

# SAC-3P-M12MS/5,0-PUR/M12FS 345 - Sensor/actuator cable



1402561

<https://www.phoenixcontact.com/us/products/1402561>

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, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 5 m, For valve connector

## Commercial data

Item number	1402561
Packing unit	1 pc
Minimum order quantity	25 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1CBA
GTIN	4046356623667
Weight per piece (including packing)	172.3 g
Weight per piece (excluding packing)	162.5 g
Customs tariff number	85444290
Country of origin	PL

# SAC-3P-M12MS/5,0-PUR/M12FS 345 - Sensor/actuator cable



1402561

<https://www.phoenixcontact.com/us/products/1402561>

## Technical data

### Product properties

Product type	Sensor/actuator cable
Application	Valve connector
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 $U_N$	60 V AC
	60 V DC
Nominal current $I_N$	4 A

### Mechanical properties

#### Mechanical data

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

### Signaling

Status display	no
Status display present	no

### Connector

#### Connection 1

Type	Plug straight M12
Number of positions	3
Coding type	A

#### Connection 2

# SAC-3P-M12MS/5,0-PUR/M12FS 345 - Sensor/actuator cable



1402561

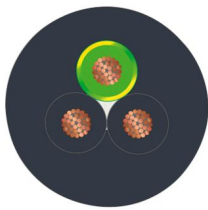
<https://www.phoenixcontact.com/us/products/1402561>

Type	Socket straight M12
Number of positions	3
Coding type	A

## Cable/line

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

PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	30 kg/km
UL AWM Style	20549
Number of positions	3
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20
Conductor cross-section	3x 0.5 mm <sup>2</sup>
Wire diameter incl. insulation	1.5 mm ±0.05 mm (Signal line)
External cable diameter	4.50 mm ±0.2 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	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
Max. conductor resistance	39 Ω/km (at 20 °C)
Insulation resistance	min. 20 MΩ*km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 1200 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	22.5 mm
Smallest bending radius, movable installation	45 mm
Dynamic load capacity (bending)	Max. bending cycles: 15000000, Bending radius: 50 mm, Traversing path: 0.9 m, Traversing rate: 5 m/s, Acceleration: 30 m/s <sup>2</sup>
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	according to DIN VDE 0482

# SAC-3P-M12MS/5,0-PUR/M12FS 345 - Sensor/actuator cable



1402561

<https://www.phoenixcontact.com/us/products/1402561>

	According to DIN EN 50265-2-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	largely oil-resistant partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -20 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-5 °C ... 80 °C (Cable, flexible installation)

# SAC-3P-M12MS/5,0-PUR/M12FS 345 - Sensor/actuator cable



1402561

<https://www.phoenixcontact.com/us/products/1402561>

## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

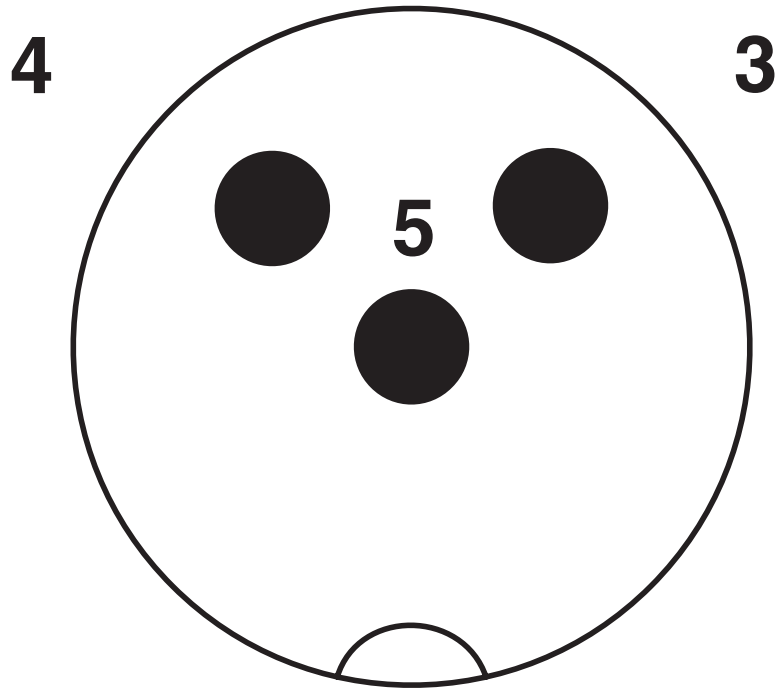
# SAC-3P-M12MS/5,0-PUR/M12FS 345 - Sensor/actuator cable



1402561

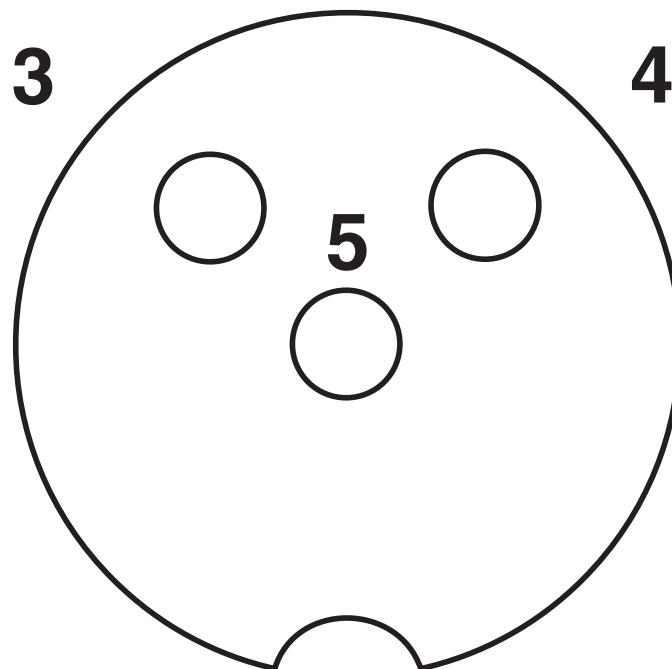
<https://www.phoenixcontact.com/us/products/1402561>

Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

Schematic diagram



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

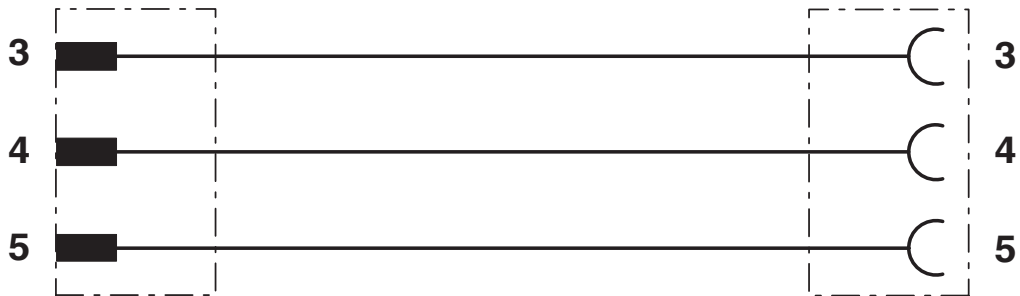
# SAC-3P-M12MS/5,0-PUR/M12FS 345 - Sensor/actuator cable



1402561

<https://www.phoenixcontact.com/us/products/1402561>

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

# SAC-3P-M12MS/5,0-PUR/M12FS 345 - Sensor/actuator cable



1402561

<https://www.phoenixcontact.com/us/products/1402561>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### ETIM

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

### UNSPSC

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

# SAC-3P-M12MS/5,0-PUR/M12FS 345 - Sensor/actuator cable



1402561

<https://www.phoenixcontact.com/us/products/1402561>

## 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)