

SAC-4P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224166

<https://www.phoenixcontact.com/us/products/1224166>

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 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	1224166
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF06
Product key	BF1CCC
GTIN	4063151313746
Weight per piece (including packing)	69.9 g
Weight per piece (excluding packing)	69.42 g
Customs tariff number	85444290
Country of origin	PL

SAC-4P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224166

<https://www.phoenixcontact.com/us/products/1224166>

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

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	≥ 100
-----------------------------	------------

Signaling

Status display	No
Status display present	No

Connection data

Conductor connection

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

SAC-4P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable

1224166

<https://www.phoenixcontact.com/us/products/1224166>

Connector

Connection 1

Type	Plug straight M12 Push Pull
Number of positions	4
Coding type	A
Number of positions	4
Locking type	Push Pull


Connection 2

Type	Socket angled M12 Push Pull
Number of positions	4
Coding type	A
Number of positions	4
Locking type	Push Pull

Cable/line

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

PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	30 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.27 mm ±0.02 mm
External cable diameter	4.2 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, white, blue, black
Thickness, insulation	≥ 0.21 mm

SAC-4P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224166

<https://www.phoenixcontact.com/us/products/1224166>

Thickness, outer sheath	approx. 0.5 mm
Overall twist	4 wires, twisted
Max. conductor resistance	≤ 58 Ω/km
Insulation resistance	≥ 1 GΩ*km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Max. bending cycles	10000000
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
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
	Low adhesion
Special properties	abrasion-resistant
	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	flexible
	-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

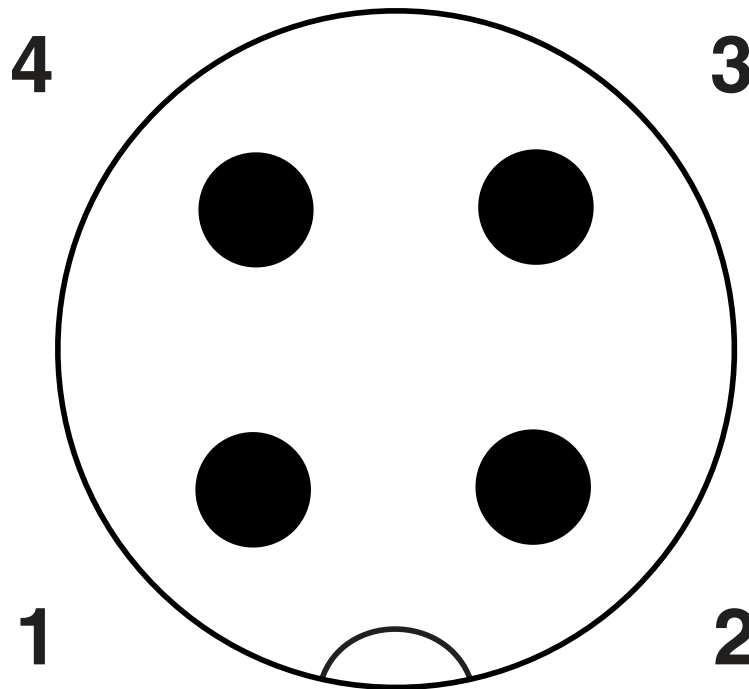
SAC-4P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable

1224166

<https://www.phoenixcontact.com/us/products/1224166>

Drawings

Schematic diagram



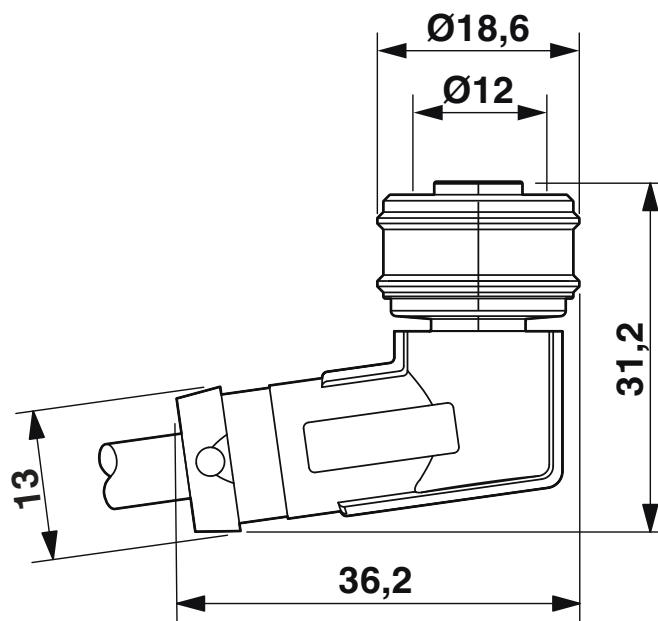
Pin assignment M12 male connector

SAC-4P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable

1224166

<https://www.phoenixcontact.com/us/products/1224166>

Dimensional drawing



M12 push-pull female connector, angled

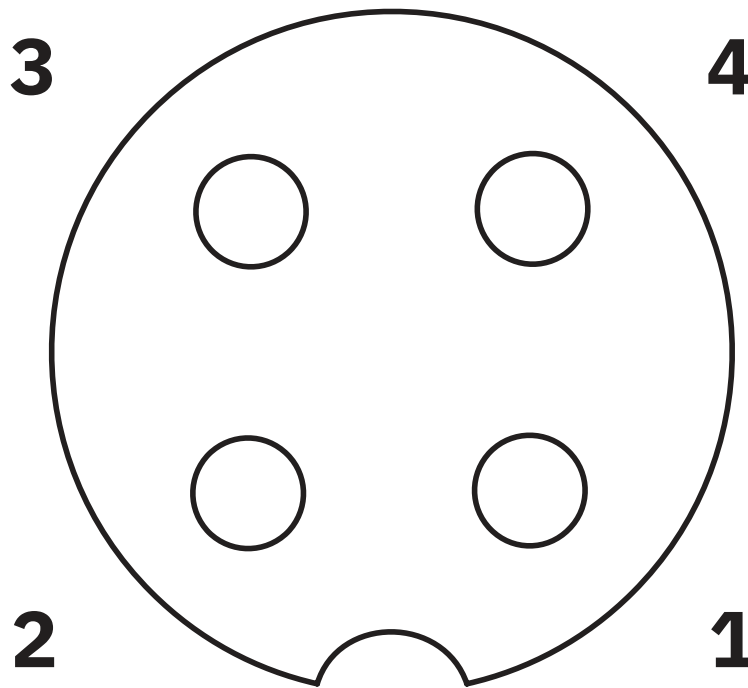
SAC-4P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224166

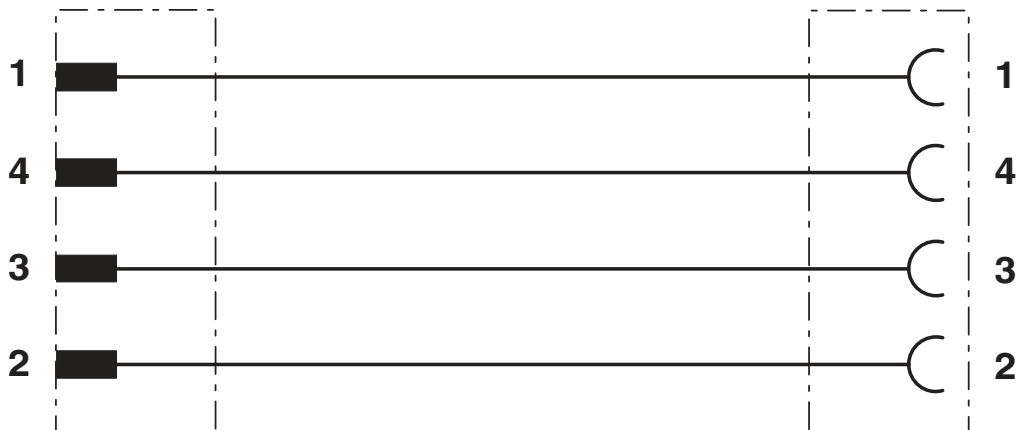
<https://www.phoenixcontact.com/us/products/1224166>

Schematic diagram



Pin assignment socket M 12

Circuit diagram

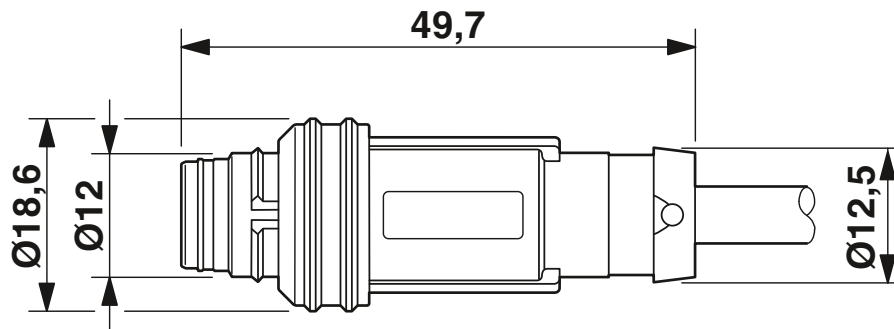


SAC-4P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable

1224166

<https://www.phoenixcontact.com/us/products/1224166>

Dimensional drawing



M12 push-pull male connector, straight

SAC-4P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224166

<https://www.phoenixcontact.com/us/products/1224166>

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-4P-P12MS/ 1,5-PUR/P12FR - Sensor/actuator cable



1224166

<https://www.phoenixcontact.com/us/products/1224166>

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