

# SAC-3P-P12MS/ 3,0-PUR - Sensor/actuator cable



1385536

<https://www.phoenixcontact.com/nl/products/1385536>

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 Push Pull, coding: A, on free cable end, cable length: 3 m

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Save time, thanks to installation with push-pull fast locking

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1385536       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | AF1CBC        |
| Product key                          | AF1CBC        |
| GTIN                                 | 4063151819118 |
| Weight per piece (including packing) | 75,2 g        |
| Weight per piece (excluding packing) | 74,676 g      |
| Customs tariff number                | 85444290      |
| Country of origin                    | PL            |

# SAC-3P-P12MS/ 3,0-PUR - Sensor/actuator cable



1385536

<https://www.phoenixcontact.com/nl/products/1385536>

## Technical data

### Product properties

|                      |          |
|----------------------|----------|
| Application          | Standard |
| Number of positions  | 3        |
| No. of cable outlets | 1        |
| Shielded             | no       |
| Coding               | A        |

### Insulation characteristics

|                      |    |
|----------------------|----|
| Overvoltage category | II |
| Degree of pollution  | 3  |

### Material specifications

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Material                               | PK (Pin contact carrier)                    |
| Flammability rating according to UL 94 | V0                                          |
| Seal material                          | FKM                                         |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Contact material                       | CuSn                                        |
| Contact surface material               | Ni/Au                                       |
| Material for screw connection          | Brass, nickel-plated                        |

### Electrical properties

|                       |                            |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 250 V AC                   |
|                       | 250 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 |

### Connection data

#### Conductor connection

|                   |                          |
|-------------------|--------------------------|
| Tightening torque | M12 push-pull connectors |
|-------------------|--------------------------|

### Connector

#### Connection 1

|      |                             |
|------|-----------------------------|
| Type | Plug straight M12 Push Pull |
|------|-----------------------------|

# SAC-3P-P12MS/ 3,0-PUR - Sensor/actuator cable



1385536

<https://www.phoenixcontact.com/nl/products/1385536>

|                     |           |
|---------------------|-----------|
| Number of positions | 3         |
| Locking type        | Push Pull |
| Coding type         | A         |

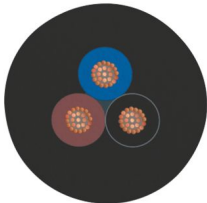
## Connection 2

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

## Cable/line

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

## PUR halogen-free black [PUR]

|                                               |                                                                                                                            |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Dimensional drawing                           |                                         |
| Cable weight                                  | 23 kg/km                                                                                                                   |
| UL AWM Style                                  | 20549                                                                                                                      |
| Number of positions                           | 3                                                                                                                          |
| Shielded                                      | no                                                                                                                         |
| Cable type                                    | PUR halogen-free black [PUR]                                                                                               |
| 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                | 1.27 mm ±0.02 mm (Signal line)                                                                                             |
| External cable diameter                       | 3.85 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)<br>approx. 0.50 mm (Outer cable sheath)                                                        |
| Overall twist                                 | 3 wires, twisted                                                                                                           |
| Max. conductor resistance                     | max. 58 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   | 19 mm                                                                                                                      |
| Smallest bending radius, movable installation | 38 mm                                                                                                                      |
| Dynamic load capacity (bending)               | Max. bending cycles: 10000000, Bending radius: 38 mm,<br>Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 |

# SAC-3P-P12MS/ 3,0-PUR - Sensor/actuator cable



1385536

<https://www.phoenixcontact.com/nl/products/1385536>

|                                 |                                                                                                    |
|---------------------------------|----------------------------------------------------------------------------------------------------|
|                                 | m/s, Acceleration: 10 m/s <sup>2</sup>                                                             |
| Dynamic load capacity (torsion) | Torsion: $\pm 180^\circ$ /m, Torsion cycles: $\geq 20000000$ , Torsional frequency: 35 cycles/min. |
| 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                | Highly resistant to acids, alkaline solutions and solvents                                         |
|                                 | hydrolysis and microbe resistant                                                                   |
|                                 | 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

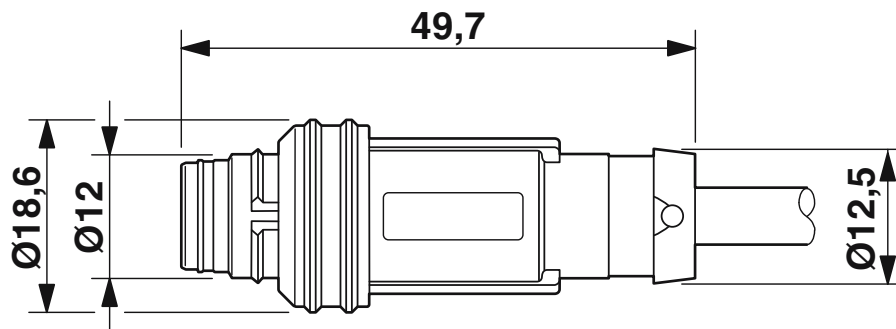
|                                                                   |                                  |
|-------------------------------------------------------------------|----------------------------------|
| Degree of protection                                              | IP65                             |
|                                                                   | IP67                             |
| Ambient temperature (operation) (male connector/female connector) | -25 °C ... 85 °C (Plug / socket) |

## Standards and regulations

|                          |                 |
|--------------------------|-----------------|
| Standard designation     | M12-Push-Pull   |
| Standards/specifications | IEC 61076-2-010 |

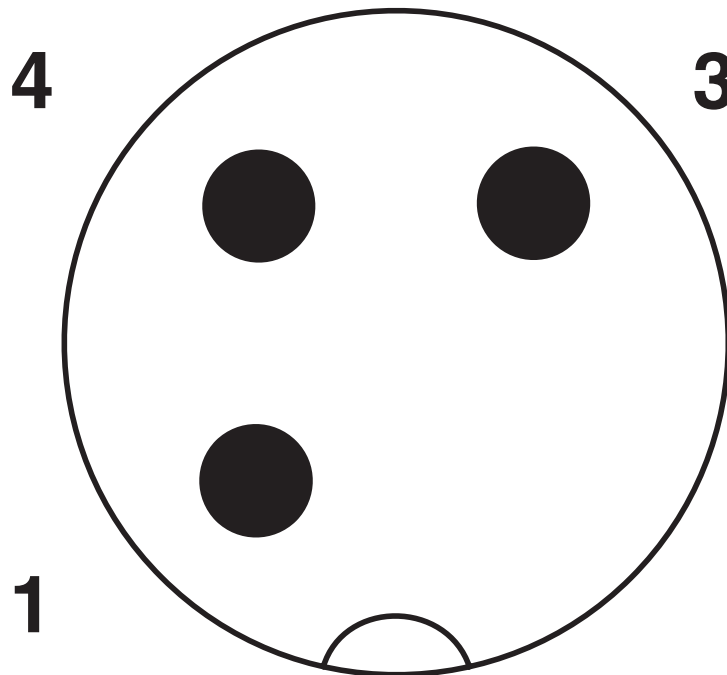
## Drawings

Dimensional drawing



M12 push-pull male connector, straight

Schematic diagram



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

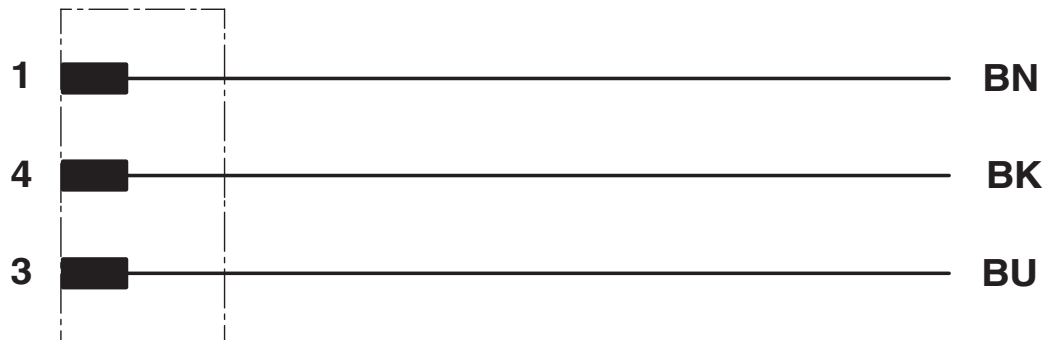
# SAC-3P-P12MS/ 3,0-PUR - Sensor/actuator cable



1385536

<https://www.phoenixcontact.com/nl/products/1385536>

Circuit diagram



Contact assignment of the M12 plug

# SAC-3P-P12MS/ 3,0-PUR - Sensor/actuator cable



1385536

<https://www.phoenixcontact.com/nl/products/1385536>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/nl/products/1385536>

|                                                                                                                                          |                       |                       |                   |                             |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| <div><b>cULus Listed</b><br/>Approval ID: E221474</div> |                       |                       |                   |                             |
|                                                                                                                                          | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                                                    |                       |                       |                   |                             |
|                                                                                                                                          | 300 V                 | 4 A                   | - 22              | -                           |

# SAC-3P-P12MS/ 3,0-PUR - Sensor/actuator cable



1385536

<https://www.phoenixcontact.com/nl/products/1385536>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27060311 |
| ECLASS-15.0 | 27060311 |

### ETIM

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

### UNSPSC

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

# SAC-3P-P12MS/ 3,0-PUR - Sensor/actuator cable



1385536

<https://www.phoenixcontact.com/nl/products/1385536>

## 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 | 0,725 kg CO2e |
|---------|---------------|

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT B.V.  
Hengelder 56 6902 PA Zevenaar  
Postbus 246 6900 AE Zevenaar  
(0316) 59 17 20  
[sales@phoenixcontact.nl](mailto:sales@phoenixcontact.nl)