

## Sensor/Actuator cable - SAC-MS/0,3PVC/BI-1LZ110V BK180 - 1416157

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Sensor/Actuator cable, 3-position, PVC, black RAL 9005, Plug straight M12 SPEEDCON, A-coded, on Valve connector BI (11 mm), with 1 LED, connected with Z diode, Cable length: 0.3 m, 180° version



### Key Commercial Data

Packing unit	1 STK
Minimum order quantity	100 STK
Weight per Piece (excluding packing)	40.0 g
Custom tariff number	85444290
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	0.3 m
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#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-20 °C ... 85 °C (valve plug)

#### General

Rated current at 40°C	4 A
Rated voltage	24 V
Number of positions	3
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	1 LED

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## Technical data

### General

Protective circuit/component	Z diode
Overvoltage category	III
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100 (M12 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 66
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	PVC black
Cable type (abbreviation)	PVC
Cable abbreviation	LiYY
UL AWM style	2464
Conductor cross section	3x 0.5 mm <sup>2</sup>
AWG signal line	20
Conductor structure signal line	16x 0.20 mm
Core diameter including insulation	1.5 mm ±0.05 mm
Wire colors	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
External sheath, color	black RAL 9005
External cable diameter D	4.8 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Outer sheath, material	PVC
Material conductor insulation	PVC

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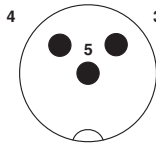
## Technical data

### Cable

Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 20 \text{ M}\Omega \cdot \text{km}$
Conductor resistance	39 $\Omega/\text{km}$ (at 20 °C)
Nominal voltage, cable	300 V
Test voltage, cable	1200 V
Flame resistance	DIN VDE 0482
	DIN EN 50265-2-1
Resistance to oil	largely oil-resistant
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (cable, flexible installation)

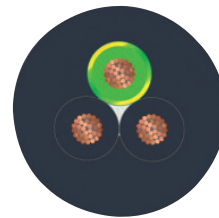
## Drawings

Schematic diagram



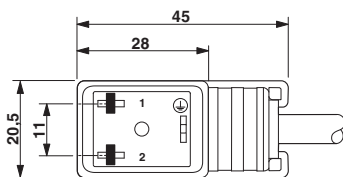
Pin assignment M12 plug, 3-pos., valve connector

Cable cross section



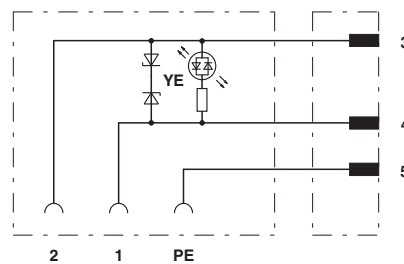
PVC black [PVC]

Dimensional drawing



Valve connector, type BI

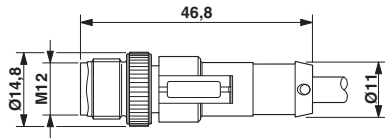
Circuit diagram



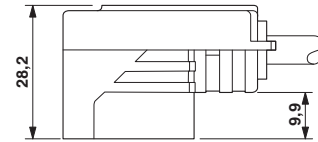
Contact assignment of M12 plug and valve connector

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Dimensional drawing



Dimensional drawing



Valve connector, type BI, side view

M12 x 1 plug, straight

## Classifications

eCl@ss

eCl@ss 5.1	27061801
eCl@ss 6.0	27279218
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

ETIM

ETIM 5.0	EC001855
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## Approvals

Approvals

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Approvals

CSAus

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Ex Approvals

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Approvals submitted

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## Approval details

CSAus	
Nominal current I <sub>N</sub>	4 A
Nominal voltage U <sub>N</sub>	24 V

