

# SAC-3P- 5,0-600/M 8FR-2L FB - Sensor/actuator cable



1406488

<https://www.phoenixcontact.com/us/products/1406488>

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, PP-EPDM halogen-free, gray RAL 7035, free cable end, on Socket angled M8, coding: A, with 2 LEDs, cable length: 5 m, Hygienic design, with plastic knurl

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Contamination can be detected quickly – thanks to the light color
- Convenient: increased machine availability thanks to quick and easy diagnostics

## Commercial data

Item number	1406488
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF01
Product key	AF1BBA
GTIN	4046356780551
Weight per piece (including packing)	106.7 g
Weight per piece (excluding packing)	67.28 g
Customs tariff number	85444290
Country of origin	PL

1406488

<https://www.phoenixcontact.com/us/products/1406488>

## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Seal material	FKM
Material of grip body	PP
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material for screw connection	Polypropylene

### Electrical properties

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

### Connection data

#### Conductor connection

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

### Connector

#### Connection 1

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

# SAC-3P- 5,0-600/M 8FR-2L FB - Sensor/actuator cable



1406488

<https://www.phoenixcontact.com/us/products/1406488>

## Connection 2

Type	Socket angled M8
Number of positions	3
Coding type	A

## Cable/line

Cable length	5 m
--------------	-----

## Halogen-free PP gray [600]

Dimensional drawing	
Cable weight	19 kg/km
Number of positions	3
Shielded	no
Cable type	Halogen-free PP gray [600]
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 (Signal line)
External cable diameter	4.20 mm ±0.15 mm
Outer sheath, material	PP-EPDM
External sheath, color	gray RAL 7035
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. 0.80 mm
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
Max. conductor resistance	78 Ω/km (at 20 °C)
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC (Spark test)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	21 mm
Smallest bending radius, movable installation	42 mm
Dynamic load capacity (bending)	Max. bending cycles: 4000000, Bending radius: 10 x D,

# SAC-3P- 5,0-600/M 8FR-2L FB - Sensor/actuator cable



1406488

<https://www.phoenixcontact.com/us/products/1406488>

	Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s <sup>2</sup>
Dynamic load capacity (torsion)	Torsion: ±270 °/m, Torsion cycles: ≥4000000, Torsional frequency: max.25 Torsion cycles/min
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Other resistance	Resistant to cold bending and cold impacts (according to DIN EN 60811-1-4 (-40 °C))
Special properties	FDA compliant according to FDA 21 CFR 177.2600
	highly flexible
	Flexible cable conduit capable
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)
	-25 °C ... 105 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
	IP69K
Ambient temperature (operation) (male connector/female connector)	-40 °C ... 105 °C (Plug / socket)

## Standards and regulations

### M8

Standard designation	M8 connector
Standards/specifications	IEC 61076-2-104
Standard designation	Material conformance
Standards/specifications	FDA 21 CFR 177.2600

## Drawings

Dimensional drawing



Socket M8 x 1, angled

Schematic diagram



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

Circuit diagram



Contact assignment of M8/M12 socket with two LEDs

# SAC-3P- 5,0-600/M 8FR-2L FB - Sensor/actuator cable



1406488

<https://www.phoenixcontact.com/us/products/1406488>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1406488>



**EAC-RoHS**

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

1406488

<https://www.phoenixcontact.com/us/products/1406488>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### ETIM

ETIM 10.0	EC001855
-----------	----------

### UNSPSC

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

1406488

<https://www.phoenixcontact.com/us/products/1406488>

## 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%
-------------------------------------	----------------------------

### EF3.1 Climate Change

CO2e kg	1.49 kg CO2e
---------	--------------

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)