

SAC-3P-M12MS/ 6,0-116/A-1L-Z - Sensor/actuator cable



1412448

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Sensor/actuator cable, 3-position, PUR/PVC, black RAL 9005, Plug straight M12, coding: A, with 1 LED, on Valve connector A, with 1 LED, Wiring: Z diode, cable length: 6 m

The figure shows the SPEEDCON version

Commercial data

Item number	1412448
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1DJA
GTIN	4046356962773
Weight per piece (including packing)	334.9 g
Weight per piece (excluding packing)	334 g
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
Shielded	no
Coding	A

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	V0
Seal material	TPU
Material housing valve plug	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	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	24 V AC 24 V DC
Nominal current I_N	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

Type	Plug straight M12
Number of positions	3

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Coding type	A
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Connection 2

Type	Valve connector A
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	6 m
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PUR/PVC, 0.75 mm², black [116]

Dimensional drawing	
Cable weight	53.4 kg/km
UL AWM Style	20549
Number of positions	3
Shielded	no
Cable type	PUR/PVC, 0.75 mm ² , black [116]
Conductor structure signal line	24x 0.20 mm
AWG signal line	18
Conductor cross-section	3x 0.75 mm ²
Wire diameter incl. insulation	1.7 mm ±0.05 mm
External cable diameter	5.80 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
Max. conductor resistance	26 Ω/km (at 20 °C)
Insulation resistance	≥ 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	29 mm
Smallest bending radius, movable installation	58 mm
Dynamic load capacity (bending)	Max. bending cycles: 1000000, Traversing path: 10 m, Traversing rate: 2 m/s, Acceleration: 2.5 m/s ²
Flame resistance	DIN VDE 0482
	DIN EN 50265-2-1
	in acc. with UL FT-2
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Low adhesion
Special properties	flexible
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-20 °C ... 85 °C (Valve connector)
	-40 °C ... 80 °C (cable, fixed installation)
	-15 °C ... 80 °C (Cable, flexible installation)

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Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



Valve connector, type A

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Valve connector, type A, side view



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

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Schematic diagram



Valve connector pin assignment, type A

Circuit diagram



Contact assignment of M12 plug and valve connector

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Classifications

ECLASS

ECLASS-13.0	27060312
ECLASS-15.0	27060312

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Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	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.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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