

# SAC-12P-MS/ 0,5-35T/FS SH SCO - Sensor/actuator cable



1404942

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Sensor/actuator cable, 12-pos., PUR/PVC, RAL 9005 (black), shielded, straight M12 SPEEDCON plug (A-coded) to straight M12 SPEEDCON socket (A-coded), cable length: 0.5 m

## Commercial data

Item number	1404942
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1CNA
GTIN	4046356728775
Weight per piece (including packing)	87.6 g
Weight per piece (excluding packing)	87.6 g
Country of origin	DE

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## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated
Outer sheath, material	PUR
Conductor material	Tin-plated Cu litz wires

### Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	30 V AC
	30 V DC
Nominal current $I_N$	1.5 A
Max. conductor resistance	142 $\Omega/\text{km}$

### Mechanical properties

#### Mechanical data

Max. bending cycles	2000000
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### Signaling

Status display	no
Status display present	no

### Connector

#### Connection 1

Type	Plug straight M12 SPEEDCON
Number of positions	12

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Locking type	SPEEDCON
Coding type	A

## Connection 2

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

## Cable/line

Cable length	0.5 m
Cable type	Black PUR/PVC twisted pair
External cable diameter	8.50 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Wire diameter incl. insulation	1 mm ±0.05 mm
Single wire, color	white-brown, green-yellow, gray-pink, blue-red, black-violet, gray/pink-red/blue
Cable cross section	0.14 mm <sup>2</sup>
Material, inner sheath	PVC
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	18x 0.10 mm
AWG signal line	26
Material wire insulation	PVC
Overall twist	Six pairs around the filler to the core
Shielding	Tinned copper braided shield
Optical shield covering	85 %
Cable resistance	142 Ω/km
Number of bending cycles	2000000
Bending radius	85 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Resistance to oil	DIN VDE 0472 Part 803, test type B
Flame resistance	DIN VDE 0472 part 804, test type B
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	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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Resistance to oil	DIN VDE 0472 Part 803, test type B
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## Standards and regulations

Flame resistance	DIN VDE 0472 part 804, test type B
Resistance to oil	DIN VDE 0472 Part 803, test type B
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

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## Drawings

Dimensional drawing



M12 SPEEDCON plug, straight, shielded

Dimensional drawing



Socket M12-SPEEDCON, straight, shielded

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Schematic diagram



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

Schematic diagram



Pin assignment M12, 12-pos., female side view

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Circuit diagram



Contact assignment of the M12 plug and the M23 socket

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## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

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