

1400780

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: A, with 1 LED, on Valve connector CI (9.4 mm), with 1 LED, Wiring: Z diode, cable length: 0.3 m

### Commercial data

Item number	1400780
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF07
Product key	AF1DOA
GTIN	4046356511483
Weight per piece (including packing)	32.3 g
Weight per piece (excluding packing)	33.8 g
Customs tariff number	85444290
Country of origin	PL



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# Technical data

### Product properties

Product type	Sensor/actuator cable with valve connector
Number of positions	3
No. of cable outlets	1
Coding	A
Insulation characteristics	
Overvoltage category	III
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94	НВ
Seal material	TPU
Material housing valve plug	TPU
Material of grip body	TPU
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Contact material	CuSn
Valve plug contact insert material	PA 6.6
Contact surface material	Sn
Material for screw connection	Zinc die-cast, nickel-plated

# Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	24 V AC
	24 V DC
Nominal current I <sub>N</sub>	4 A

## Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles ≥ 100	
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# Signaling

Status display	1 LED
Status display present	yes

#### Connector

## Connection 1

Туре	Plug straight M12
Number of positions	3



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Coding type	A
Connection 2	
Туре	Valve connector CI (9.4 mm)
Number of positions	3
Material	CuSn (Contact)
	Sn (Contact surface)
	PA 6.6 (Contact carrier)
	TPU (Housing)
Protective circuit	Z diode

### Cable/line

Cable length	0.3 m
Cable length	0.0 111

### PUR halogen-free black [PUR]

Dimensional drawing



Cable weight	30 kg/km
UL AWM Style	20549
Number of positions	3
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20
Conductor cross section	3x 0.5 mm²
Wire diameter incl. insulation	1.5 mm ±0.05 mm (Signal line)
External cable diameter	4.50 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
Max. conductor resistance	39 Ω/km (at 20 °C)
Insulation resistance	min. 20 MΩ*km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 1200 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D



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Smallest bending radius, fixed installation	22.5 mm
Smallest bending radius, movable installation	45 mm
Dynamic load capacity (bending)	Max. bending cycles: 15000000, Bending radius: 50 mm, Traversing path: 0.9 m, Traversing rate: 5 m/s, Acceleration: 30 m/s²
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	according to DIN VDE 0482
	According to DIN EN 50265-2-1
Resistance to oil	in accordance with DIN EN 60811-2-1
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 and real-life conditions

#### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C 90 °C (Plug / socket)
Ambient temperature (operation) (Valve connector)	-20 °C 80 °C (Valve connector)

# Standards and regulations

### M12

Standard designation	M12 connector			
Standards/specifications	IEC 61076-2-101			
Valve connector				
Standard designation	Valve connector			
Standards/specifications	EN 175301-803			

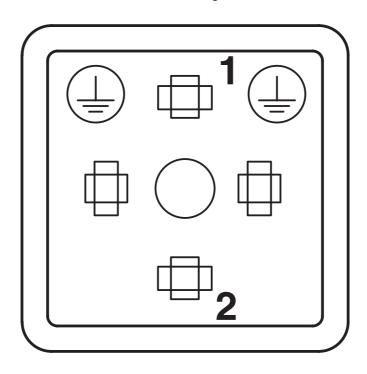


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# Drawings

### Schematic diagram





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# **Approvals**

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CSAus Approval ID: 13631				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine				
	24 V	4 A	-	-



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# Classifications

### **ECLASS**

	ECLASS-13.0	27060312		
	ECLASS-15.0	27060312		
ETIM				
	ETIM 9.0	EC001855		
UNSPSC				
	UNSPSC 21.0	31251500		



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# Environmental product compliance

#### EU RoHS

Yes
7(c)-l
EFUP-50
An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
Diboron trioxide(CAS: 1303-86-2)
Lead monoxide (lead oxide)(CAS: 1317-36-8)
e84a3bb6-79af-4d32-80a6-e4f9062e7de4

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