

SAC-5P-P12MS/ 1,5-PUR/M12FS - Sensor/actuator cable



1396546

<https://www.phoenixcontact.com/us/products/1396546>

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, 5-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 Push Pull, on Socket straight M12, coding: A, 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	1396546
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF06
Product key	AF1CDC
GTIN	4063151819224
Weight per piece (including packing)	65.9 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	PL

SAC-5P-P12MS/ 1,5-PUR/M12FS - Sensor/actuator cable



1396546

<https://www.phoenixcontact.com/us/products/1396546>

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

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

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection

Tightening torque	0.4 Nm
-------------------	--------

Connector

Connection 1

Type	Plug straight M12 Push Pull
Number of positions	5
Locking type	Push Pull

Connection 2

Type	Socket straight M12
Number of positions	5
Coding type	A

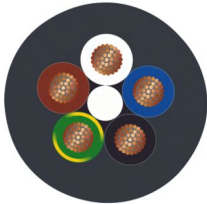
SAC-5P-P12MS/ 1,5-PUR/M12FS - Sensor/actuator cable



1396546

<https://www.phoenixcontact.com/us/products/1396546>

Cable/line

Cable length	1.5 m
PUR halogen-free black [PUR]	
Dimensional drawing	
Cable weight	33 kg/km
UL AWM Style	20549
Number of positions	5
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	5x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.27 mm 0.05 mm (Signal line)
External cable diameter	4.55 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, green-yellow
Thickness, insulation	approx. 0.50 mm
Max. conductor resistance	max. 58 Ω/km (at 20 °C)
Insulation resistance	≥ 16 GΩ*km (at 20 °C)
Nominal voltage, cable	300 V
Test voltage	3000 V
Smallest bending radius, fixed installation	23 mm
Smallest bending radius, movable installation	46 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 46 mm, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥2000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815
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
Highly resistant to acids, alkaline solutions and solvents	

SAC-5P-P12MS/ 1,5-PUR/M12FS - Sensor/actuator cable



1396546

<https://www.phoenixcontact.com/us/products/1396546>

Other resistance	hydrolysis and microbe resistant
	Resistant to salt water
	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Special properties	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) (male connector/female connector)	-25 °C ... 85 °C (Plug / socket)

Standards and regulations

Standard designation	M12-Push-Pull
Standards/specifications	IEC 61076-2-010

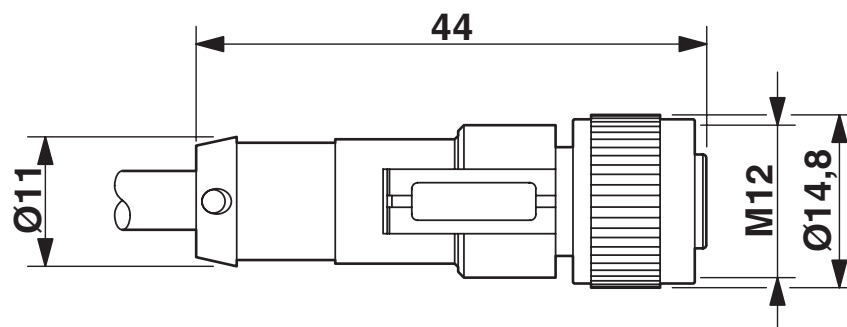
SAC-5P-P12MS/ 1,5-PUR/M12FS - Sensor/actuator cable

1396546

<https://www.phoenixcontact.com/us/products/1396546>

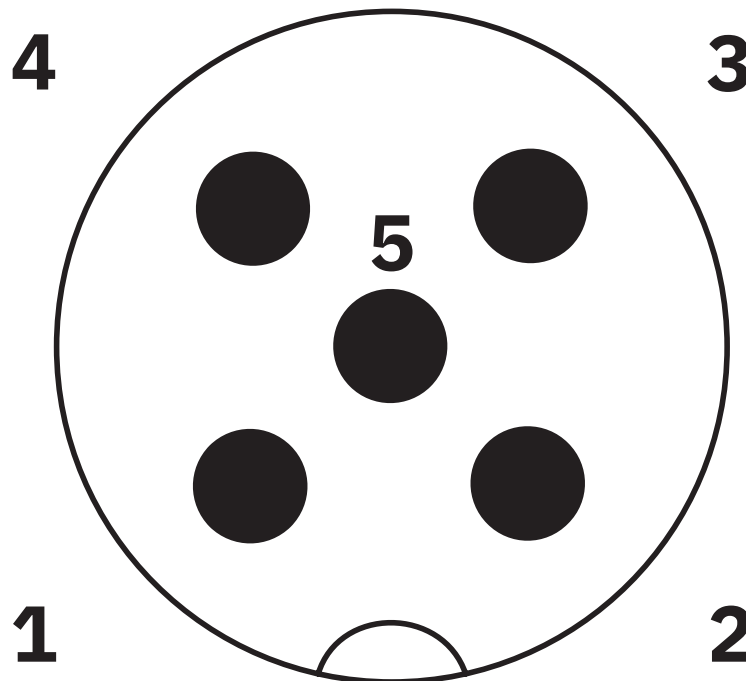
Drawings

Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



Pin assignment M12 male connector

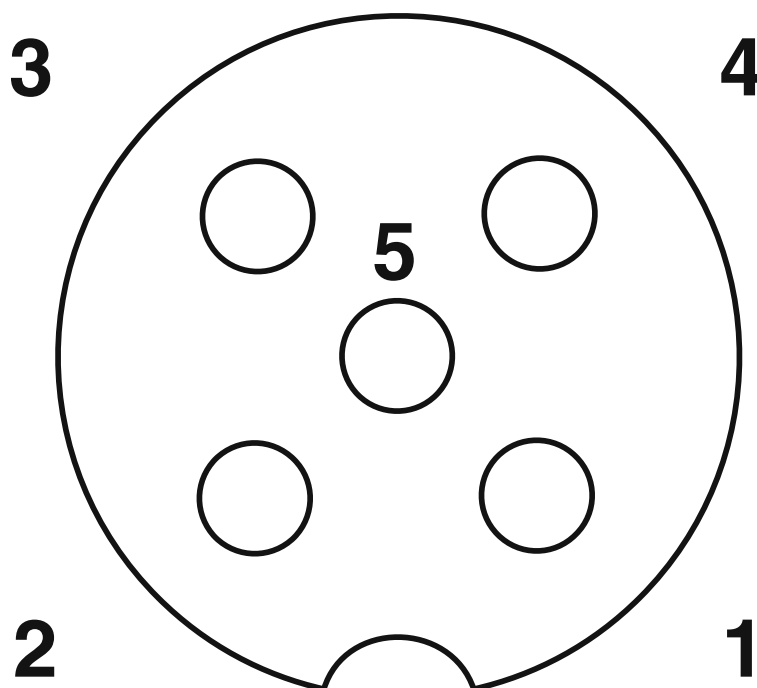
SAC-5P-P12MS/ 1,5-PUR/M12FS - Sensor/actuator cable



1396546

<https://www.phoenixcontact.com/us/products/1396546>

Schematic diagram



Pin assignment socket M 12

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

SAC-5P-P12MS/ 1,5-PUR/M12FS - Sensor/actuator cable



1396546

<https://www.phoenixcontact.com/us/products/1396546>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

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

UNSPSC

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

SAC-5P-P12MS/ 1,5-PUR/M12FS - Sensor/actuator cable



1396546

<https://www.phoenixcontact.com/us/products/1396546>

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 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