

## Sensor/Actuator cable - SAC-HZ-3P-MS/1,5-542/ FRSHSCOBK - 1409512

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, PVC, yellow RAL 1021, shielded, Plug straight M12 SPEEDCON, A-coded, on Socket angled M12 SPEEDCON, A-coded, Cable length: 1.5 m



### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 1 STK                                                                                                   |
| Minimum order quantity               | 10 STK                                                                                                  |
| GTIN                                 | <br>4 055626 017662 |
| Weight per Piece (excluding packing) | 22.22 g                                                                                                 |
| Weight per piece (including packing) | 22.22 g                                                                                                 |
| Country of origin                    | United States                                                                                           |
| Note                                 | Made to Order (non-returnable)                                                                          |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 1.5 m |
|-----------------|-------|

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection            | IP65                             |

#### General

|                              |                                                                                                     |
|------------------------------|-----------------------------------------------------------------------------------------------------|
| Note                         | These cable assemblies are UL/cUL listed for use in Class I, Division 2 (CID2) hazardous locations. |
| Number of positions          | 3                                                                                                   |
| Coding                       | A - standard                                                                                        |
| Standards/regulations        | M12 connector IEC 61076-2-101                                                                       |
| Status display               | No                                                                                                  |
| Protective circuit/component | Unwired                                                                                             |

# Sensor/Actuator cable - SAC-HZ-3P-MS/1,5-542/ FRSHSCOBK - 1409512

## Technical data

### General

|                      |                        |
|----------------------|------------------------|
| Overvoltage category | II                     |
| Degree of pollution  | 3                      |
| Torque               | 0.4 Nm (M12 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, hardly inflammable, self-extinguishing |
| Material, knurls                       | Zinc die-cast, nickel-plated                |
| Sealing material                       | NBR                                         |

### Standards and Regulations

|                                        |                                    |
|----------------------------------------|------------------------------------|
| Standard designation                   | M12 connector                      |
| Standards/regulations                  | IEC 61076-2-101                    |
| Flammability rating according to UL 94 | HB                                 |
| UL, USA/Canada                         | Class I, Div. 2, Groups A, B, C, D |

### Cable

|                                               |                              |
|-----------------------------------------------|------------------------------|
| Cable type                                    | PVC yellow 105 °C            |
| Cable type (abbreviation)                     | 542                          |
| UL AWM style                                  | 2517 (105°C/300 V)           |
| AWG signal line                               | 22                           |
| Core diameter including insulation            | 1.27 mm ±0.03 mm             |
| Wire colors                                   | brown, blue, black           |
| Overall twist                                 | 3 wires, twisted             |
| Shielding                                     | Tinned copper braided shield |
| Optical shield covering                       | 85 %                         |
| External sheath, color                        | yellow                       |
| External cable diameter D                     | 5.2 mm ±0.2 mm               |
| Minimum bending radius, flexible installation | 12 x D                       |
| Cable weight                                  | 40 kg/km                     |
| Outer sheath, material                        | PVC                          |
| Material conductor insulation                 | PVC                          |
| Conductor material                            | Tin-plated Cu litz wires     |
| Insulation resistance                         | ≥ ()                         |
| Conductor resistance                          | max. 50.5 Ω/km (20° C)       |
| Nominal voltage, cable                        | 300 V                        |
| Special properties                            | UL standards PLTC and ITC    |
| Other resistance                              | UV resistant                 |

# Sensor/Actuator cable - SAC-HZ-3P-MS/1,5-542/ FRSHSCOBK - 1409512

## Technical data

### Cable

|                                 |                                               |
|---------------------------------|-----------------------------------------------|
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation) |
|---------------------------------|-----------------------------------------------|

## Classifications

### eCl@ss

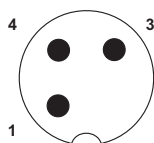
|            |          |
|------------|----------|
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

### ETIM

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

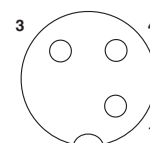
## Drawings

Schematic diagram



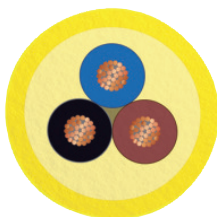
Pin assignment M12 plug, 3-pos., A-coded, view male side

Schematic diagram



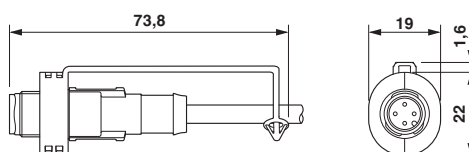
Pin assignment M12 socket, 3-pos., A-coded, view female side

Cable cross section



PVC yellow 105 °C [542]

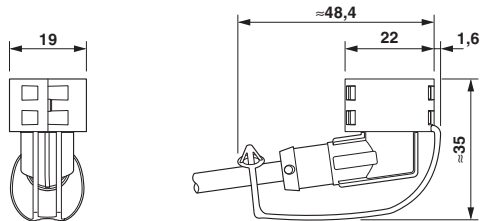
Dimensional drawing



EXCLIP mounted plug

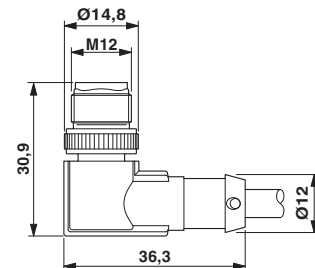
# Sensor/Actuator cable - SAC-HZ-3P-MS/1,5-542/ FRSHSCOBK - 1409512

Dimensional drawing



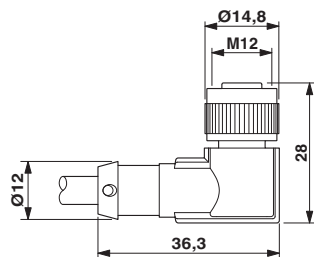
EXCLIP mounted socket

Dimensional drawing



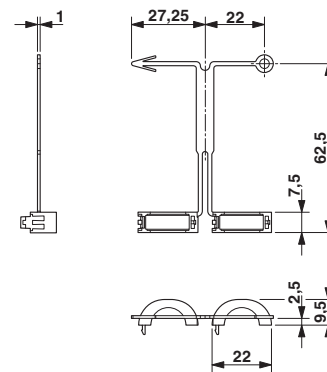
M12 x 1 male plug, angled, shielded

Dimensional drawing



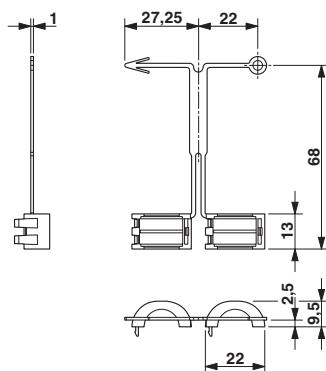
M12 x 1 socket, angled, shielded

Dimensional drawing



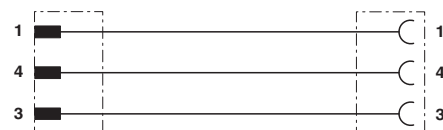
EXCLIP plug

Dimensional drawing



EXCLIP socket

Circuit diagram



Contact assignment of M8 plugs / M12 sockets

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>