valve plug	TPU
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	TPU (Seal molded)

### Standards and Regulations

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

### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549
Conductor cross section	3x 0.5 mm <sup>2</sup>
AWG signal line	20
Conductor structure signal line	28x 0.15 mm
Core diameter including insulation	1.5 mm ±0.05 mm (Signal line)
Wire colors	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
External sheath, color	black-gray RAL 7021

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## Technical data

### Cable

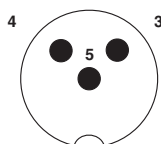
External cable diameter D	4.5 mm ±0.2 mm
Smallest bending radius, fixed installation	22.5 mm
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s <sup>2</sup>
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	min. 20 MΩ*km
Conductor resistance	39 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 1200 V
Flame resistance	According to DIN VDE 0482
	According to DIN EN 50265-2-1
Halogen-free	in accordance with DIN VDE 0472 part 815
Other resistance	largely oil-resistant
	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (cable, flexible installation)

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

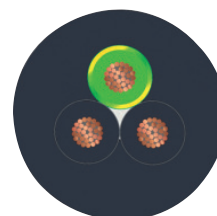
## Drawings

Schematic diagram



Pin assignment M12 plug, 3-pos., valve connector

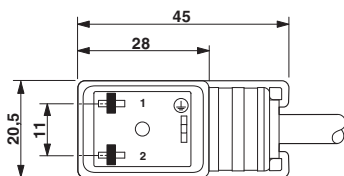
Cable cross section



PUR halogen-free black [PUR]

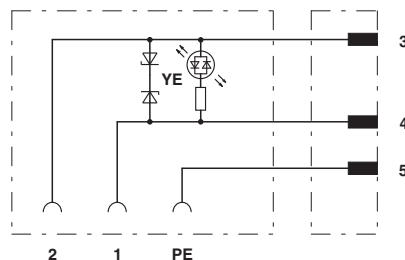
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Dimensional drawing



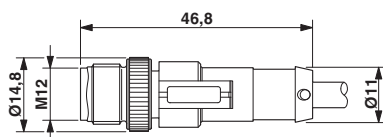
Valve connector, type BI

Circuit diagram



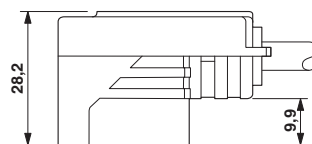
Contact assignment of M12 plug and valve connector

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



Valve connector, type BI, side view

## Approvals

### Approvals

Approvals

EAC / CSAus

Ex Approvals

### Approval details

EAC		EAC-Zulassung
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CSAus		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
Nominal voltage UN		24 V	
Nominal current IN		4 A	

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