

Sensor/actuator cable - SAC-3P-M12MS/ 0,7-802/A-1L-Z - 1454671

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Sensor/actuator cable, 3-position, PUR halogen-free, welding sputter-resistant, highly flexible, gray RAL 7001, Plug straight M12, A-coded, on Valve connector A, with 1 LED, connected with Z diode, cable length: 0.7 m

as in the figure, but with a gray conductor

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356578097

Technical data

Dimensions

Length of cable	0.7 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 AC
	24 V DC
Number of positions	3
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
	Valve connector EN 175301-803

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Technical data

General

Status display	1 LED
Protective circuit/component	Z diode
Overvoltage category	III
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100 (M12 connector)
Torque	0.4 Nm (M12 connector)
	0.6 Nm (Valve 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 6.6
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	HB

Cable

Note	Due to the extremely robust outer sheath, this cable should only be stripped in 5 cm increments.
Cable type	PUR, halogen-free, highly stranded, resistant to welding sparks, gray
Cable type (abbreviation)	802
Cable abbreviation	Li12Y11Y-HF
Conductor cross section	3x 0.5 mm ² (Signal line)
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	Wires twisted in layers
External sheath, color	gray RAL 7001
External cable diameter D	4.5 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D

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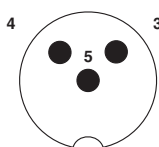
Technical data

Cable

Minimum bending radius, flexible installation	5 x D
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s ²
Torsion force	± 360 °/m
Cable weight	31 kg/km
Outer sheath, material	PUR
Material conductor insulation	PES
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 20 MΩ*km
Conductor resistance	39 Ω/km (at 20 °C)
Nominal voltage, cable	300 V
Test voltage, cable	1200 V
Special properties	Cable jacket is welding spark-resistant, recyclable, matt, low-adhesion, abrasion-resistant, flame-retardant, and self-extinguishing
	Free from silicone and cadmium
	Free of substances which would hinder coating with paint or varnish
Flame resistance	DIN VDE 0472 part 804, test type B
	IEC 60332-1
	in acc. with UL FT-2
Halogen-free	The cable is halogen-free
Resistance to oil	according to VDE 0472 Part 803
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation)
	-30 °C ... 90 °C (cable, flexible installation)
	to 120 °C (for 3000 h)

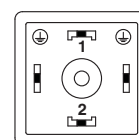
Drawings

Schematic diagram



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

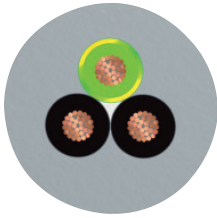
Schematic diagram



Valve connector pin assignment, type A

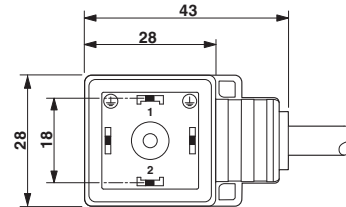
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Cable cross section



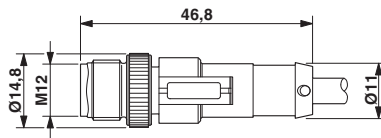
PUR, halogen-free, highly stranded, resistant to welding sparks, gray [802]

Dimensional drawing



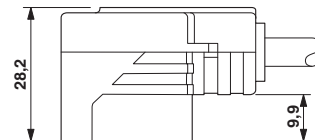
Valve connector, type A

Dimensional drawing



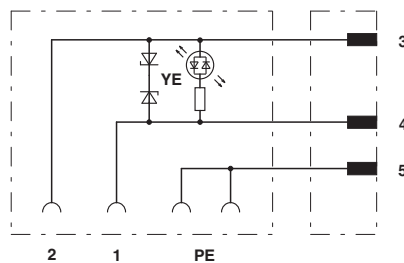
Plug, M12 x 1, straight, shielded

Dimensional drawing



Valve connector, type A, side view

Circuit diagram



Contact assignment of M12 plug and valve connector

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