

# SAC-3P-10,0-PUR/M12FR-2L VW - Sensor/actuator cable



1693885

<https://www.phoenixcontact.com/us/products/1693885>

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, irradiated, orange RAL 2003, free cable end, on Socket angled M12, coding: A, with 2 LEDs, cable length: 10 m, Customer-specific version

## Commercial data

Item number	1693885
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1CBA
GTIN	4017918481797
Weight per piece (including packing)	268.9 g
Weight per piece (excluding packing)	262.9 g
Customs tariff number	85444290
Country of origin	PL

# SAC-3P-10,0-PUR/M12FR-2L VW - Sensor/actuator cable



1693885

<https://www.phoenixcontact.com/us/products/1693885>

## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### 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

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	24 V
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

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

#### Connection 2

Type	Socket angled M12
Number of positions	3
Coding type	A

# SAC-3P-10,0-PUR/M12FR-2L VW - Sensor/actuator cable



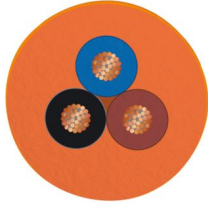
1693885

<https://www.phoenixcontact.com/us/products/1693885>

## Cable/line

Cable length	10 m
--------------	------

PUR irradiated halogen-free orange [150]

Dimensional drawing	
Number of positions	3
Shielded	no
Cable type	PUR irradiated halogen-free orange [150]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross-section	3x 0.34 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.05 mm ±0.05 mm (Signal line)
External cable diameter	4.40 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Material wire insulation	PE
Single wire, color	brown, blue, black
Overall twist	3 wires, twisted
Max. conductor resistance	max. 57 Ω/km
Nominal voltage, cable	250 V (AC)
Test voltage	2000 V (50 Hz, 5 minutes)
Smallest bending radius, fixed installation	13.5 mm
Smallest bending radius, movable installation	53 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 44 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s <sup>2</sup>
Flame resistance	according to DIN VDE 0472 Part 804
Other resistance	UV resistant
Special properties	Silicone-free Irradiated
Ambient temperature (operation)	-50 °C ... 105 °C (cable, fixed installation) -40 °C ... 105 °C (Cable, flexible installation)

## Environmental and real-life conditions

Ambient conditions

# SAC-3P-10,0-PUR/M12FR-2L VW - Sensor/actuator cable



1693885

<https://www.phoenixcontact.com/us/products/1693885>

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)
Ambient temperature (operation) (fixed installation)	-50 °C ... 105 °C (cable, fixed installation)
Ambient temperature (operation) (flexible installation)	-40 °C ... 105 °C (Cable, flexible installation)

# SAC-3P-10,0-PUR/M12FR-2L VW - Sensor/actuator cable

1693885

<https://www.phoenixcontact.com/us/products/1693885>

## Drawings

Dimensional drawing



Socket M12 x 1, angled, with LED

Schematic diagram



Pin assignment M12 socket, 3-pos., A-coded, view female side

# SAC-3P-10,0-PUR/M12FR-2L VW - Sensor/actuator cable



1693885

<https://www.phoenixcontact.com/us/products/1693885>

Circuit diagram



Contact assignment of M12 sockets with LED

# SAC-3P-10,0-PUR/M12FR-2L VW - Sensor/actuator cable



1693885

<https://www.phoenixcontact.com/us/products/1693885>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

# SAC-3P-10,0-PUR/M12FR-2L VW - Sensor/actuator cable



1693885

<https://www.phoenixcontact.com/us/products/1693885>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - 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)