

# SAC-3P-15,0-PUR/M12FS SH - Sensor/actuator cable



1529124

<https://www.phoenixcontact.com/us/products/1529124>

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, shielded, free cable end, on Socket straight M12, coding: A, cable length: 12 m

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1529124                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | BF03                           |
| Product key                          | AF1CIA                         |
| GTIN                                 | 4017918978594                  |
| Weight per piece (including packing) | 725.7 g                        |
| Weight per piece (excluding packing) | 644.4 g                        |
| Customs tariff number                | 85444290                       |
| Country of origin                    | PL                             |

## Technical data

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| Number of positions  | 3                     |
| No. of cable outlets | 1                     |
| Shielded             | yes                   |
| 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 | ≥ 100 MΩ |
| Nominal voltage $U_N$ | 48 V AC  |
|                       | 60 V DC  |
| Nominal current $I_N$ | 4 A      |

### Mechanical properties

#### Mechanical data

|                             |       |
|-----------------------------|-------|
| Insertion/withdrawal cycles | ≥ 100 |
|-----------------------------|-------|

### Signaling

|                        |    |
|------------------------|----|
| Status display         | no |
| Status display present | no |

### Connector

#### Connection 1

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

#### Connection 2

|                     |                     |
|---------------------|---------------------|
| Type                | Socket straight M12 |
| Number of positions | 3                   |
| Coding type         | A                   |

# SAC-3P-15,0-PUR/M12FS SH - Sensor/actuator cable



1529124

<https://www.phoenixcontact.com/us/products/1529124>

## Cable/line

|                                               |                                                                                                                                        |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Cable length                                  | 12 m                                                                                                                                   |
| PUR halogen-free black [PUR]                  |                                                                                                                                        |
| Cable weight                                  | 31 kg/km                                                                                                                               |
| UL AWM Style                                  | 20549                                                                                                                                  |
| Number of positions                           | 3                                                                                                                                      |
| Shielded                                      | yes                                                                                                                                    |
| 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                       | 4.65 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)                                                                                                            |
|                                               | approx. 0.50 mm (Outer cable sheath)                                                                                                   |
| Overall twist                                 | 3 wires, twisted                                                                                                                       |
| Optical shield covering                       | 80 %                                                                                                                                   |
| 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   | 23 mm                                                                                                                                  |
| Smallest bending radius, movable installation | 47 mm                                                                                                                                  |
| Dynamic load capacity (bending)               | Max. bending cycles: 10000000, Bending radius: 47 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s <sup>2</sup> |
| Dynamic load capacity (torsion)               | Torsion: ±180 °/m, Torsion cycles: ≥2000000, 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                                                                    |

# SAC-3P-15,0-PUR/M12FS SH - Sensor/actuator cable



1529124

<https://www.phoenixcontact.com/us/products/1529124>

|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)    |
|                                 | -25 °C ... 80 °C (Cable, flexible installation) |

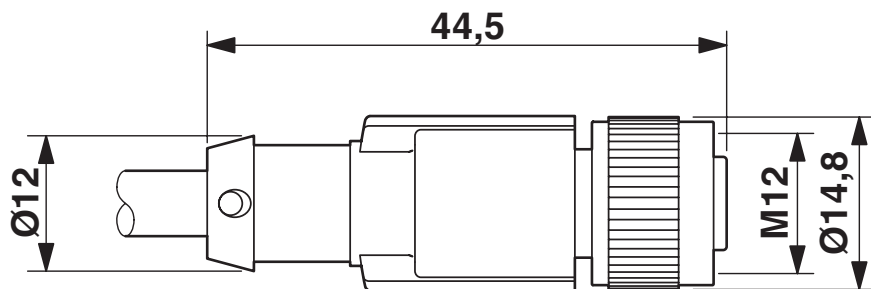
## Environmental and real-life conditions

### Ambient conditions

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

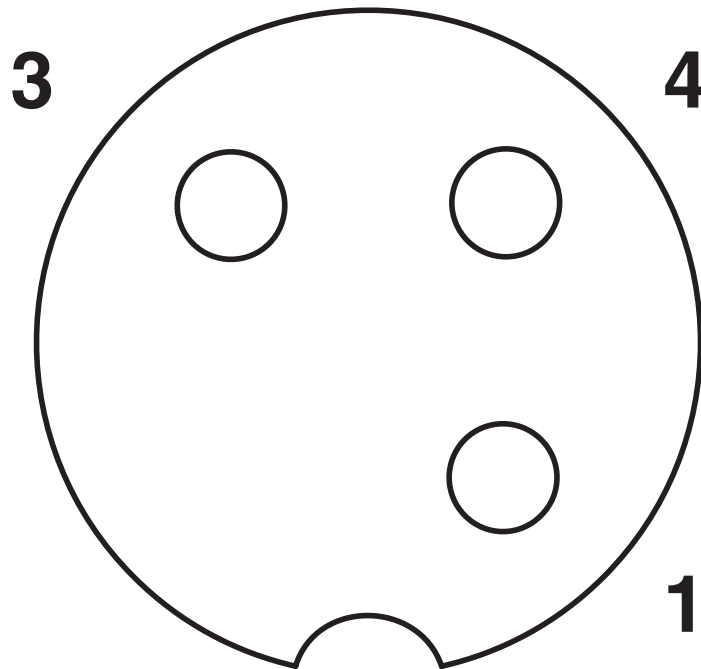
## Drawings

Dimensional drawing



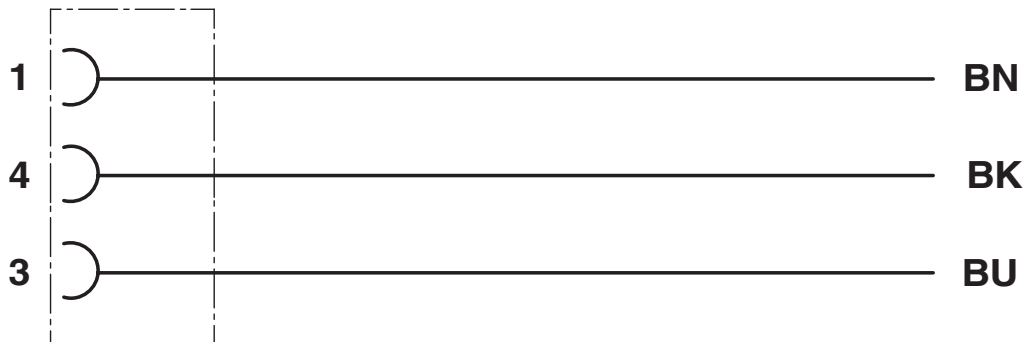
M12 x 1 socket, straight, shielded

Schematic diagram



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

Circuit diagram



Contact assignment of the M12 socket

# SAC-3P-15,0-PUR/M12FS SH - Sensor/actuator cable



1529124

<https://www.phoenixcontact.com/us/products/1529124>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

# SAC-3P-15,0-PUR/M12FS SH - Sensor/actuator cable



1529124

<https://www.phoenixcontact.com/us/products/1529124>

## 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 2025 © - 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)