

## Sensor/Actuator cable - SAC-3P-M 8MS/ 3,0-PUR/M 8SIFS - 1417701

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, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on Socket straight M8 Snap-in, Cable length: 3 m

### Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Save time, thanks to installation with snap-in rapid interlock system
- Our standard: robust halogen-free PUR cable



### Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	81.0 g
Custom tariff number	85444290
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	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
-----------------------	-----

## Sensor/Actuator cable - SAC-3P-M 8MS/ 3,0-PUR/M 8SIFS - 1417701

### Technical data

#### General

Rated voltage	60 V
Number of positions	3
Insulation resistance	$\geq 100 \text{ M}\Omega$
Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104
Status display	No
Protective circuit/component	Unwired
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	$\geq 100$

#### 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	M8 connector
Standards/regulations	IEC 61076-2-104
Flammability rating according to UL 94	HB

#### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549
Conductor cross section	3x 0.25 mm <sup>2</sup> (Signal line)
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Core diameter including insulation	1.17 mm $\pm 0.02$ mm (Signal line)
Thickness, insulation	$\geq 0.38$ mm (Core insulation)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
External sheath, color	black-gray RAL 7021

# Sensor/Actuator cable - SAC-3P-M 8MS/ 3,0-PUR/M 8SIFS - 1417701

## Technical data

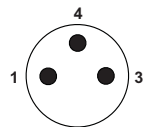
### Cable

Outer sheath thickness	approx. 0.9 mm
External cable diameter D	4.4 mm $\pm$ 0.15 mm
Smallest bending radius, fixed installation	22 mm
Smallest bending radius, movable installation	44 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	4000000
Bending radius	44 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Cable weight	24 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 100 \text{ G}\Omega \cdot \text{km}$ (at 20 °C)
Conductor resistance	$\leq 78 \text{ }\Omega/\text{km}$ (at 20 °C)
Nominal voltage, cable	$\leq 300 \text{ V}$
Test voltage, cable	$\geq 3000 \text{ V}$
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Flame resistance	in accordance with DIN UL-Style 20549
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	hydrolysis and microbe resistant
	Highly resistant to acids, alkaline solutions and solvents
	Resistant to salt water
	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)

## Drawings

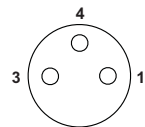
Sensor/Actuator cable - SAC-3P-M 8MS/ 3,0-PUR/M 8SIFS - 1417701

Schematic diagram



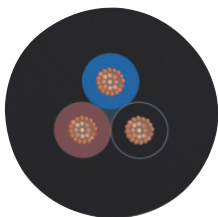
Pin assignment M8 plug, 3-pos., view male side

Schematic diagram



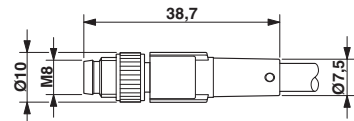
Pin assignment M8 socket, 3-pos., view female side

Cable cross section



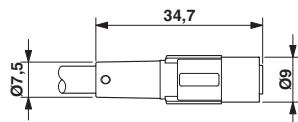
PUR halogen-free black [PUR]

Dimensional drawing



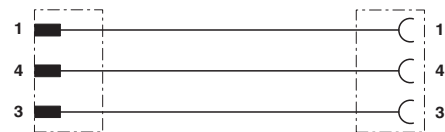
M8 x 1 male plug, straight version

Dimensional drawing



M8 snap-in sockets

Circuit diagram



Contact assignment of M8 plugs/sockets

Classifications

eCl@ss

eCl@ss 5.1	27061801
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

ETIM

ETIM 5.0	EC001855
----------	----------

Approvals

Approvals

## Sensor/Actuator cable - SAC-3P-M 8MS/ 3,0-PUR/M 8SIFS - 1417701

### Approvals


Approvals


UL Listed / cUL Listed / 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

cULus Listed 	
--	--

### Accessories

Accessories

Conductor marking

## Sensor/Actuator cable - SAC-3P-M 8MS/ 3,0-PUR/M 8SIFS - 1417701

### Accessories

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

### Marker carrier cable

Conductor marker carrier - PATO 2/15 - 1013122



Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 2.8-4.4 mm, Lettering field: 4 x 15 mm

Conductor marker carrier - PATO 3/15 - 1013135



Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 4.4-6.7 mm, Lettering field: 4 x 15 mm

## Sensor/Actuator cable - SAC-3P-M 8MS/ 3,0-PUR/M 8SIFS - 1417701

### Accessories

Conductor marker carrier - PATO 4/15 - 1013148



Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 6.7-10 mm, Lettering field: 4 x 15 mm

---

### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm