

SAC-12P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413186

<https://www.phoenixcontact.com/us/products/1413186>

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, on Socket straight M12 SPEEDCON, cable length: 10 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	1413186
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1CGA
GTIN	4046356993258
Weight per piece (including packing)	614.3 g
Weight per piece (excluding packing)	602 g
Customs tariff number	85444290
Country of origin	DE

SAC-12P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413186

<https://www.phoenixcontact.com/us/products/1413186>

Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	12
No. of cable outlets	1
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	V0
Seal material	NBR
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 straight M12 SPEEDCON
Locking type	SPEEDCON

Connection 2

Type	Socket straight M12 SPEEDCON
Locking type	SPEEDCON


SAC-12P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413186

<https://www.phoenixcontact.com/us/products/1413186>

Cable/line

Cable length	10 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 partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)

SAC-12P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413186

<https://www.phoenixcontact.com/us/products/1413186>

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)	-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

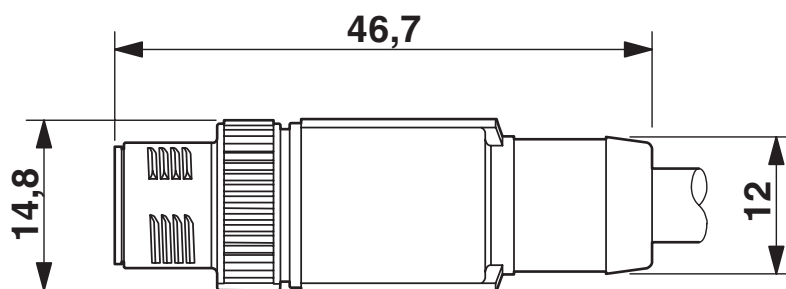
SAC-12P-MS/10,0-PUR/FS SCO - Sensor/actuator cable

1413186

<https://www.phoenixcontact.com/us/products/1413186>

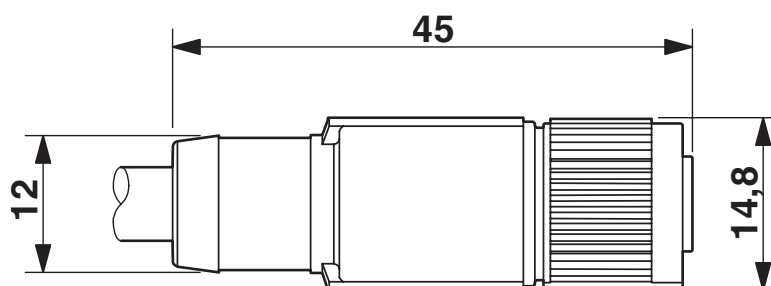
Drawings

Dimensional drawing



M12 SPEEDCON plug, straight

Dimensional drawing



M12-SPEEDCON socket, straight

SAC-12P-MS/10,0-PUR/FS SCO - Sensor/actuator cable

1413186

<https://www.phoenixcontact.com/us/products/1413186>

Schematic diagram



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

Schematic diagram



Pin assignment M12, 12-pos., female side view

SAC-12P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413186

<https://www.phoenixcontact.com/us/products/1413186>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1413186>

 UL Listed Approval ID: E221474				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	30 V	1 A	-	-

SAC-12P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413186

<https://www.phoenixcontact.com/us/products/1413186>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

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

UNSPSC

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

SAC-12P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413186

<https://www.phoenixcontact.com/us/products/1413186>

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

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