

# SAC-4P-M12MS/ 1,5-150/M12FS - Sensor/actuator cable



1546631

<https://www.phoenixcontact.com/us/products/1546631>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 4-position, PUR halogen-free, irradiated, welding sputter-resistant, orange RAL 2003, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 1.5 m

As shown in the illustration but with an orange conductor

## Commercial data

Item number	1546631
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1CCA
GTIN	4046356128780
Weight per piece (including packing)	73.6 g
Weight per piece (excluding packing)	73.6 g
Customs tariff number	85444290
Country of origin	IN

# SAC-4P-M12MS/ 1,5-150/M12FS - Sensor/actuator cable



1546631

<https://www.phoenixcontact.com/us/products/1546631>

## Technical data

### Product properties

Product type	Sensor/actuator cable
Number of positions	4
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

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	250 V AC
	250 V DC
Nominal current $I_N$	4 A

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$
-----------------------------	------------

### Signaling

Status display	no
Status display present	no

### Connection data

#### Conductor connection

Tightening torque	0.4 Nm
-------------------	--------

### Connector

#### Connection 1

Type	Plug straight M12
------	-------------------

# SAC-4P-M12MS/ 1,5-150/M12FS - Sensor/actuator cable

1546631

<https://www.phoenixcontact.com/us/products/1546631>

Number of positions	4
Coding type	A

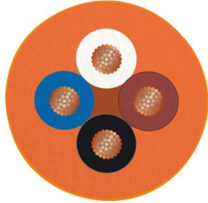
## Connection 2

Type	Socket straight M12
Number of positions	4
Coding type	A

## Cable/line

Cable length	1.5 m
--------------	-------

## 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	5.20 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)
Smallest bending radius, fixed installation	min. 15 mm
Smallest bending radius, movable installation	min. 30 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 52 mm, Traversing path: 10 m, Traversing rate: 3 m/s
Dynamic load capacity (torsion)	Torsion: ±360 °/m
Halogen-free	The cable is halogen-free
Other resistance	hydrolysis and microbe resistant

# SAC-4P-M12MS/ 1,5-150/M12FS - Sensor/actuator cable



1546631

<https://www.phoenixcontact.com/us/products/1546631>

	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/ 1,5-150/M12FS - Sensor/actuator cable

1546631

<https://www.phoenixcontact.com/us/products/1546631>

## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

# SAC-4P-M12MS/ 1,5-150/M12FS - Sensor/actuator cable

1546631

<https://www.phoenixcontact.com/us/products/1546631>

Schematic diagram



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

# SAC-4P-M12MS/ 1,5-150/M12FS - Sensor/actuator cable

1546631

<https://www.phoenixcontact.com/us/products/1546631>

Schematic diagram



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

Circuit diagram



# SAC-4P-M12MS/ 1,5-150/M12FS - Sensor/actuator cable



1546631

<https://www.phoenixcontact.com/us/products/1546631>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### UNSPSC

UNSPSC 21.0	26121600
-------------	----------

# SAC-4P-M12MS/ 1,5-150/M12FS - Sensor/actuator cable



1546631

<https://www.phoenixcontact.com/us/products/1546631>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)