

# SAC-3P-MR/ 0,6-PUR/A SCO - Sensor/actuator cable



1402224

<https://www.phoenixcontact.com/us/products/1402224>

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, PUR halogen-free, black-gray RAL 7021, Plug angled M12 SPEEDCON, coding: A, on Valve connector A, Wiring: unwired, cable length: 0.6 m

## Commercial data

Item number	1402224
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1DJA
GTIN	4046356589222
Weight per piece (including packing)	53.2 g
Weight per piece (excluding packing)	22.22 g
Country of origin	PL

1402224

<https://www.phoenixcontact.com/us/products/1402224>

## Technical data

### Product properties

Product type	Sensor/actuator cable with valve connector
Number of positions	3
No. of cable outlets	1
Shielded	no
Coding	A

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Connection data

#### Conductor connection

Tightening torque	0.4 Nm (M12 connector)
	0.6 Nm (Valve connector)

### Material specifications

Flammability rating according to UL 94	V0
Seal material	TPU
Material housing valve plug	TPU
Material of grip body	TPU
Contact material	CuSn
Contact surface material	Ni/Au
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 $U_N$	48 V AC
	60 V DC
Nominal current $I_N$	4 A

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$ (M12 connector)
-----------------------------	----------------------------

### Signaling

Status display	no
Status display present	no

# SAC-3P-MR/ 0,6-PUR/A SCO - Sensor/actuator cable



1402224

<https://www.phoenixcontact.com/us/products/1402224>

## Connector

### Connection 1

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

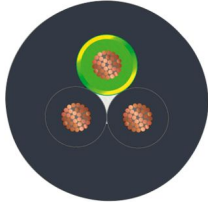
### Connection 2

Type	Valve connector A
Material	CuSn (Contact)
	Sn (Contact surface)
	PA 6.6 (Contact carrier)
	TPU (Housing)
Protective circuit	unwired

## Cable/line

Cable length	0.6 m
--------------	-------

### PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	30 kg/km
UL AWM Style	20549
Number of positions	3
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	28x 0.15 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 (Signal line)
External cable diameter	4.50 mm ±0.2 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	black 1, black 2, green/yellow
Overall twist	3 wires, twisted

# SAC-3P-MR/ 0,6-PUR/A SCO - Sensor/actuator cable



1402224

<https://www.phoenixcontact.com/us/products/1402224>

Max. conductor resistance	39 Ω/km (at 20 °C)
Insulation resistance	min. 20 MΩ*km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 1200 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	22.5 mm
Smallest bending radius, movable installation	45 mm
Dynamic load capacity (bending)	Max. bending cycles: 15000000, Bending radius: 50 mm, Traversing path: 0.9 m, Traversing rate: 5 m/s, Acceleration: 30 m/s <sup>2</sup>
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	according to DIN VDE 0482 According to DIN EN 50265-2-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	largely oil-resistant partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -20 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65 IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)
Ambient temperature (operation) (Valve connector)	-20 °C ... 85 °C (Valve connector)

## Standards and regulations

### M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

### Valve connector

Standard designation	Valve connector
Standards/specifications	EN 175301-803

# SAC-3P-MR/ 0,6-PUR/A SCO - Sensor/actuator cable

1402224

<https://www.phoenixcontact.com/us/products/1402224>

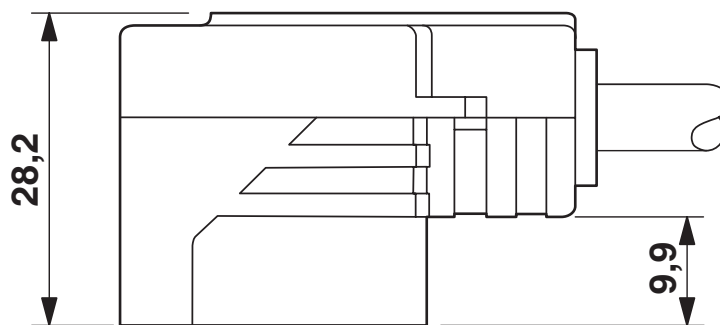
## Drawings

Dimensional drawing



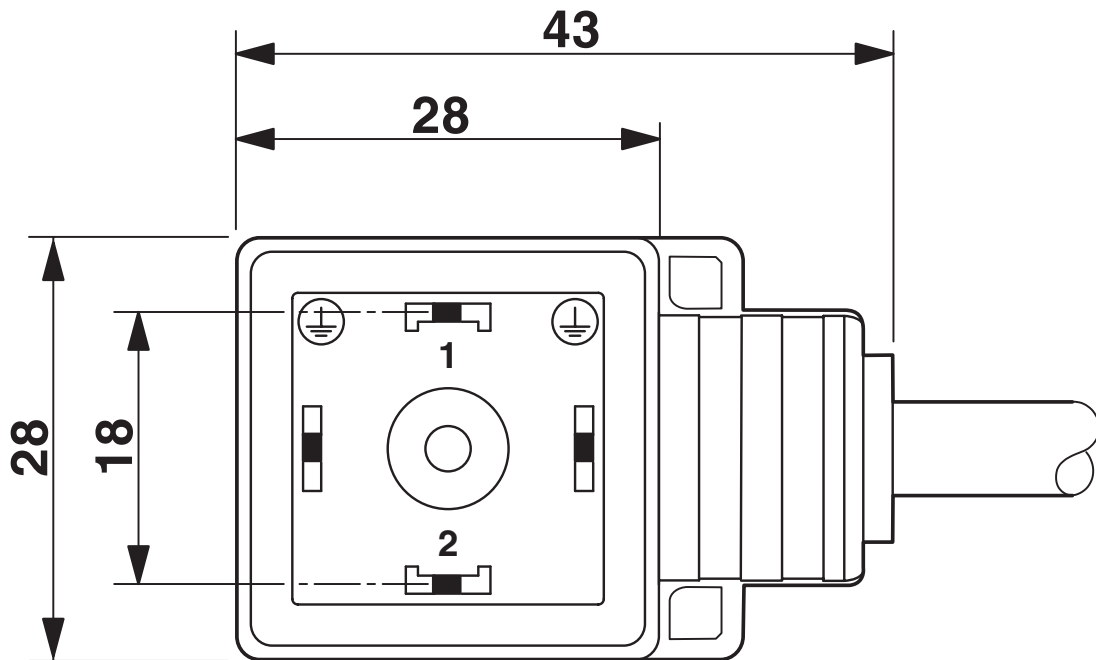
M12 x 1 male plug, angled

Dimensional drawing



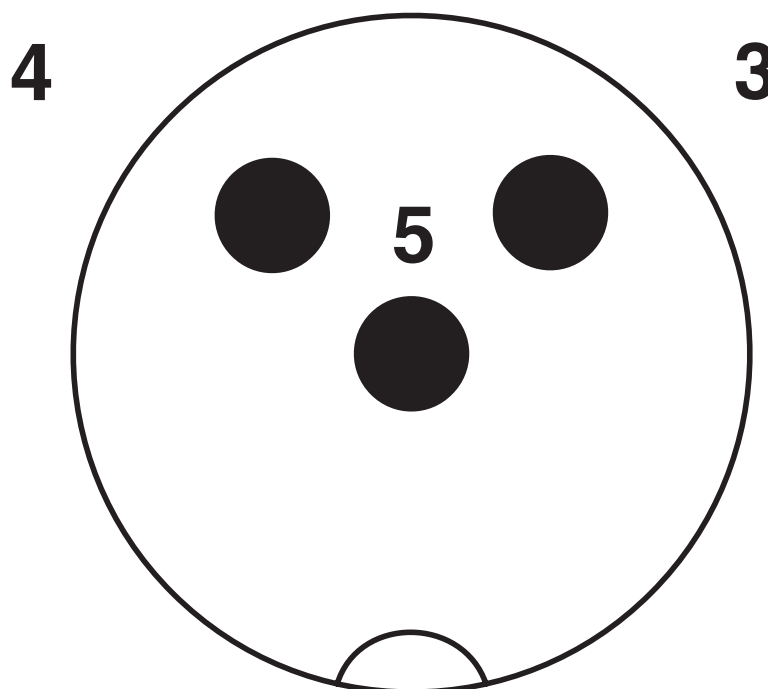
Valve connector, type A, side view

Dimensional drawing



Valve connector, type A

Schematic diagram



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

1402224

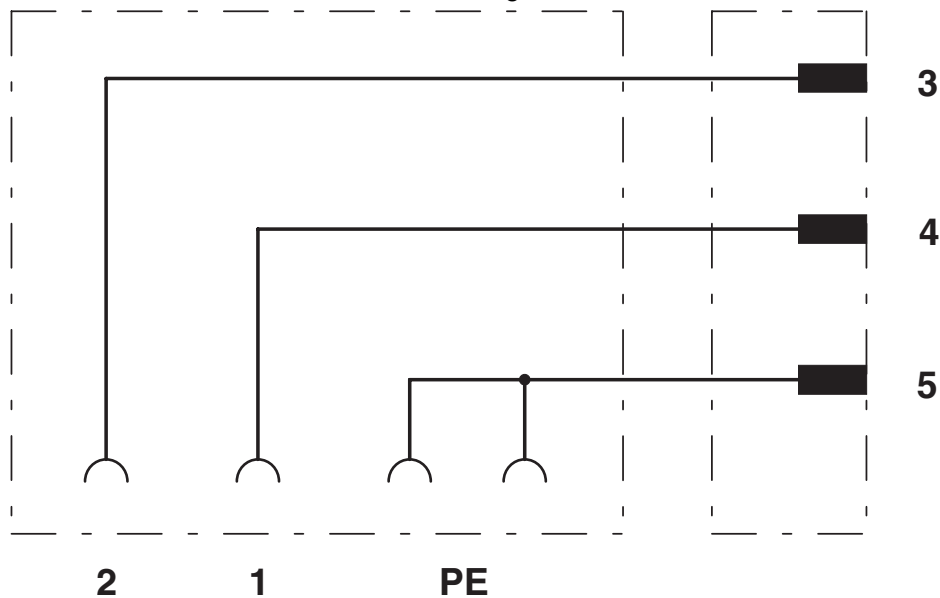
<https://www.phoenixcontact.com/us/products/1402224>

Schematic diagram



Valve connector pin assignment, type A

Circuit diagram



Contact assignment of M12 plug and valve connector

# SAC-3P-MR/ 0,6-PUR/A SCO - Sensor/actuator cable



1402224

<https://www.phoenixcontact.com/us/products/1402224>

## Classifications

### ECLASS

ECLASS-13.0	27060312
ECLASS-15.0	27060312

1402224

<https://www.phoenixcontact.com/us/products/1402224>

## Environmental product compliance

### EU RoHS

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

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### 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)