



**Automatización Eléctrica**  
Especialistas en Automatización

At the end of this document you will find links to products related to this catalog. You can go directly to our shop by clicking [HERE](#). [HERE](#)

## Sensor/Actuator cable - SAC-3P-MS/ 0,3-PUR/BI-1L-Z SCO - 1435137

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Sensor/Actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, A-coded, on Valve connector BI (11 mm), with 1 LED, connected with Z diode, Cable length: 0.3 m

### Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Robust valve connector with Zener diode as protective circuit
- Save time, thanks to installation with SPEEDCON fast locking system
- Convenient: increased machine availability thanks to quick and easy diagnostics
- Our standard: robust halogen-free PUR cable



### Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 1 STK   |
| GTIN         | <br>4 046356 413480 |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 0.3 m |
|-----------------|-------|

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
|                                 | -20 °C ... 85 °C (valve plug)    |
| Degree of protection            | IP65                             |
|                                 | IP67                             |

#### General

|                       |              |
|-----------------------|--------------|
| Rated current at 40°C | 4 A          |
| Rated voltage         | 24 V         |
| Number of positions   | 3            |
| Insulation resistance | ≥ 100 MΩ     |
| Coding                | A - standard |

# Sensor/Actuator cable - SAC-3P-MS/ 0,3-PUR/BI-1L-Z SCO - 1435137

## Technical data

### General

|                              |                               |
|------------------------------|-------------------------------|
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | 1 LED                         |
| Protective circuit/component | Z diode                       |
| Overvoltage category         | III                           |
| Degree of pollution          | 3                             |
| Insertion/withdrawal cycles  | ≥ 100 (M12 connector)         |
| Torque                       | 0.4 Nm (M12 connector)        |
|                              | 0.6 Nm (Valve connector)      |

### Material

|  |                              |
|--|------------------------------|
| Flammability rating according to UL 94 | HB                           |
| Contact material                       | CuSn                         |
| Contact surface material               | Ni/Au                        |
| Contact carrier material               | TPU GF                       |
| Material of grip body                  | TPU                          |
| Valve plug contact material            | CuSn                         |
| Valve plug contact surface material    | Sn                           |
| Valve plug contact insert material     | PA 66                        |
| Material housing valve plug            | TPU                          |
| Material, knurls                       | Zinc die-cast, nickel-plated |
| Sealing material                       | TPU (Seal molded)            |

### Standards and Regulations

|  |                 |
|--|-----------------|
| Standard designation                   | M12 connector   |
| Standards/regulations                  | IEC 61076-2-101 |
| Flammability rating according to UL 94 | HB              |

### Cable

|   |                                |
|---|--------------------------------|
| Cable type                                  | PUR halogen-free black         |
| Cable type (abbreviation)                   | PUR                            |
| Cable abbreviation                          | Li9Y11Y-HF                     |
| UL AWM style                                | 20549                          |
| Conductor cross section                     | 3x 0.5 mm <sup>2</sup>         |
| AWG signal line                             | 20                             |
| Conductor structure signal line             | 28x 0.15 mm                    |
| Core diameter including insulation          | 1.5 mm ±0.05 mm (Signal line)  |
| Wire colors                                 | black 1, black 2, green/yellow |
| Overall twist                               | 3 wires, twisted               |
| External sheath, color                      | black-gray RAL 7021            |
| External cable diameter D                   | 4.5 mm ±0.2 mm                 |
| Smallest bending radius, fixed installation | 22.5 mm                        |
| Number of bending cycles                    | 15000000                       |

# Sensor/Actuator cable - SAC-3P-MS/ 0,3-PUR/BI-1L-Z SCO - 1435137

## Technical data

### Cable

|                                 |  |
|---------------------------------|--|
| Bending radius                  | 50 mm  |
| Traversing path                 | 0.9 m  |
| Traversing rate                 | 5 m/s  |
| Acceleration                    | 30 m/s <sup>2</sup>  |
| Outer sheath, material          | PUR  |
| Material conductor insulation   | PP   |
| Conductor material              | Bare Cu litz wires   |
| Insulation resistance           | min. 20 MΩ*km  |
| Conductor resistance            | 39 Ω/km (at 20 °C)   |
| Nominal voltage, cable          | ≤ 300 V  |
| Test voltage, cable             | ≥ 1200 V   |
| Flame resistance                | According to DIN VDE 0482                                  |
|                                 | According to DIN EN 50265-2-1                              |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815                   |
| 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)            |

## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27279218 |

### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |

# Sensor/Actuator cable - SAC-3P-MS/ 0,3-PUR/BI-1L-Z SCO - 1435137

## Approvals

Approvals

---

Approvals

EAC

---

Ex Approvals

---

Approvals submitted

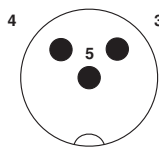
---

Approval details

|     |
|-----|
| EAC |
|-----|

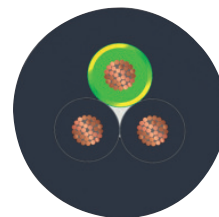
## Drawings

Schematic diagram



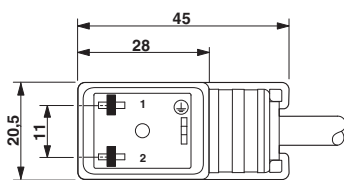
Pin assignment M12 plug, 3-pos., valve connector

Cable cross section



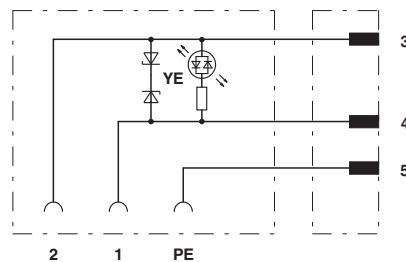
PUR halogen-free black [PUR]

Dimensional drawing



Valve connector, type BI

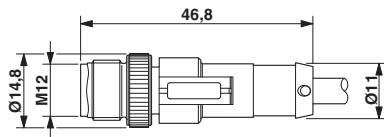
Circuit diagram



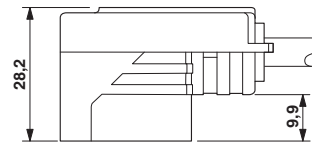
Contact assignment of M12 plug and valve connector

## Sensor/Actuator cable - SAC-3P-MS/ 0,3-PUR/BI-1L-Z SCO - 1435137

Dimensional drawing



Dimensional drawing



Valve connector, type BI, side view

M12 x 1 plug, straight

---

Phoenix Contact 2016 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

Below is a list of articles with direct links to our shop Electric Automation Network where you can see:

- Quote per purchase volume in real time.
- Online documentation and datasheets of all products.
- Estimated delivery time enquiry in real time.
- Logistics systems for the shipment of materials almost anywhere in the world.
- Purchasing management, order record and tracking of shipments.

To access the product, [click on the green button.](#)

| <b>Product</b>  | <b>Code</b> | <b>Reference</b>               | <b>Product link</b>        |
|---|-------------|--------------------------------|----------------------------|
| Sensor/Actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, A-coded, on Valve connector BI (11 mm), with 1 LED, connected with Z diode, Cable length: 0.3 m | 1435137     | SAC-3P-MS/ 0,3-PUR/BI-1L-Z SCO | <a href="#">Buy on EAN</a> |