

# SAC-3P-M12Y/2X1,5-PUR/M 8FR-2L - Sensor/actuator cable



1671438

<https://www.phoenixcontact.com/us/products/1671438>

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 halogen-free, Plug straight M12, coding: A, on Socket angled M8, coding: A, with 2 LEDs and Socket angled M8, coding: A, with 2 LEDs, cable length: 1.5 m

## Commercial data

Item number	1671438
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	BF1COA
Catalog page	Page 250 (C-2-2019)
GTIN	4017918135263
Weight per piece (including packing)	78.9 g
Weight per piece (excluding packing)	77.9 g
Customs tariff number	85444290
Country of origin	PL

# SAC-3P-M12Y/2X1,5-PUR/M 8FR-2L - Sensor/actuator cable



1671438

<https://www.phoenixcontact.com/us/products/1671438>

## Technical data

### Product properties

Product type	Distributor with cable
Number of positions	3
Application	Standard
No. of cable outlets	2
Shielded	no
Coding	A

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Connection data

Tightening torque	0.4 Nm (M12 connector)
	0.2 Nm (M8 connectors)

### Material specifications

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

### Mechanical properties

#### Mechanical data

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

### Signaling

Status display	2 LEDs
Status display present	Yes

### Connector

#### Connection 1

# SAC-3P-M12Y/2X1,5-PUR/M 8FR-2L - Sensor/actuator cable



1671438

<https://www.phoenixcontact.com/us/products/1671438>

Type	Plug straight M12
Coding type	A

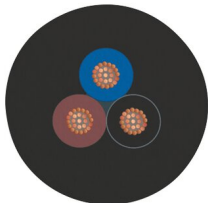
## Connection 2

Type	Socket angled M8
Coding type	A

## Cable/line

Cable length	1.5 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 mm² (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
Test voltage	≥ 3000 V
Smallest bending radius, fixed installation	18 mm
Smallest bending radius, movable installation	36 mm
Max. bending cycles	1000000

# SAC-3P-M12Y/2X1,5-PUR/M 8FR-2L - Sensor/actuator cable



1671438

<https://www.phoenixcontact.com/us/products/1671438>

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)
	-40 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

## Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	M8 connector
Standards/specifications	IEC 61076-2-104

# SAC-3P-M12Y/2X1,5-PUR/M 8FR-2L - Sensor/actuator cable



1671438

<https://www.phoenixcontact.com/us/products/1671438>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1671438>



### UL Listed

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	-	-



### cUL Listed

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	-	-



### EAC-RoHS

Approval ID: RU D-DE.HB35.B.00387

### cULus Listed

# SAC-3P-M12Y/2X1,5-PUR/M 8FR-2L - Sensor/actuator cable



1671438

<https://www.phoenixcontact.com/us/products/1671438>

## Classifications

### ECLASS

ECLASS-11.0	27060313
ECLASS-12.0	27060313
ECLASS-13.0	27060313

### ETIM

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

### UNSPSC

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

# SAC-3P-M12Y/2X1,5-PUR/M 8FR-2L - Sensor/actuator cable



1671438  
<https://www.phoenixcontact.com/us/products/1671438>

## Environmental product compliance

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

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)