

SAC-12P-MS/ 6,5-PVC SCO - Sensor/actuator cable



1408576

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Sensor/actuator cable, 12-position, PVC, black RAL 9005, Plug straight M12 SPEEDCON, coding: A, on free cable end, cable length: 6.5 m

Commercial data

Item number	1408576
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1CGA
GTIN	4046356831383
Weight per piece (including packing)	338 g
Weight per piece (excluding packing)	338 g
Country of origin	DE

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Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	12
No. of cable outlets	1
Shielded	no
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	HB
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	$\geq 10 \text{ M}\Omega$
Nominal voltage U_N	30 V AC
	30 V DC
Nominal current I_N	1.5 A

Signaling

Status display	no
Status display present	no

Connector

Connection 1

Type	Plug straight M12 SPEEDCON
Number of positions	12
Locking type	SPEEDCON
Coding type	A

Connection 2

Type	free cable end
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Cable/line

Cable length	6.5 m
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PVC black [PVC]

Dimensional drawing	
Number of positions	12
Shielded	no
Cable type	PVC black [PVC]
Conductor structure signal line	18x 0.10 mm
AWG signal line	26
Conductor cross-section	12x 0.14 mm ² (Signal line)
Wire diameter incl. insulation	1 mm ±0.05 mm (Signal line)
External cable diameter	5.80 mm
Outer sheath, material	PVC
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	white, brown, green, yellow, gray, pink, blue, red, black, violet, gray/pink, red/blue
Overall twist	12 wires twisted in layers
Max. conductor resistance	≤ 142 Ω/km (at 20 °C)
Insulation resistance	> 10 MΩ*km
Nominal voltage, cable	250 V
Test voltage Core/Core	1500 V AC
Smallest bending radius, fixed installation	29 mm
Smallest bending radius, movable installation	87 mm
Flame resistance	DIN EN 50265-2-1
Ambient temperature (operation)	-25 °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 IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 85 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-25 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-5 °C ... 80 °C (Cable, flexible installation)

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Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

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Drawings

Dimensional drawing



M12 SPEEDCON plug, straight

Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view

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Circuit diagram



Contact assignment of the M12 plug

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Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

UNSPSC

UNSPSC 21.0	26121600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

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.)	Lead(CAS: 7439-92-1)
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