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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, Cable length: 15 m



## **Key Commercial Data**

Packing unit	1 STK
Minimum order quantity	50 STK
Weight per Piece (excluding packing)	463.4 g
Custom tariff number	85444290
Country of origin	Poland

### Technical data

#### **Dimensions**

Length of cable	15 m

#### 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	$\geq 100 \text{ M}\Omega$
Status display	1 LED
Protective circuit/component	Z diode
Overvoltage category	III
Degree of pollution	3

Material



## Technical data

#### 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

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
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s²
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	min. 20 MΩ*km



## Technical data

#### Cable

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)

# Drawings

Schematic diagram



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

Cable cross section



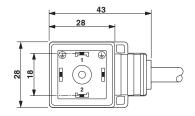
PUR halogen-free black [PUR]

Schematic diagram



Valve connector pin assignment, type A

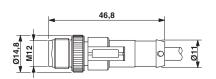
### Dimensional drawing



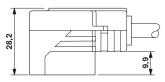
Valve connector, type A



### Dimensional drawing



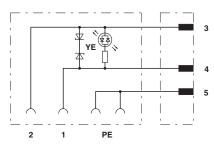
### Dimensional drawing



Valve connector, type A, side view

M12 x 1 plug, straight

### Circuit diagram



Contact assignment of M12 plug and valve connector

## Classifications

### eCl@ss

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

#### **ETIM**

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

### **UNSPSC**

UNSPSC 6.01	31251501



## Classifications

#### **UNSPSC**

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

# Approvals

Α	р	pı	o	٧	al	ls

Approvals

CSA / CSAus / cCSAus

Ex Approvals

Approvals submitted

### Approval details

CSA (1)				
Nominal current IN	4 A			
Nominal voltage UN	24 V			

CSAus				
Nominal current IN	4 A			
Nominal voltage UN	24 V			

cCSAus

#### Accessories

Accessories

Mounting material



### Accessories

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



Fillister head screw with plastic knurl, M3 x 40

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