

# SAC-12P-MR/ 3,0-PUR SCO - Sensor/actuator cable



1430585

<https://www.phoenixcontact.com/us/products/1430585>

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, 12-position, PUR halogen-free, black RAL 9005, Plug angled M12 SPEEDCON, coding: A, on free cable end, cable length: 3 m

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Save time, thanks to installation with SPEEDCON fast locking system
- Our standard: robust halogen-free PUR cable
- Save space – with high-pos. connectors

## Commercial data

Item number	1430585
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1CGA
GTIN	4046356456401
Weight per piece (including packing)	197.1 g
Weight per piece (excluding packing)	194.1 g
Customs tariff number	85444290
Country of origin	DE

## Technical data

### Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	12
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	V0
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated

### Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	30 V AC
	30 V DC
Nominal current $I_N$	1.5 A

### Signaling

Status display	no
Status display present	no

### Connection data

#### Conductor connection

Tightening torque	0.4 Nm (M12 connector)
-------------------	------------------------

### Connector

#### Connection 1

Type	Plug angled M12 SPEEDCON
Number of positions	12
Locking type	SPEEDCON
Coding type	A

#### Connection 2

# SAC-12P-MR/ 3,0-PUR SCO - Sensor/actuator cable



1430585


<https://www.phoenixcontact.com/us/products/1430585>

Type	free cable end
------	----------------

## Cable/line

Cable length	3 m
--------------	-----

### PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	17 kg/km
Number of positions	12
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	18x 0.10 mm
AWG signal line	26
Conductor cross-section	12x 0.14 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1 mm ±0.05 mm (Signal line)
External cable diameter	7.20 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PP
Single wire, color	white, brown, green, yellow, gray, pink, blue, red, black, violet, gray/pink, red/blue
Overall twist	12 wires twisted in layers
Max. conductor resistance	142 Ω/km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 1500 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	36 mm
Smallest bending radius, movable installation	72 mm
Dynamic load capacity (bending)	Max. bending cycles: 4000000, Bending radius: 54 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s <sup>2</sup>
Halogen-free	in accordance with DIN EN 50267-2-1
Flame resistance	in acc. to UL VW1 DIN EN 60332-1-2
Resistance to oil	EN 60811-2-1
Other resistance	EN 50525-2-21:2012-01

# SAC-12P-MR/ 3,0-PUR SCO - Sensor/actuator cable



1430585

<https://www.phoenixcontact.com/us/products/1430585>

	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Special properties	Low adhesion surface
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

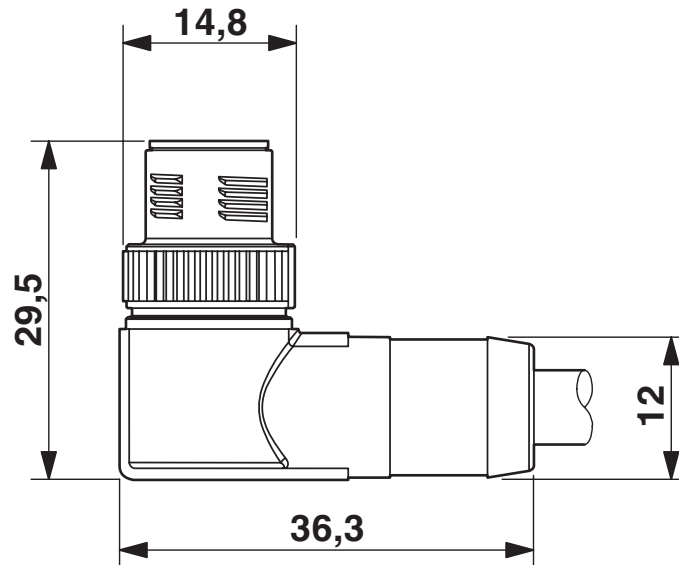
Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 85 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-20 °C ... 80 °C (Cable, flexible installation)

## Standards and regulations

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

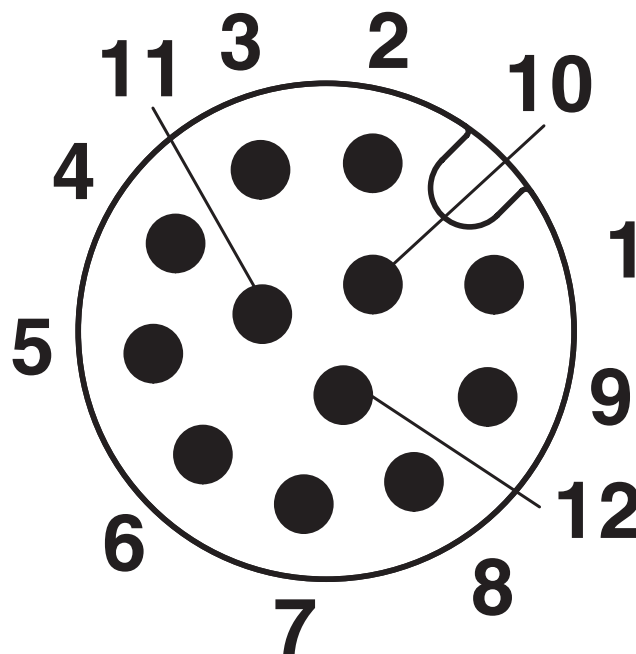
Drawings

Dimensional drawing



Plug M12 SPEEDCON, angled, shielded

Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view

# SAC-12P-MR/ 3,0-PUR SCO - Sensor/actuator cable



1430585

<https://www.phoenixcontact.com/us/products/1430585>

Circuit diagram



Contact assignment of the M12 plug

# SAC-12P-MR/ 3,0-PUR SCO - Sensor/actuator cable



1430585

<https://www.phoenixcontact.com/us/products/1430585>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1430585>

 <b>UL Listed</b> Approval ID: E221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	30 V	1 A	-	-

 <b>EAC-RoHS</b> Approval ID: RU D-DE.HB35.B.00387	
--	--

# SAC-12P-MR/ 3,0-PUR SCO - Sensor/actuator cable



1430585

<https://www.phoenixcontact.com/us/products/1430585>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### ETIM

ETIM 10.0	EC001855
-----------	----------

### UNSPSC

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

# SAC-12P-MR/ 3,0-PUR SCO - Sensor/actuator cable



1430585

<https://www.phoenixcontact.com/us/products/1430585>

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

### EF3.1 Climate Change

CO2e kg	2.891 kg CO2e
---------	---------------

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)