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The illustration shows the SPEEDCON version

Sensor/Actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, A-coded, on Valve connector A, with 1 LED, connected with Z diode, connected with Z diode, Cable length: 0.6 m



# **Key Commercial Data**

Packing unit	1 STK
GTIN	4 046356 509510
GTIN	4046356509510
Weight per Piece (excluding packing)	51.400 g
Custom tariff number	85444290
Country of origin	Poland

## Technical data

#### **Dimensions**

Length of cable 0.6 m
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#### 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
Number of positions	3
Insulation resistance	$\geq$ 100 M $\Omega$
Coding	A - standard



## Technical data

## General

Standards/regulations	M12 connector IEC 61076-2-101
	Valve connector EN 175301-803
Status display	1 LED
Protective circuit/component	Z diode
Overvoltage category	III
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100

#### Material

Flammability rating according to UL 94	НВ
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
Standard designation	Valve connector
Standards/regulations	EN 175301-803
Flammability rating according to UL 94	НВ

### 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 mm²
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
External cable diameter D	4.5 mm ±0.2 mm
Smallest bending radius, fixed installation	22.5 mm



## Technical data

## Cable

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



Schematic diagram



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

Valve connector pin assignment, type A

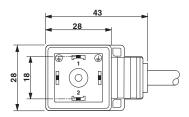


Cable cross section



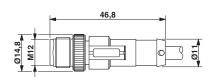
PUR halogen-free black [PUR]

### Dimensional drawing

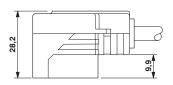


Valve connector, type A

Dimensional drawing



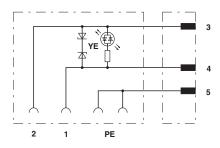
#### Dimensional drawing



Valve connector, type A, side view

Plug, M12 x 1, straight, shielded

Circuit diagram



Contact assignment of M12 plug and valve connector

### Classifications

## eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCI@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218
eCI@ss 9.0	27060311



## Classifications

## **ETIM**

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855
ETIM 6.0	EC001855

### **UNSPSC**

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

# **Approvals**

Approvals

Approvals

CSA / CSAus / cCSAus

Ex Approvals

# Approval details

CSA	<b>(P</b>	http://www.csagroup.org/services/testing- and-certification/certified-product-listing/		13631
Nominal current IN			4 A	
Nominal voltage UN			24 V	

CSAus	SP.	http://www.csagroup.org/services/testing- and-certification/certified-product-listing/		13631
Nominal current IN			4 A	
Nominal voltage UN			24 V	

cCSAus



http://www.csagroup.org/us/en/services/ testing-and-certification/certified-product-listing



## Accessories

Accessories

Mounting material

Screw - SAC-V-SCREW-M3-29 KNURL - 1403779



Fillister head screw with plastic knurl, M3 x 40

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