

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

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, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M8, with 2 LEDs, cable length: 3 m

## Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Convenient: increased machine availability thanks to quick and easy diagnostics

## Commercial Data

Item number	1671072
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF1
Product Key	BF1BBA
Catalog Page	Page 188 (C-2-2019)
GTIN	4017918134921
Weight per Piece (including packing)	61 g
Weight per Piece (excluding packing)	56.7 g
Customs tariff number	85444290
Country of origin	PL

## Technical Data

### Product properties

Product type	Sensor/actuator cable
Number of positions	3
Application	Standard
No. of cable outlets	1
Shielded	no
Coding	A

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Color Handle area	transparent
Flammability rating according to UL 94	HB
Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

### Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	24 V DC
Nominal current $I_N$	4 A
Protective circuit	unwired

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$
-----------------------------	------------

### Signaling

Status display	2 LEDs
Status display present	Yes

### Connection data

#### Conductor connection

Tightening torque	0.2 Nm (M8 connectors)
-------------------	------------------------

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

## Connector

### Connection 1

Type	free cable end
------	----------------

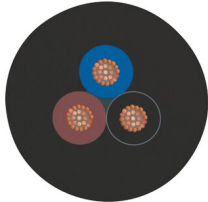
### Connection 2

Type	Socket angled M8
Number of positions	3
Coding type	A

## Cable/line

Cable length	3 m
--------------	-----

### PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	18 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	3
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	3x 0.25 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.02 mm
External cable diameter	3.6 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, blue, black
Thickness, insulation	≥ 0.21 mm (Core insulation)
Thickness, outer sheath	approx. 0.5 mm
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
Max. conductor resistance	≤ 78 Ω/km (at 20 °C)
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

Test voltage	≥ 3000 V
Smallest bending radius, fixed installation	18 mm
Smallest bending radius, movable installation	36 mm
Max. bending cycles	10000000
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
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
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	-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 IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

## Standards and regulations

Standards/specifications	IEC 61076-2-104
--------------------------	-----------------

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable

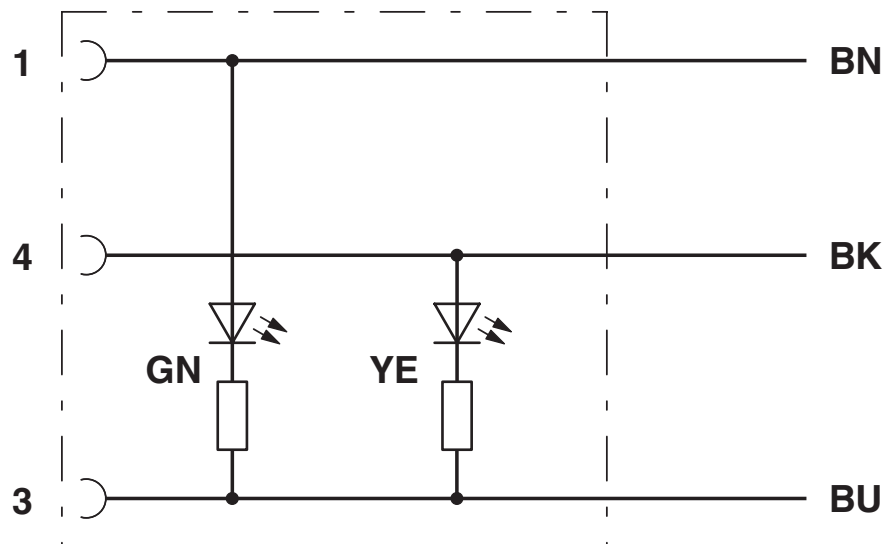


1671072

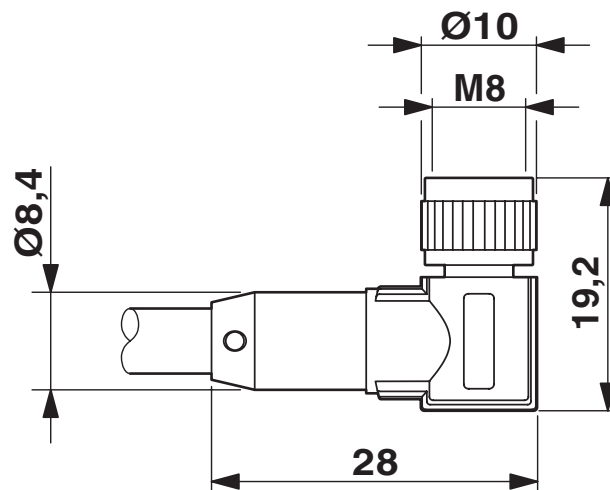
<https://www.phoenixcontact.com/in/products/1671072>

## Drawings

Circuit diagram



Dimensional drawing

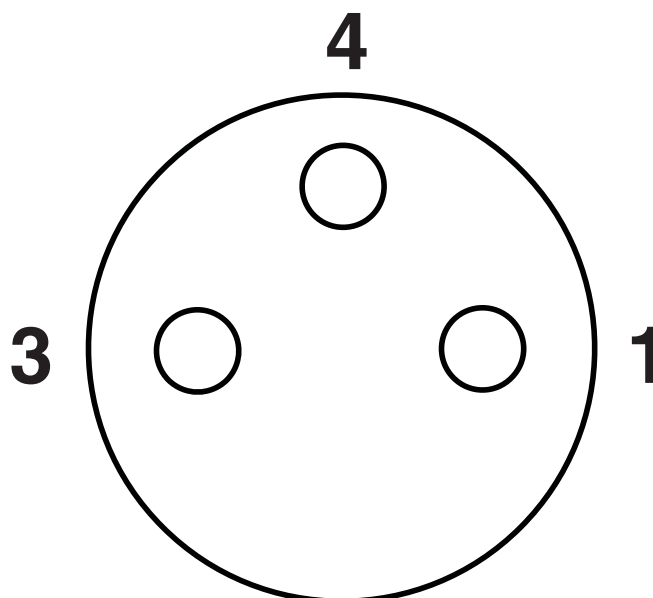


Socket M8 x 1, angled, with LED

1671072

<https://www.phoenixcontact.com/in/products/1671072>

Schematic diagram



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

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable




1671072

<https://www.phoenixcontact.com/in/products/1671072>

## Approvals

 <b>UL Listed</b> Approval ID: FILE E 221474				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	24 V	4 A	-	-

 <b>cUL Listed</b> Approval ID: FILE E 221474				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	24 V	4 A	-	-

 <b>EAC</b> Approval ID: RU D-DE.HB35.B.00387	
---	--

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

## Classifications

### ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

### ETIM

ETIM 8.0	EC001855
----------	----------

### UNSPSC

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



# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

## Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

## Accessories

### PABA WH/23 - Insert label

1013779

<https://www.phoenixcontact.com/in/products/1013779>



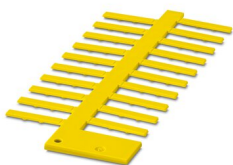
Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

---

### PABA YE/23 - Insert label

1013782

<https://www.phoenixcontact.com/in/products/1013782>



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

## B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/in/products/1051993>



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

---

## CUTFOX-S VDE - Diagonal cutter

1212207

<https://www.phoenixcontact.com/in/products/1212207>



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

## WIREFOX SAC-1 - Stripping tool

1212757

<https://www.phoenixcontact.com/in/products/1212757>



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 3.2 to 4.4 mm, any stripping length

---

## WIREFOX SAC - Stripping tool

1212623

<https://www.phoenixcontact.com/in/products/1212623>



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 4.4 to 7 mm, any stripping length

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

## WIREFOX 10 - Stripping tool

1212150

<https://www.phoenixcontact.com/in/products/1212150>



Stripping tool, for cables and conductors from 0.02 - 10 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

---

## WP-CTA POM 13,0 BK - Protective hose adapter

1422884

<https://www.phoenixcontact.com/in/products/1422884>



Protective hose adapter, for corrugated hoses with a nominal size of 13 (10 x 13), corrugated in parallel

# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

## WP-PA HF 13,0 BK - Protective hose

3240681

<https://www.phoenixcontact.com/in/products/3240681>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m

---

## WP-PA HF-HB 13,0 BK - Protective hose

3240839

<https://www.phoenixcontact.com/in/products/3240839>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

## SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable

1671072

<https://www.phoenixcontact.com/in/products/1671072>



## PROT-M 8 MS-PA-CHAIN - Screw plug

1430860

<https://www.phoenixcontact.com/in/products/1430860>

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



---

## TSD 02 SAC - Torque screwdriver

1208487

<https://www.phoenixcontact.com/in/products/1208487>

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



# SAC-3P- 3,0-PUR/M 8FR-2L - Sensor/actuator cable



1671072

<https://www.phoenixcontact.com/in/products/1671072>

## SAC BIT M8-D10 - Tool

1208461

<https://www.phoenixcontact.com/in/products/1208461>



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

---

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

[info@phoenixcontact.co.in](mailto:info@phoenixcontact.co.in)