

# SAC-8P-M12MS/1-PVC/FS SHOBS VA - Sensor/actuator cable



1404881

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Sensor/actuator cable, 8-pos., PVC, RAL 9005 (black), shielded, straight M12 male plug, A-coded, to straight M12 female plug, A-coded, cable length: 1 m, with VA knurl

as illustrated but with VA knurl and  
without PATGs

## Commercial data

Item number	1404881
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1CMA
GTIN	4046356726894
Weight per piece (including packing)	123.4 g
Weight per piece (excluding packing)	121 g
Country of origin	PL

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## Technical data

### Product properties

Product type	Sensor/actuator cable
Number of positions	8
No. of cable outlets	1
Coding	A

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94	HB
Seal material	NBR
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	Stainless steel

### Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	30 V AC
	30 V DC
Nominal current $I_N$	2 A

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$
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### Signaling

Status display	no
Status display present	no

### Connector

#### Connection 1

Type	Plug straight M12
Number of positions	8
Coding type	A

#### Connection 2

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Type	Socket straight M12
Number of positions	8
Coding type	A

## Cable/line

PVC black [PVC]

Dimensional drawing	
Note	The cable is not suitable for use with drag chains.
Cable weight	85 kg/km
UL AWM Style	2517
Number of positions	8
Shielded	yes
Cable type	PVC black [PVC]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross-section	8x 0.25 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.5 mm ±0.05 mm (Signal line)
External cable diameter	7.70 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material, filler	PVC
Material wire insulation	PVC
Single wire, color	white, brown, green, yellow, gray, pink, blue, red
Thickness, insulation	≥ 0.38 mm (Conductor insulation, signal line) ≥ 0.76 mm (Outer cable sheath)
Overall twist	8 wires around filler to the core, twisted in with additional Cu litz in the wire outer godet
Optical shield covering	85 %
Max. conductor resistance	≤ 78 Ω/km
Insulation resistance	≥ 10 GΩ*km
Nominal voltage, cable	300 V
Test voltage	3000 V
Smallest bending radius, fixed installation	38.5 mm
Smallest bending radius, movable installation	77 mm

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Flame resistance	According to UL 758/1581 (Cable Flame)
	According to DIN EN 60332-1-2 (60 s)
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 80°C
Ambient temperature (operation)	-25 °C ... 105 °C (cable, fixed installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
	IP69K

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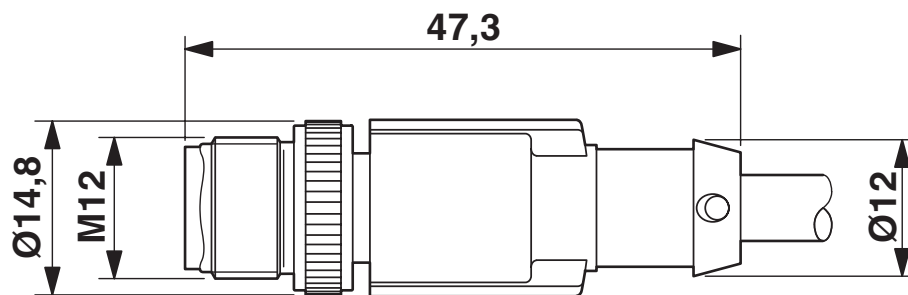


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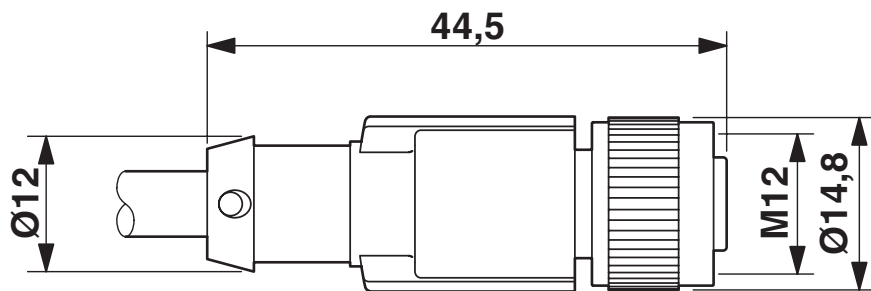
## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight, shielded

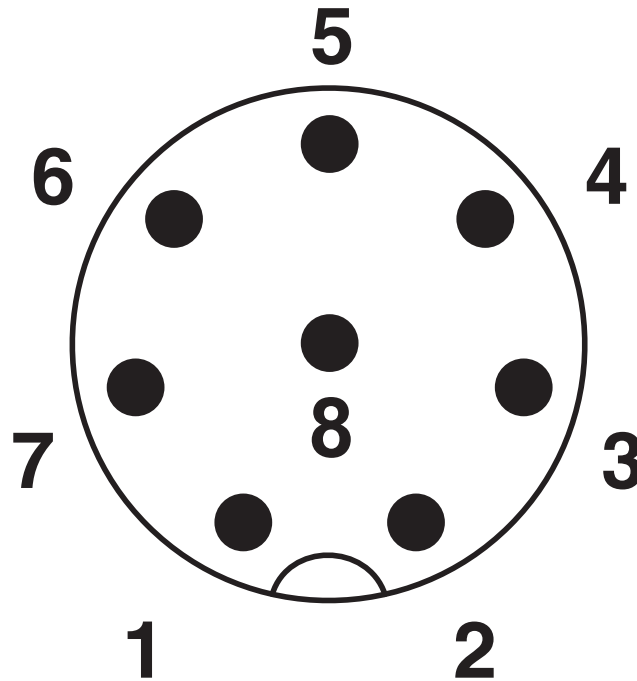
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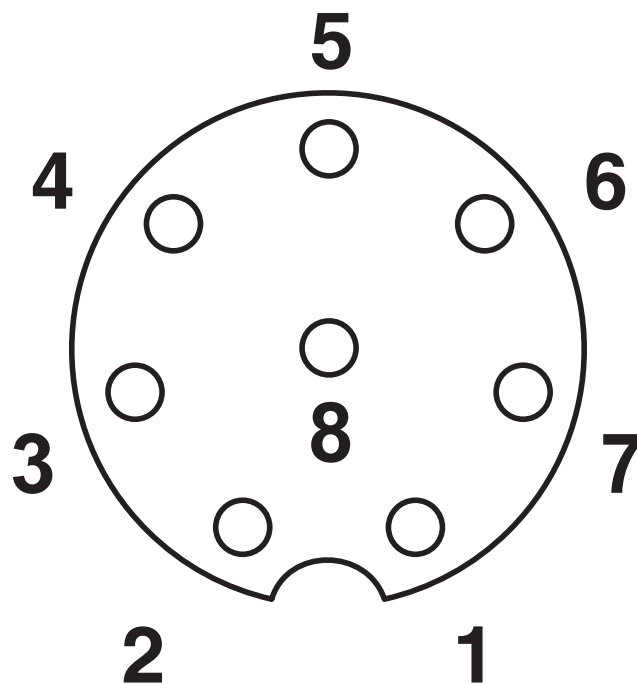
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Schematic diagram



Pin assignment M12 plug, 8-pos., view plug side

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

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Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

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