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Sensor/Actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, Acoded, on Valve connector A, with 1 LED, connected with Z diode, Cable length: 1.5 m

Product Features

- ☑ 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





Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	80.0 GRM
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	1.5 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



Technical data

General

Rated voltage	24 V
Number of positions	3
Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
	Valve connector EN 175301-803
Status display	1 LED
Protective circuit/component	Z diode
Surge voltage category	III
Pollution degree	3
Insertion/withdrawal cycles	≥ 100 (M12 connector)
Torque	0.4 Nm (M12 connector)
	0.6 Nm (Valve connector)

Material

Inflammability class 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)

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



Technical data

Cable

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/s ²
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)

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

ETIM

ETIM 3.0	EC001855



Classifications

ETIM

ETIM 4.0	EC001855
ETIM 5.0	EC001855

UNSPSC

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

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approvals submitted

Approval details

EAC

Drawings

Schematic diagram



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

Schematic diagram



Valve connector pin assignment, type A

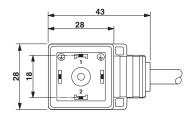


Cable cross section



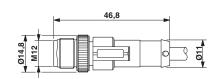
PUR halogen-free black [PUR]

Dimensioned drawing

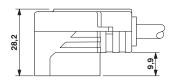


Valve connector, type A

Dimensioned drawing



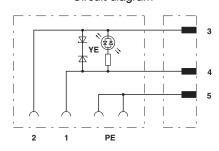
Dimensioned drawing



Valve connector, type A, side view

M12 x 1 plug, straight

Circuit diagram



Contact assignment of M12 plug and valve connector

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