

# SAC-4P-M12MS/ 5,0-150/M12FS - Sensor/actuator cable



1546660

<https://www.phoenixcontact.com/us/products/1546660>

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Sensor/actuator cable, 4-position, Plug straight M12, coding: A, connected with unwired, on Socket straight M12, coding: A, cable length: 5 m

## Commercial data

Item number	1546660
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	BF1CCA
GTIN	4046356128810
Weight per piece (including packing)	197.2 g
Weight per piece (excluding packing)	194.2 g
Customs tariff number	85444290
Country of origin	PL

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## Technical data

### Product properties

Product type	Sensor/actuator cable
Number of positions	4
Application	Standard
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
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

### Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	250 V AC
	250 V DC
Nominal current $I_N$	4 A
Protective circuit	unwired

### Mechanical properties

#### Mechanical data

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

Status display	No
Status display present	No

### Connection data

#### Conductor connection

Tightening torque	0.4 Nm
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## Connector

### Connection 1

Type	Plug straight M12
Number of positions	4
Coding type	A
Number of positions	4


### Connection 2

Type	Socket straight M12
Number of positions	4
Coding type	A
Number of positions	4

## Cable/line

Cable length	5 m
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### PUR irradiated halogen-free orange [150]

Dimensional drawing	
Number of positions	4
Shielded	no
Cable type	PUR irradiated halogen-free orange [150]
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.05 mm ±0.05 mm (Signal line)
External cable diameter	5.2 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Material wire insulation	PE
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	27 mm
Max. conductor resistance	max. 57 Ω/km
Nominal voltage, cable	320 V (AC)
Test voltage	2500 V (50 Hz, 5 minutes)

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Smallest bending radius, fixed installation	min. 15 mm
Smallest bending radius, movable installation	min. 30 mm
Max. bending cycles	5000000
Torsion force	± 360 °/m
Halogen-free	The cable is halogen-free
Other resistance	hydrolysis and microbe resistant
	Resistant to welding splashes
Special properties	Silicone-free
	Irradiated
Ambient temperature (operation)	-50 °C ... 105 °C (cable, fixed installation)
	-40 °C ... 105 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-50 °C ... 105 °C (cable, fixed installation)
	-40 °C ... 105 °C (Cable, flexible installation)

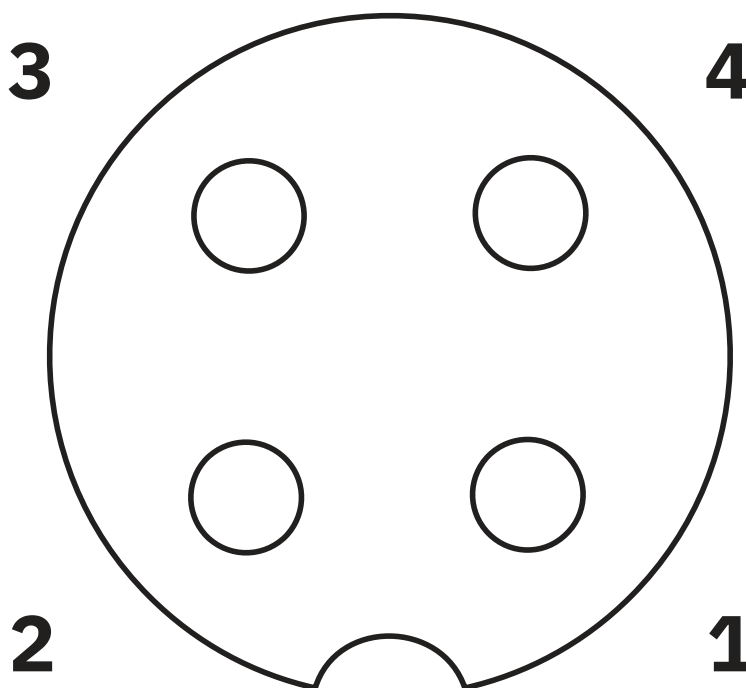
# SAC-4P-M12MS/ 5,0-150/M12FS - Sensor/actuator cable

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## Drawings

Schematic diagram



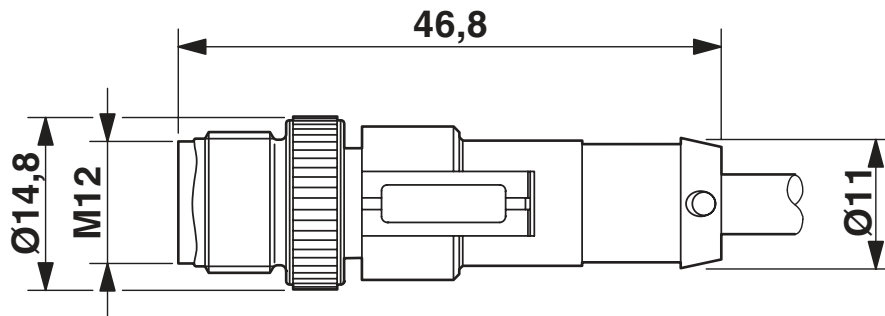
Pin assignment M12 socket, 4-pos., A-coded, view female side

# SAC-4P-M12MS/ 5,0-150/M12FS - Sensor/actuator cable

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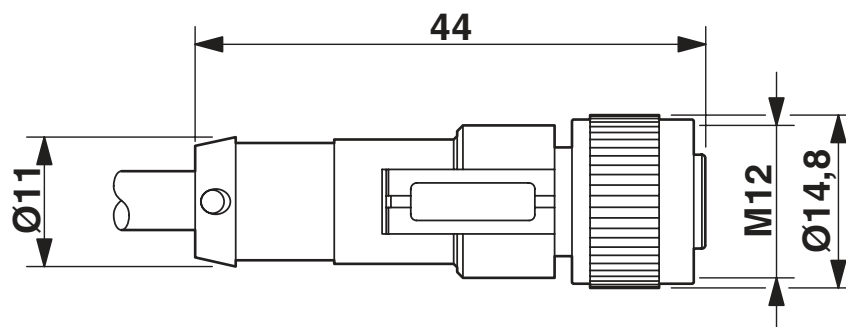
<https://www.phoenixcontact.com/us/products/1546660>

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

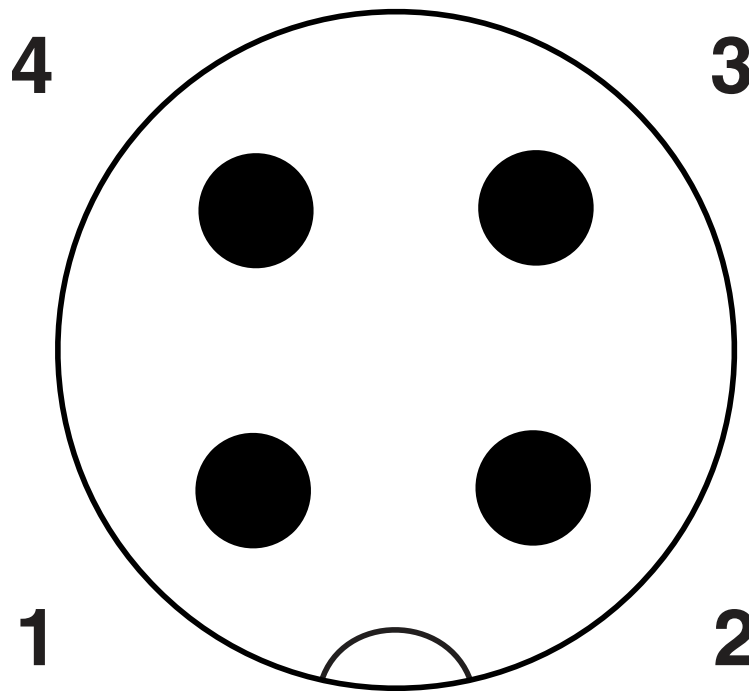
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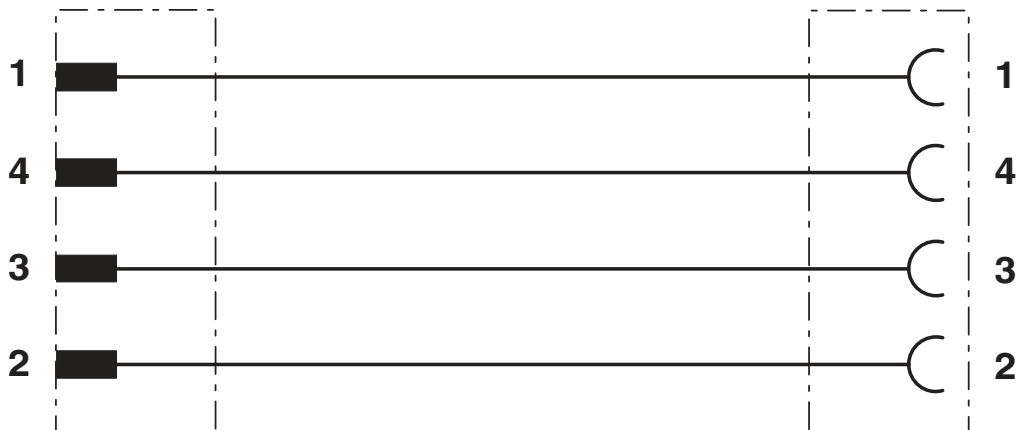
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Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

Circuit diagram



# SAC-4P-M12MS/ 5,0-150/M12FS - Sensor/actuator cable



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## Approvals

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### EAC

Approval ID: RU C-DE.BL08.B.00286



### UL Listed

Approval ID: FILE E 221474

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	300 V	4 A	-	-



### cUL Listed

Approval ID: FILE E 221474

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	300 V	4 A	-	-



### EAC-RoHS

Approval ID: RU D-DE.HB35.B.00387

### cULus Listed



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## Classifications

### ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

### ETIM

ETIM 8.0	EC001855
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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