

# SAC-MS/0,3-PVC/BI-1L BK SCO180 - Sensor/actuator cable



1416163

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Sensor/actuator cable, 3-position, PVC, black RAL 9005, Plug straight M12 SPEEDCON, coding: A, with 1 LED, on Valve connector BI (11 mm), with 1 LED, cable length: 0.3 m

As shown in the illustration but with a black handle

## Commercial data

Item number	1416163
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF19
Product key	AF1DMA
GTIN	4055626064116
Weight per piece (including packing)	41.7 g
Weight per piece (excluding packing)	41 g
Customs tariff number	85444290
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
Coding	A

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94	HB
Seal material	TPU
Material housing valve plug	TPU
Material of grip body	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

### Signaling

Status display	1 LED
Status display present	yes

### Connector

#### Connection 1

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

#### Connection 2

Type	Valve connector BI (11 mm)
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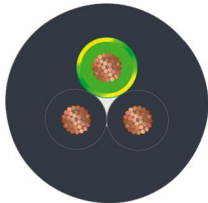
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Number of positions	3
Material	CuSn (Contact)
	Sn (Contact surface)
	PA 6.6 (Contact carrier)
	TPU (Housing)

## Cable/line

Cable length	0.3 m
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## PVC black [PVC]

Dimensional drawing	
Cable weight	38.6 kg/km
UL AWM Style	2464
Number of positions	3
Shielded	no
Cable type	PVC black [PVC]
Conductor structure signal line	16x 0.20 mm
AWG signal line	20
Conductor cross-section	3x 0.5 mm <sup>2</sup>
Wire diameter incl. insulation	1.5 mm ±0.05 mm
External cable diameter	4.80 mm ±0.2 mm
Outer sheath, material	PVC
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	39 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
Smallest bending radius, fixed installation	24 mm
Flame resistance	DIN VDE 0482
	DIN EN 50265-2-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)

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-5 °C ... 80 °C (Cable, flexible installation)
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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67

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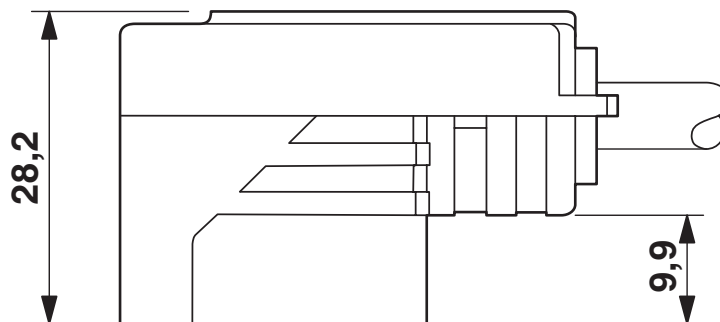
## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



Valve connector, type BI, side view

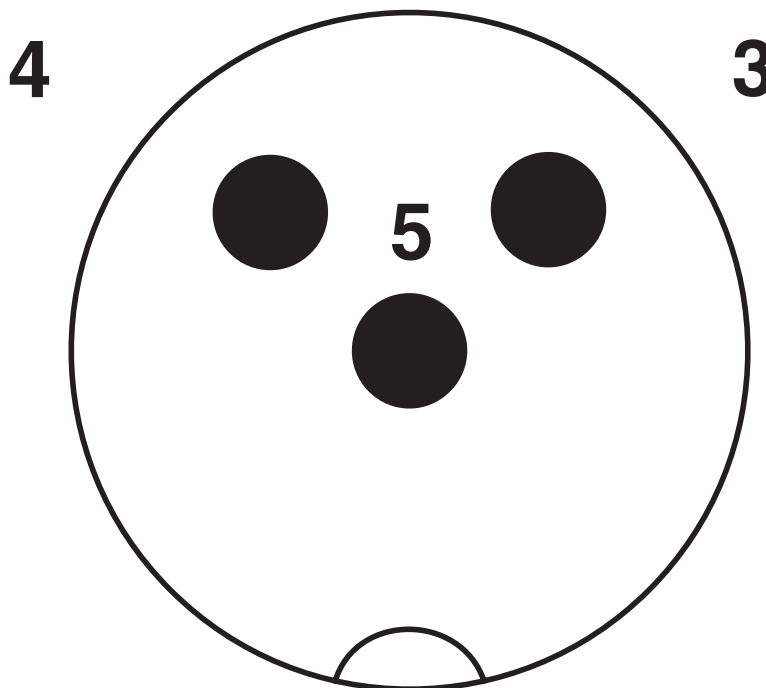
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Schematic diagram



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

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## Approvals

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 <b>CSAus</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	24 V	4 A	-	-

# SAC-MS/0,3-PVC/BI-1L BK SCO180 - Sensor/actuator cable



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## Classifications

### ECLASS

ECLASS-13.0	27060312
ECLASS-15.0	27060312

### ETIM

ETIM 10.0	EC001855
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### UNSPSC

UNSPSC 21.0	31251500
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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-E
	No hazardous substances above the limits

### EU REACH SVHC

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