# Sensor/Actuator cable - SAC-5P-MS/ 5,0-542/FSSH SCO BK - 1417908

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, 5-position, PVC, yellow RAL 1021, shielded, Plug straight M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, Cable length: 0.5 m

## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 STK |
| Weight per Piece (excluding packing) | 303.0 g |
| Custom tariff number | 85444290 |
| Country of origin | United States |

## Technical data

### Dimensions

| | |
|---|---|
| Length of cable | 0.5 m |

### Ambient conditions

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

### General

| | |
|---|---|
| Rated current at 40°C | 4 A |
| Rated voltage | 60 V |
| Number of positions | 5 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Protective circuit/component | Unwired |

# Sensor/Actuator cable - SAC-5P-MS/ 5,0-542/FSSH SCO BK - 1417908

## Technical data

### General

| | |
|---|---|
| Overvoltage category | II |
| Degree of pollution | 3 |
| 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, white, gray |
| Overall twist | 5 wires around filler to the core |
| Shielding | Tinned copper braided shield |
| Optical shield covering | 85 % |
| External sheath, color | yellow |
| External cable diameter D | 5.9 mm ±0.2 mm |
| Minimum bending radius, flexible installation | 12 x D |
| Cable weight | 57 kg/km |
| Outer sheath, material | PVC |
| Material, filler | PP |
| 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) |

# Sensor/Actuator cable - SAC-5P-MS/ 5,0-542/FSSH SCO BK - 1417908

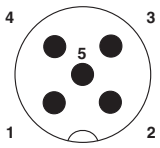
## Technical data

### Cable

| | |
|---|---|
| Nominal voltage, cable | 300 V |
| Special properties | UL standards PLTC and ITC |
| Other resistance | UV resistant |
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation) |

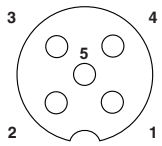
## Drawings

Schematic diagram




Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



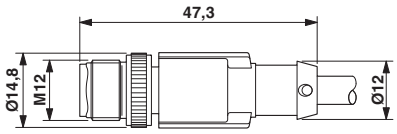

Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section



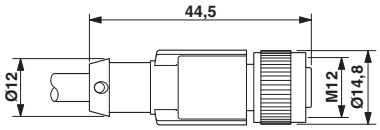
PVC yellow 105 °C [542]

Dimensional drawing




Plug, M12 x 1, straight, shielded

Dimensional drawing




M12 x 1 socket, straight, shielded

Circuit diagram




Contact assignment of the M12 plug and the M12 socket

## Approvals

### Approvals

# Sensor/Actuator cable - SAC-5P-MS/ 5,0-542/FSSH SCO BK - 1417908

## Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approvals submitted

### Approval details

UL Listed

cUL Listed

cULus Listed

## Accessories

### Accessories

### Protective cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 sockets



Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



# Sensor/Actuator cable - SAC-5P-MS/ 5,0-542/FSSH SCO BK - 1417908

## Accessories

### Safety locking

Locking clip - SAC-M12-EXCLIP-M - 1558988



Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

---

Locking clip - SAC-M12-EXCLIP-F - 1558991



Locking clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

---

### Screwdriver tools

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

---

Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

---

### Torque tool

# Sensor/Actuator cable - SAC-5P-MS/ 5,0-542/FSSH SCO BK - 1417908

## Accessories

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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