



**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/ 0,3-802/M12FS - 1457267

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, welding sputter-resistant, highly flexible, gray RAL 7001, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 0.3 m, for robots and drag chains

### Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Flexible: cable supports a high degree of torsion and bending
- Reliable solution for the body shop as cable is resistant to welding sparks

### Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 593540

### Technical data

#### Dimensions

Length of cable	0.3 m
-----------------	-------

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

#### 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

# Sensor/Actuator cable - SAC-5P-M12MS/ 0,3-802/M12FS - 1457267

## Technical data

### General

Insertion/withdrawal cycles	≥ 100
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

Note	Due to the extremely robust outer sheath, this cable should only be stripped in 5 cm increments.
Cable type	PUR, halogen-free, highly stranded, resistant to welding sparks, gray
Cable type (abbreviation)	802
Cable abbreviation	Li12Y11Y-HF
Conductor cross section	5x 0.34 mm <sup>2</sup> (Signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.3 mm ±0.05 mm (Signal line)
Wire colors	Black, brown, blue, white, green/yellow
Overall twist	5 wires around filler to the core
External sheath, color	gray RAL 7001
External cable diameter D	5.1 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	5 x D
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s <sup>2</sup>
Torsion force	± 360 °/m
Outer sheath, material	PUR
Material conductor insulation	PES
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 20 MΩ*km

# Sensor/Actuator cable - SAC-5P-M12MS/ 0,3-802/M12FS - 1457267

## Technical data

### Cable

Conductor resistance	approx. 53 Ω/km
Nominal voltage, cable	300 V
Test voltage, cable	1200 V
Special properties	Sheath resistant to welding beads, can be recycled, matt, without adhesion, wear-resistant, flame resistant and self-extinguishing
	Free from silicone and cadmium
	Free of substances which would hinder coating with paint or varnish
Flame resistance	DIN VDE 0472 part 804, test type B
	IEC 60332-1
	in acc. with UL FT-2
Halogen-free	The cable is halogen-free
Resistance to oil	As per VDE 0472 Part 803
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation)
	-30 °C ... 90 °C (cable, flexible installation)
	to 120 °C (for 3000 h)

## 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	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218

### ETIM

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/ 0,3-802/M12FS - 1457267

## Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approvals submitted

## Approval details

UL Listed	
Nominal current I <sub>N</sub>	4 A
Nominal voltage U <sub>N</sub>	125 V

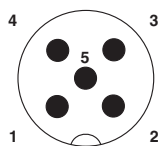
cUL Listed	
Nominal current I <sub>N</sub>	4 A
Nominal voltage U <sub>N</sub>	125 V

EAC

cULus Listed	
--------------	--

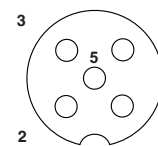
## Drawings

Schematic diagram



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

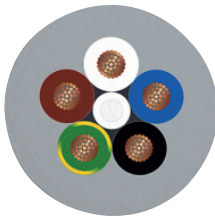
Schematic diagram



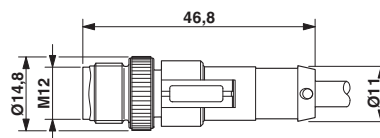
Pin assignment M12 socket, 5-pos., A-coded, socket side view

# Sensor/Actuator cable - SAC-5P-M12MS/ 0,3-802/M12FS - 1457267

Cable cross section



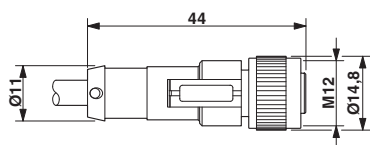
Dimensional drawing



PUR, halogen-free, highly stranded, resistant to welding sparks, gray [802]

M12 x 1 plug, straight

Dimensional drawing



M12 x 1 socket, straight

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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, welding sputter-resistant, highly flexible, gray RAL 7001, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 0.3 m, for robots and drag chains	1457267	SAC-5P-M12MS/0,3-802/M12FS	<a href="#">Buy on EAN</a>