

SAC-12P-MS/ 5,0-PUR SCO - Sensor/actuator cable



1430556

<https://www.phoenixcontact.com/us/products/1430556>

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 straight M12 SPEEDCON, coding: A, on free cable end, cable length: 5 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	1430556
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1CGA
GTIN	4046356456371
Weight per piece (including packing)	325.8 g
Weight per piece (excluding packing)	308.1 g
Customs tariff number	85444290
Country of origin	DE

SAC-12P-MS/ 5,0-PUR SCO - Sensor/actuator cable

1430556

<https://www.phoenixcontact.com/us/products/1430556>



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

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection	
Tightening torque	0.4 Nm (M12 connector)

Connector

Connection 1	
Type	Plug straight M12 SPEEDCON
Number of positions	12
Locking type	SPEEDCON
Coding type	A

Connection 2

SAC-12P-MS/ 5,0-PUR SCO - Sensor/actuator cable

1430556

<https://www.phoenixcontact.com/us/products/1430556>



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

Cable/line

Cable length	5 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 ² (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 ²
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-MS/ 5,0-PUR SCO - Sensor/actuator cable

1430556

<https://www.phoenixcontact.com/us/products/1430556>



	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

SAC-12P-MS/ 5,0-PUR SCO - Sensor/actuator cable

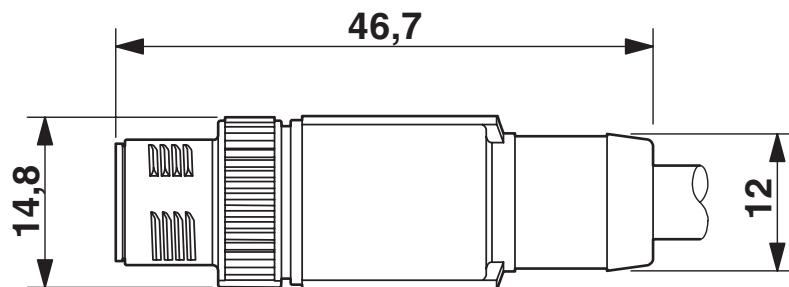
1430556

<https://www.phoenixcontact.com/us/products/1430556>



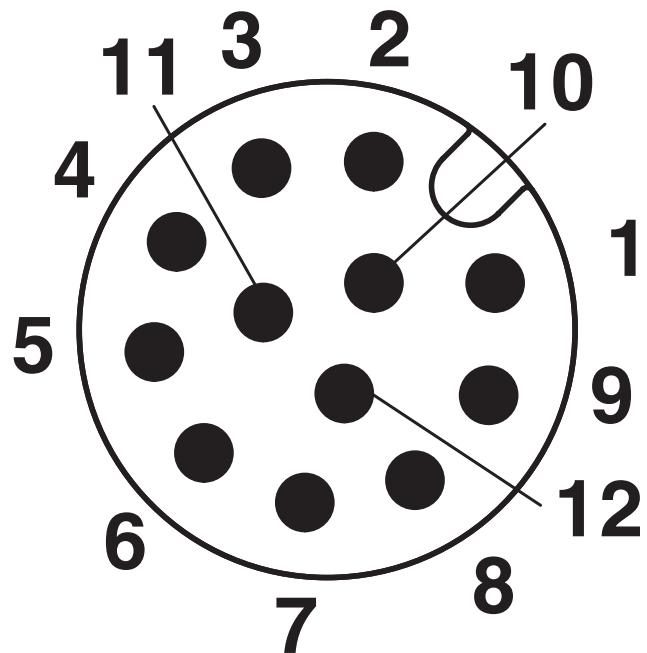
Drawings

Dimensional drawing



M12 SPEEDCON plug, straight

Schematic diagram



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

SAC-12P-MS/ 5,0-PUR SCO - Sensor/actuator cable

1430556

<https://www.phoenixcontact.com/us/products/1430556>



Circuit diagram



Contact assignment of the M12 plug

SAC-12P-MS/ 5,0-PUR SCO - Sensor/actuator cable

1430556

<https://www.phoenixcontact.com/us/products/1430556>



Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1430556>

		Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine		30 V	1 A	-	-

		EAC-RoHS
Approval ID: RU D-DE.HB35.B.00387		

SAC-12P-MS/ 5,0-PUR SCO - Sensor/actuator cable

1430556

<https://www.phoenixcontact.com/us/products/1430556>



Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

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

SAC-12P-MS/ 5,0-PUR SCO - Sensor/actuator cable

1430556

<https://www.phoenixcontact.com/us/products/1430556>



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%
-------------------------------------	----------------------------

EF3.0 Climate Change

CO2e kg	2.807 kg CO2e
---------	---------------

Phoenix Contact 2025 © - 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