

# SAC-3P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224008

<https://www.phoenixcontact.com/us/products/1224008>

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, 3-position halogen-free, Plug straight M12, coding: A Push Pull, connected with unwired, on Socket angled M12, coding: A Push Pull, cable length: 1.5 m

## Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Save time, thanks to installation with push-pull fast locking

## Commercial data

Item number	1224008
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF06
Product key	BF1CBC
GTIN	4063151315108
Weight per piece (including packing)	62.9 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	PL

# SAC-3P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224008

<https://www.phoenixcontact.com/us/products/1224008>

## Technical data

### Product properties

Product type	Sensor/actuator cable
Number of positions	3
Application	Standard
No. of cable outlets	1
Shielded	no
Coding	A

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Material	PK
	PA
Flammability rating according to UL 94	V0
Seal material	FKM
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Material for screw connection	Brass, 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	$\geq 100$
-----------------------------	------------

### Signaling

Status display	No
Status display present	No

### Connection data

#### Conductor connection

Tightening torque	M12 push-pull connectors
-------------------	--------------------------

# SAC-3P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable

1224008

<https://www.phoenixcontact.com/us/products/1224008>

## Connector

### Connection 1

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


### Connection 2

Type	Socket angled M12 Push Pull
Number of positions	3
Coding type	A
Number of positions	3
Locking type	Push Pull

## Cable/line

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

### PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	23 kg/km
UL AWM Style	20549
Number of positions	3
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	3x 0.34 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.27 mm ±0.02 mm (Signal line)
External cable diameter	3.85 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, blue, black
Thickness, insulation	≥ 0.21 mm (Core insulation)

# SAC-3P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224008

<https://www.phoenixcontact.com/us/products/1224008>

	approx. 0.5 mm (Outer cable sheath)
Overall twist	3 wires, twisted
Max. conductor resistance	max. 58 Ω/km (at 20 °C)
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Smallest bending radius, fixed installation	19 mm
Smallest bending radius, movable installation	38 mm
Max. bending cycles	10000000
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	in accordance with UL 758/1581 FT2 DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65 IP67
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)

## Standards and regulations

Standard designation	M12-Push-Pull
Standards/specifications	IEC 61076-2-010

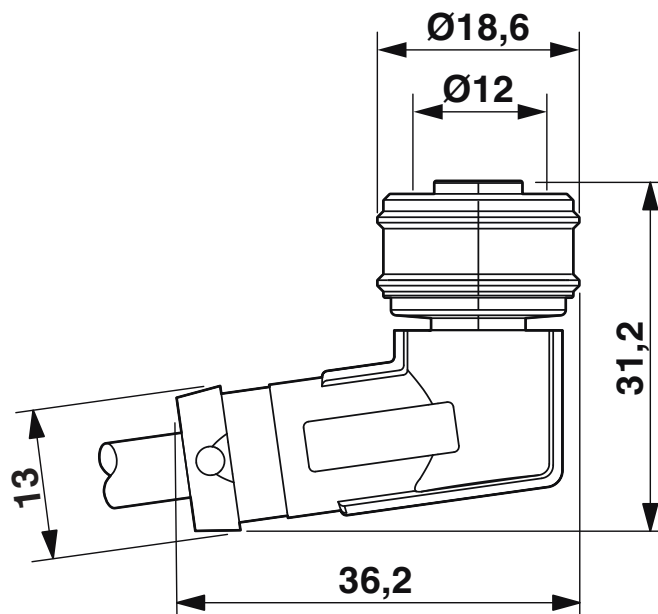
# SAC-3P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable

1224008

<https://www.phoenixcontact.com/us/products/1224008>

## Drawings

Dimensional drawing



M12 push-pull female connector, angled

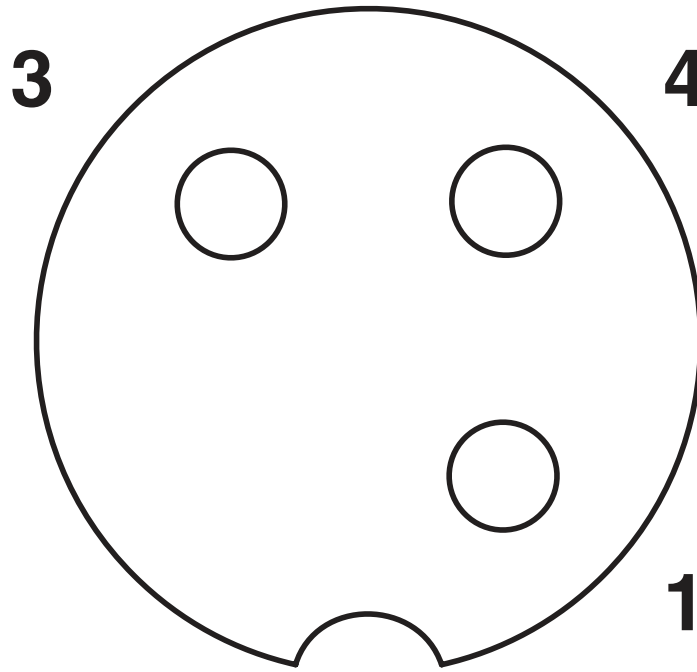
# SAC-3P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224008

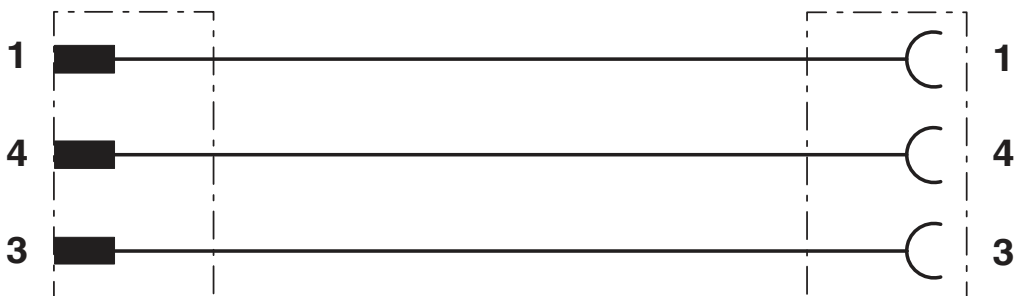
<https://www.phoenixcontact.com/us/products/1224008>

Schematic diagram



Pin assignment socket M 12

Circuit diagram

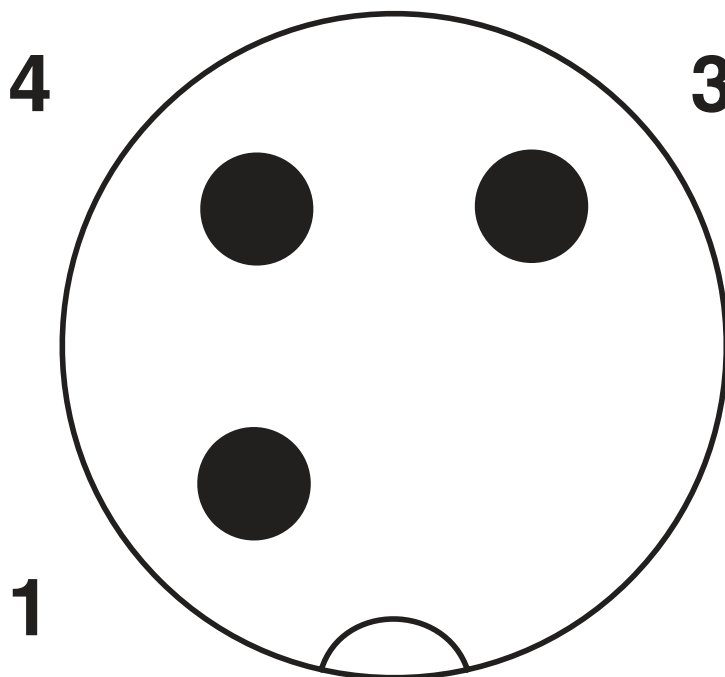


# SAC-3P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable

1224008

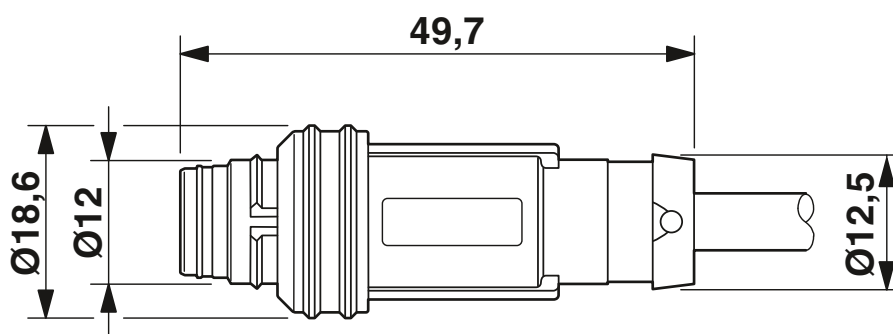
<https://www.phoenixcontact.com/us/products/1224008>

Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

Dimensional drawing



M12 push-pull male connector, straight

# SAC-3P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224008

<https://www.phoenixcontact.com/us/products/1224008>

## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC001855
----------	----------

### UNSPSC

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



# SAC-3P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224008

<https://www.phoenixcontact.com/us/products/1224008>

## Environmental product compliance

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

Phoenix Contact 2023 © - 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)