

# Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

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 angled M8, with 2 LEDs and Socket angled M8, with 2 LEDs, cable length: 1.5 m



## Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356638111

## Technical data

### Dimensions

Length of cable	1.5 m
-----------------	-------

### Ambient conditions

Degree of protection	IP65
	IP67
	IP68

### General

Rated current at 40°C	4 A
Rated voltage	24 V DC
Number of positions	3
Color handle area	transparent
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104
Status display	2 LEDs
Overvoltage category	II
Degree of pollution	3
Torque	0.2 Nm (M8 knurl)

# Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

## Technical data

### 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

Standards/specifications	M8 connector 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 / 10493 (80°C/300 V)
Conductor cross section	3x 0.25 mm <sup>2</sup>
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Core diameter including insulation	1.17 mm ±0.02 mm
Thickness, insulation	≥ 0.21 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
Outer sheath thickness	approx. 0.5 mm
External cable diameter D	3.6 mm ±0.15 mm
Smallest bending radius, fixed installation	18 mm
Smallest bending radius, movable installation	36 mm
Number of bending cycles	10000000
Bending radius	44 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Cable weight	18 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Conductor resistance	≤ 78 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V

## Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

### Technical data

#### Cable

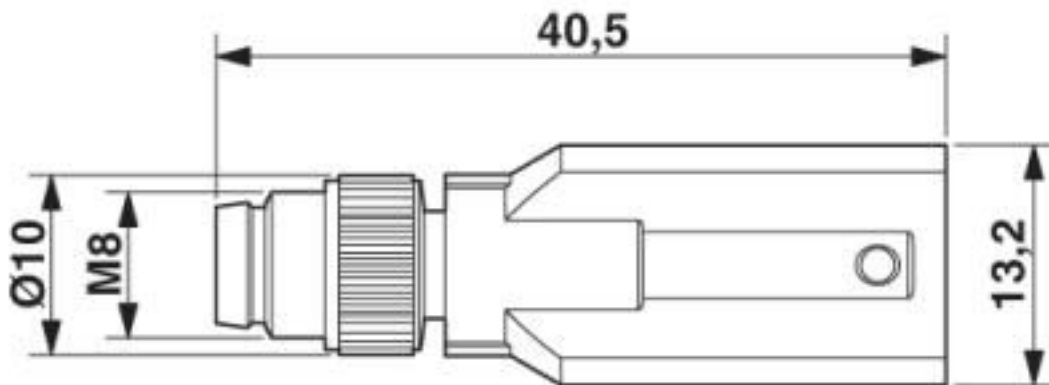
Test voltage, cable	≥ 3000 V
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Flame resistance	in accordance with UL 758/1581 FT2
	DIN EN 60332-2-2 (20 s)
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance 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)

#### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

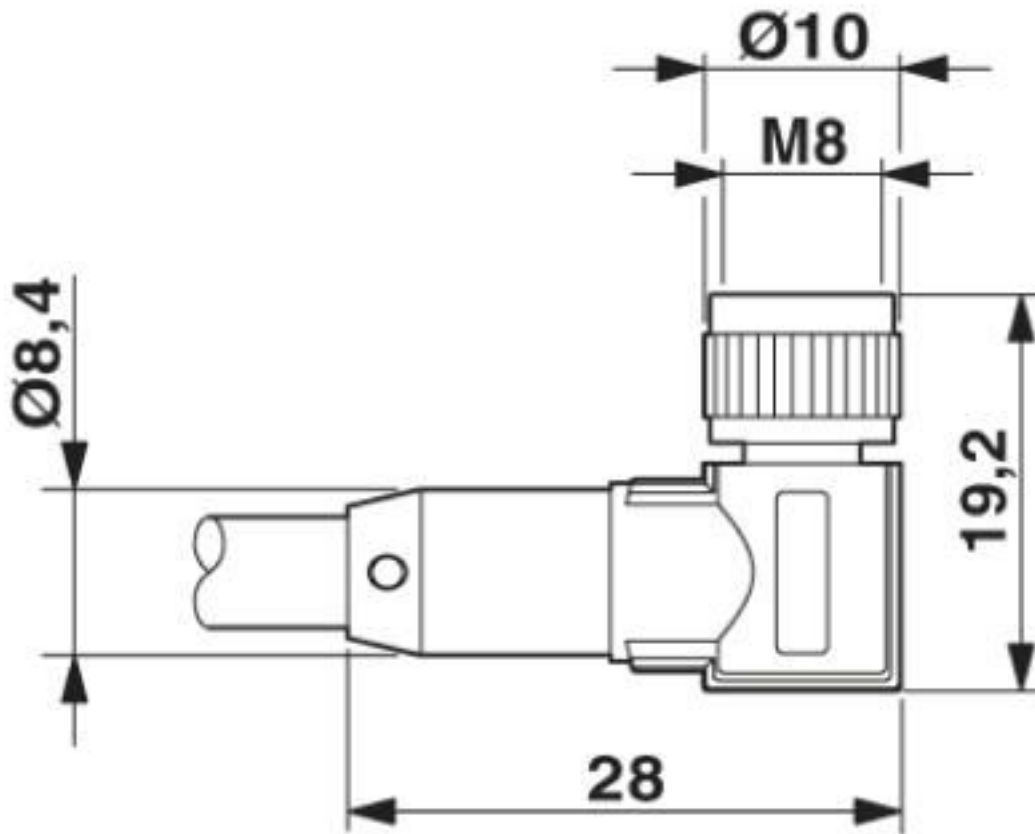
Dimensional drawing



Plug M8 x 1, Y-distributor

# Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

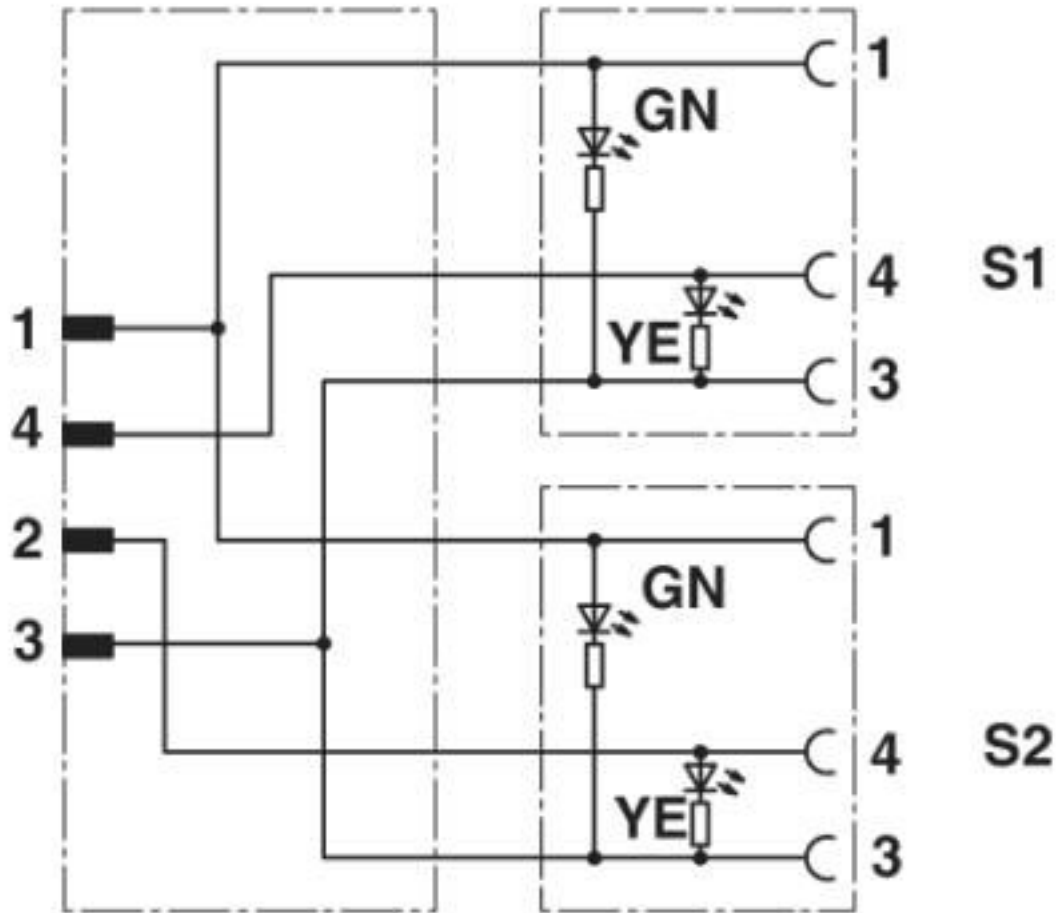
Dimensional drawing



Socket M8 x 1, angled, with LED

# Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

Circuit diagram



Contact assignment of the M8 plug and the M8 socket

## Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

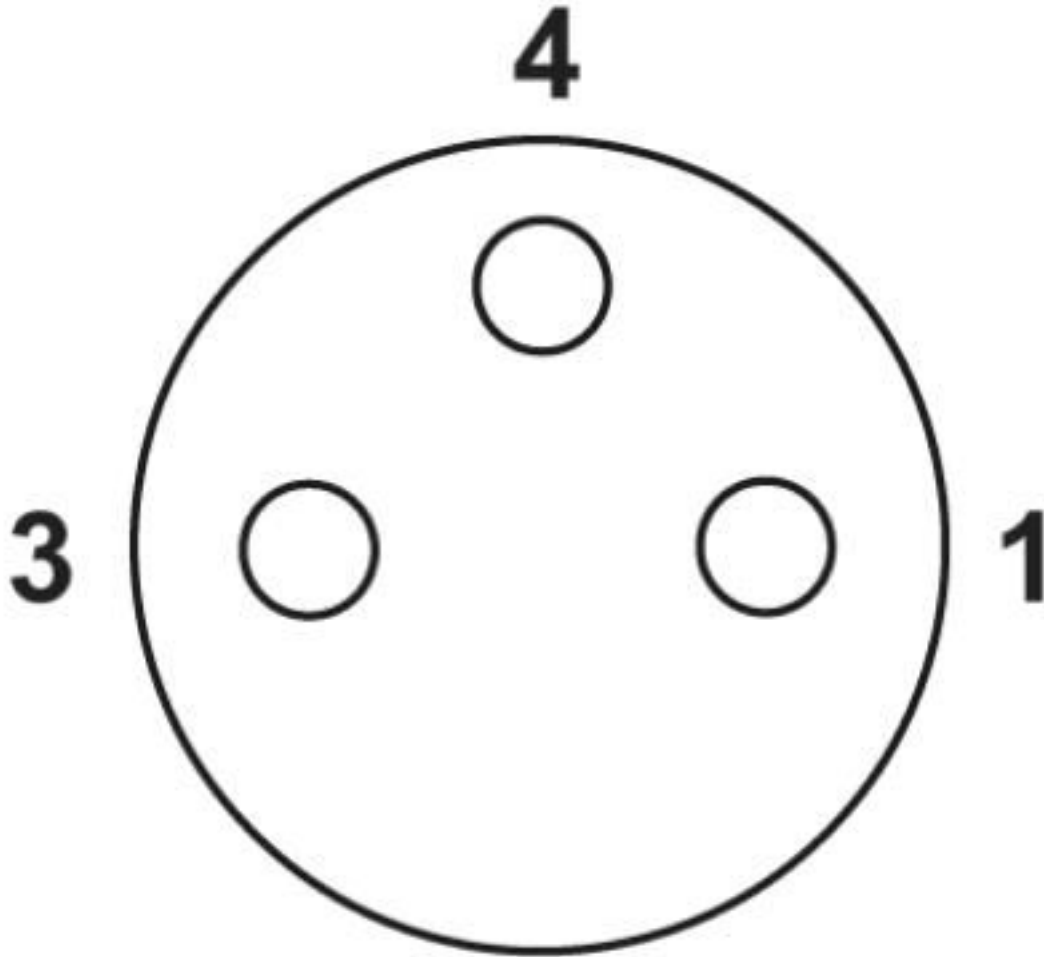
Schematic diagram



Pin assignment M8 plug, 4-pos., view male side

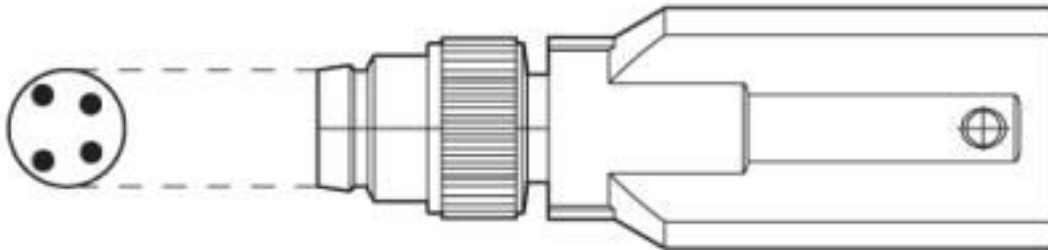
# Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

Schematic diagram



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

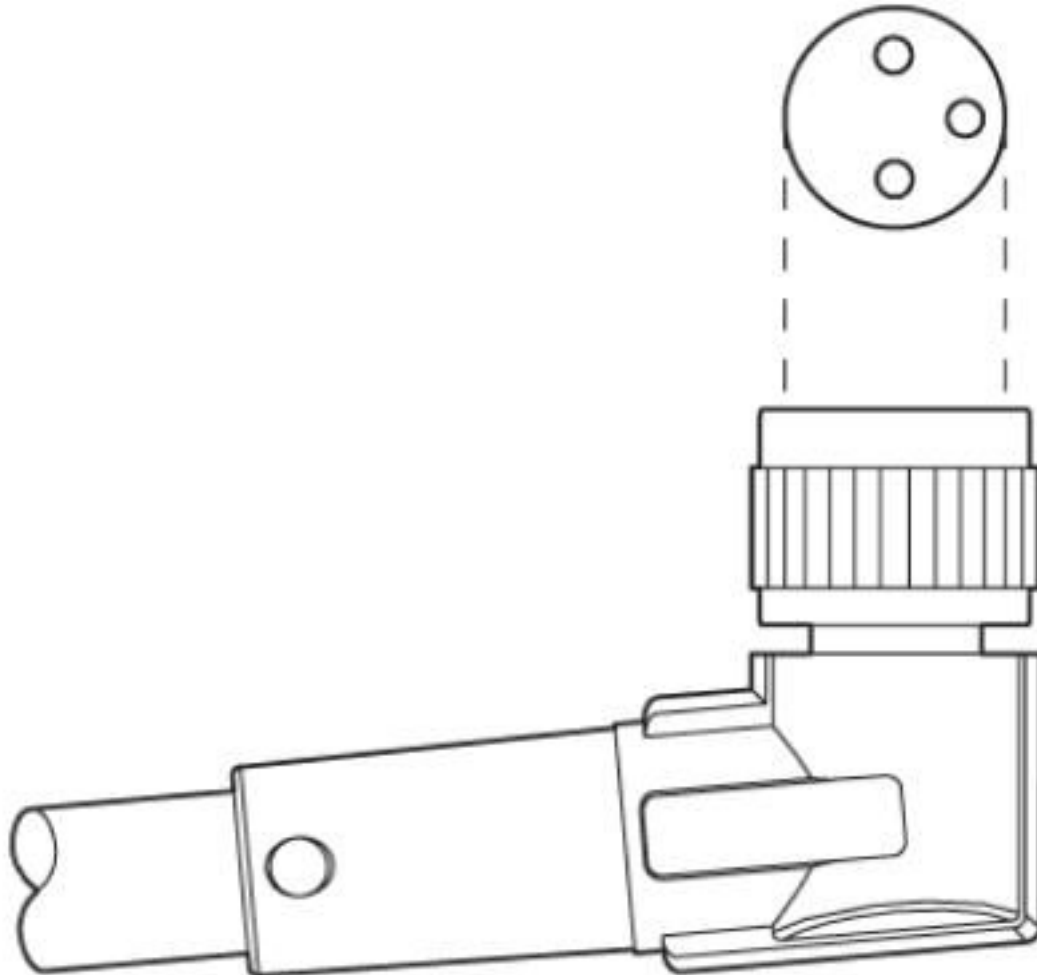
Schematic diagram



Alignment of the connector pin assignment

# Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

Schematic diagram

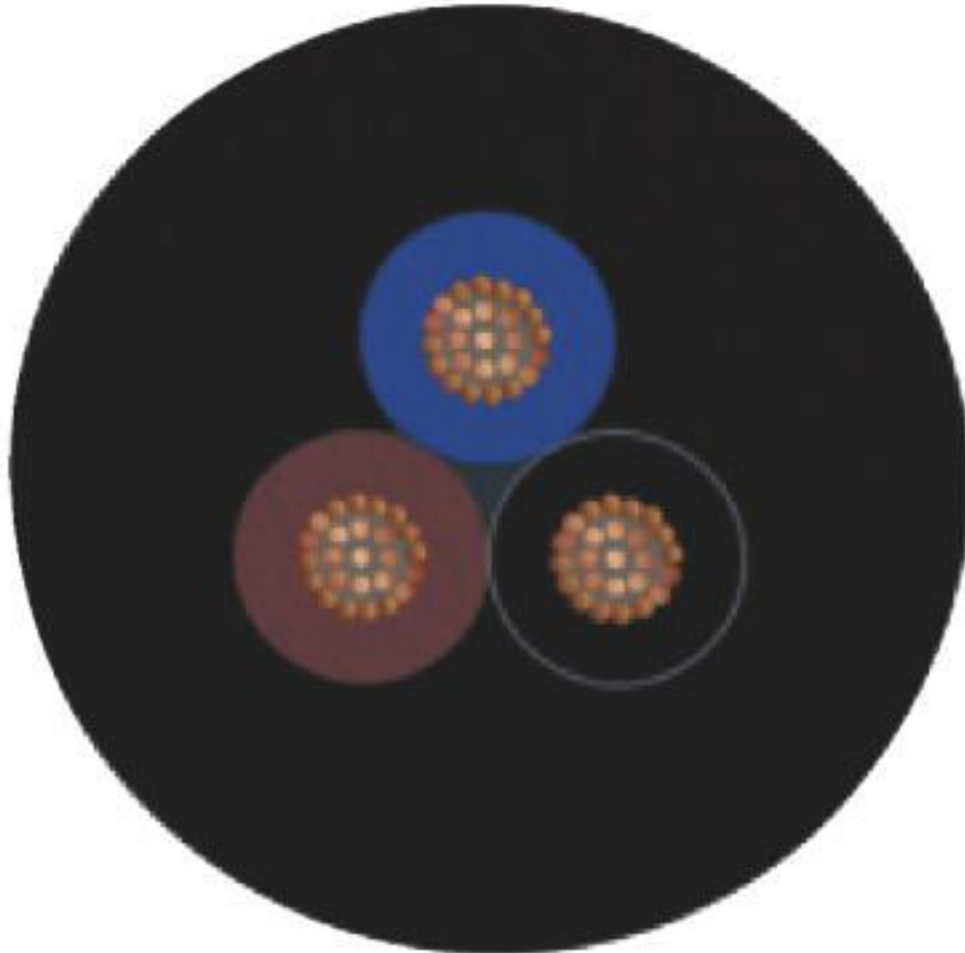


Alignment of the connector pin assignment



# Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

Cable cross section



PUR halogen-free black [PUR]

## Classifications

eCl@ss

eCl@ss 10.0.1	27060311
eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

# Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

## Classifications

### ETIM

ETIM 4.0	EC001855
ETIM 5.0	EC001855
ETIM 6.0	EC001855
ETIM 7.0	EC001855

### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 19.0	31251501
UNSPSC 20.0	31251501
UNSPSC 21.0	31251501

## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / EAC-RoHS / EAC / cULus Listed

#### Ex Approvals

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal voltage UN	24 V		
Nominal current IN	4 A		

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal voltage UN	24 V		
Nominal current IN	4 A		

# Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

## Approvals

EAC-RoHS		RU D- DE.HB35.B.00387
----------	--	--------------------------

EAC		RU C- DE.BL08.B.00286
-----	--	--------------------------

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

## Accessories

### Accessories

#### Conductor marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm, Number of individual labels: 20

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm, Number of individual labels: 20

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm, Number of individual labels: 20

#### Labeled conductor marker

## Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

### Accessories

Cable marker - PABA WH/15 CUS - 0824444



Cable marker, can be ordered: Strip, white, labeled according to customer specifications, mounting type: thread on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm

Cable marker - PABA YE/15 CUS - 0824447



Cable marker, can be ordered: Strip, yellow, labeled according to customer specifications, mounting type: thread on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm

Cable marker - PABA RD/15 CUS - 0824442



Cable marker, can be ordered: Strip, red, labeled according to customer specifications, mounting type: thread on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm

Cable marker - PABA BU/15 CUS - 0824441



Cable marker, can be ordered: Strip, blue, labeled according to customer specifications, mounting type: thread on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm

### Plug for cable screw gland

Screw plug - PROT-M8 - 1682540



An M8 screw plug for the unoccupied M8 sockets of the sensor/actuator cable, boxes and flush-type connectors

### Screwdriver tools

## Sensor/actuator cable - SAC-3P-M8Y/2X1,5-PUR/M 8FR-2L - 1458761

### Accessories

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

---

### Torque tool

Torque screwdriver - TSD 02 SAC - 1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

---

Phoenix Contact 2020 © - 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>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Sensor Cables / Actuator Cables](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[60963](#) [60964](#) [703000D02F2002](#) [703001D02F0602](#) [703001D02F300](#) [704000D02F120](#) [773032K02F030](#) [802027107404-1](#) [802027213811-1](#)  
[804001A09M150](#) [805001A09M0502](#) [84914-0235](#) [84914-0237](#) [885030A09M020](#) [8R4J30E03C3003](#) [1200651332](#) [1200651713](#) [1200660844](#)  
[1200660845](#) [1200661173](#) [1200680071](#) [1200720053](#) [1200720081](#) [1200720099](#) [1200720217](#) [1200800231](#) [1200860125](#) [1200870123](#)  
[1200980102](#) [1200650267](#) [1200650298](#) [1200660183](#) [1200660782](#) [1200660849](#) [1200661295](#) [1200661297](#) [1200661342](#) [1200661343](#)  
[1200670080](#) [1200670220](#) [1200680331](#) [1200720252](#) [1200730184](#) [1200860344](#) [1200870359](#) [1200870643](#) [1200980008](#) [1200980031](#)  
[1210502211](#) [1210400542](#)