



Automatización Eléctrica
Especialistas en Automatización

At the end of this document you will find links to products related to this catalog. You can go directly to our shop by clicking [HERE](#). [HERE](#)

Sensor/Actuator cable - SAC-5P-M12MS/ 3,0-PUR/M12FS SH - 1500910

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Sensor/Actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, shielded, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 3 m

Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Our standard: robust halogen-free PUR cable
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference

Key Commercial Data

Packing unit	1 STK
GTIN	 4 017918 612290

Technical data

Dimensions

Length of cable	3 m
-----------------	-----

Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65
	IP67

General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100

Sensor/Actuator cable - SAC-5P-M12MS/ 3,0-PUR/M12FS SH - 1500910

Technical data

General

Torque	0.4 Nm (M12 connector)
--------	------------------------

Material

Flammability rating according to UL 94	HB
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Flammability rating according to UL 94	HB

Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	LiF9YC11Y
UL AWM style	20549
Conductor cross section	5x 0.34 mm ² (Signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.27 mm ±0.02 mm (Signal line)
Thickness, insulation	≥ 0.21 mm
Wire colors	Brown, white, blue, black, gray
Overall twist	5 wires around filler to the core
Shielding	Tinned copper braided shield
Optical shield covering	85 %
External sheath, color	black-gray RAL 7021
External cable diameter D	5.9 mm ±0.2 mm
Smallest bending radius, fixed installation	29.5 mm
Smallest bending radius, movable installation	59 mm (up to +60°C)
Number of bending cycles	4000000
Bending radius	59 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Cable weight	48 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP

Sensor/Actuator cable - SAC-5P-M12MS/ 3,0-PUR/M12FS SH - 1500910

Technical data

Cable

Conductor material	Bare Cu litz wires
Insulation resistance	70 GΩ*km (at 20 °C)
Conductor resistance	max. 57 Ω/km (at 20 °C)
Nominal voltage, cable	300 V (at 20 °C)
Test voltage Core/Core	3000 V (at 20 °C)
Special properties	Flexible cable conduit capable
Flame resistance	in acc. with UL FT-2
Halogen-free	in accordance with DIN VDE 0472 part 815
Other resistance	hydrolysis and microbe resistant
	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (cable, flexible installation)

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27279218
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218

ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

Approvals

Approvals

Sensor/Actuator cable - SAC-5P-M12MS/ 3,0-PUR/M12FS SH - 1500910

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approvals submitted

Approval details

UL Listed	
Nominal current IN	4 A
Nominal voltage UN	125 V

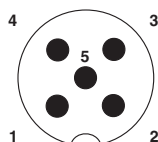
cUL Listed	
Nominal current IN	4 A
Nominal voltage UN	125 V

EAC

cULus Listed

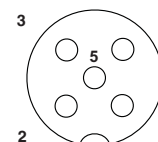
Drawings

Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side

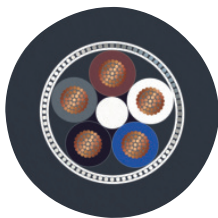
Schematic diagram



Pin assignment M12 socket, 5-pos., A-coded, socket side view

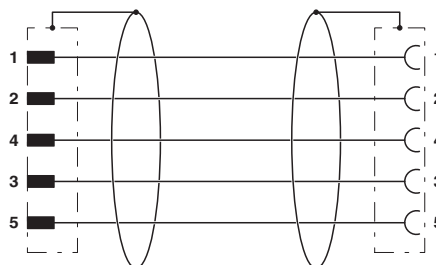
Sensor/Actuator cable - SAC-5P-M12MS/ 3,0-PUR/M12FS SH - 1500910

Cable cross section



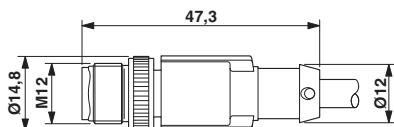
PUR halogen-free black [PUR]

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight, shielded

Phoenix Contact 2016 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

Below is a list of articles with direct links to our shop Electric Automation Network where you can see:

- Quote per purchase volume in real time.
- Online documentation and datasheets of all products.
- Estimated delivery time enquiry in real time.
- Logistics systems for the shipment of materials almost anywhere in the world.
- Purchasing management, order record and tracking of shipments.

To access the product, [click on the green button.](#)

Product	Code	Reference	Product link
Sensor/Actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, shielded, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 3 m	1500910	SAC-5P-M12MS/ 3,0-PUR/M12FS SH	Buy on EAN