

SAC-3P-MS/ 1,0-170/M 8FS SCO - Sensor/actuator cable



1538801

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, coding: A, on Socket straight M8, cable length: 1 m

Commercial data

Item number	1538801
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	AF1BBA
GTIN	4046356077446
Weight per piece (including packing)	34.7 g
Weight per piece (excluding packing)	34.7 g
Country of origin	PL

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Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	3
No. of cable outlets	1
Shielded	no
Coding	A

Material specifications

Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

Electrical properties

Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A
Max. conductor resistance	77.6 Ω /m

Mechanical properties

Mechanical data

Max. bending cycles	4000000
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Signaling

Status display present	no
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Connector

Connection 1

Type	Plug straight M12 SPEEDCON
Number of positions	3
Locking type	SPEEDCON
Coding type	A

Connection 2

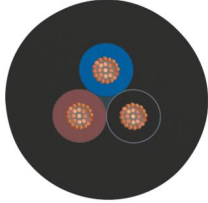
Type	Socket straight M8
Number of positions	3

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Cable/line

Cable length	1 m
PUR halogen-free black [PUR]	
Dimensional drawing	
Cable weight	18 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	3
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross-section	3x 0.25 mm ² (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.02 mm
External cable diameter	3.60 mm ±0.15 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	brown, blue, black
Thickness, insulation	≥ 0.21 mm (Core insulation)
Thickness, outer sheath	approx. 0.50 mm
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
Max. conductor resistance	≤ 78 Ω/km (at 20 °C)
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Smallest bending radius, fixed installation	18 mm
Smallest bending radius, movable installation	36 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 44 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥5000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	in accordance with UL 758/1581 FT2

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	DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	hydrolysis and microbe resistant
	Highly resistant to acids, alkaline solutions and solvents
	Resistant to salt water
	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-40 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

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Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



Socket M8 x 1, straight

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Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

Schematic diagram



Pin assignment M8 socket, 3-pos.

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Circuit diagram



Contact assignment of M12 plugs / M8 sockets

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Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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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