

## Sensor/Actuator cable - SAC-3P-MS/1,5-542/ FSSH SCO BK - 1406251


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, shielded, Plug straight M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, Cable length: 1.5 m



### Key Commercial Data

|                        |   |
|------------------------|---|
| Packing unit           | 1 STK   |
| Minimum order quantity | 50 STK  |
| GTIN                   | <br>4 046356 798013 |
| GTIN                   | 4046356798013   |

### Technical data

#### Dimensions

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

#### Ambient conditions

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

#### General

|                              |                               |
|------------------------------|-------------------------------|
| Rated current at 40°C        | 4 A                           |
| Rated voltage                | 250 V                         |
| Number of positions          | 3                             |
| Insulation resistance        | ≥ 100 MΩ                      |
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | No                            |
| Protective circuit/component | Unwired                       |
| Overvoltage category         | II                            |
| Degree of pollution          | 3                             |

# Sensor/Actuator cable - SAC-3P-MS/1,5-542/ FSSH SCO BK - 1406251

## Technical data

### General

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

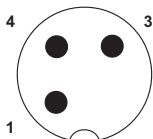
### Cable

|   |   |
|---|---|
| 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                         | ≥ (550 M Ohms/m @ 500V)                       |
| Conductor resistance                          | max. 50.5 Ω/km (20° C)                        |
| Nominal voltage, cable                        | 300 V   |
| Special properties                            | UL standards PLTC and ITC                     |
| Flame resistance                              | FT4   |
| Other resistance                              | UV resistant                                  |
| Ambient temperature (operation)               | -30 °C ... 105 °C (cable, fixed installation) |

# Sensor/Actuator cable - SAC-3P-MS/1,5-542/ FSSH SCO BK - 1406251

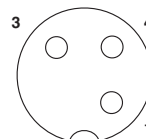
## Drawings

Schematic diagram



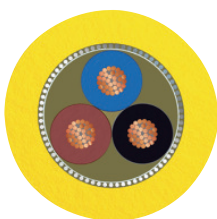
Pin assignment M12 plug, 3-pos., A-coded, view male side

Schematic diagram



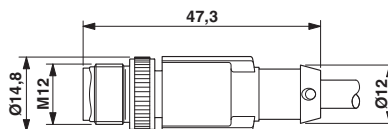
Pin assignment M12 socket, 3-pos., A-coded, view female side

Cable cross section



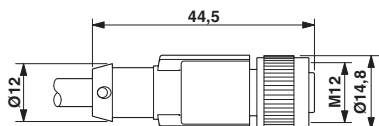
PVC yellow 105 °C [542]

Dimensional drawing



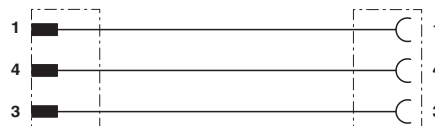
Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight, shielded

Circuit diagram



Contact assignment of M8 plugs / M12 sockets

## Approvals

### Approvals

Approvals


UL Listed / cUL Listed / cULus Listed


Ex Approvals

### Approval details

# Sensor/Actuator cable - SAC-3P-MS/1,5-542/ FSSH SCO BK - 1406251

## Approvals

|                    |   |   |               |
|--------------------|---|---|---------------|
| UL Listed          |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
|                    |   |   |               |
| Nominal current IN |   | 4 A   |               |
| Nominal voltage UN |   | 300 V   |               |

|                    |   |   |               |
|--------------------|---|---|---------------|
| cUL Listed         |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
|                    |   |   |               |
| Nominal current IN |   | 4 A   |               |
| Nominal voltage UN |   | 300 V   |               |

|              |  |  |  |
|--------------|--|--|--|
| cULus Listed |  |  |  |
|--------------|--|--|--|

Phoenix Contact 2017 © - 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>