# Sensor/actuator cable - SAC-4P-M8MS/1,5-680/M8FS FDP - 1096002

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Sensor/actuator cable, 4-position, PVC, gray, shielded, Plug straight M8, on Socket straight M8, cable length: 1.5 m, Foil shielding plus drain wire

## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 pc |
| GTIN | 4 055626 929538 |
| GTIN | 4055626929538 |
| Weight per Piece (excluding packing) | 40.000 g |
| Country of origin | United States |

## Technical data

### Dimensions

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

### Ambient conditions

| | |
|---|---|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |

### General

| | |
|---|---|
| Rated current at 40°C | 4 A |
| Rated voltage | 48 V AC |
| | 60 V DC |

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## Technical data

### General

| | |
|---|---|
| Number of positions | 4 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M8 connector IEC 61076-2-104 |
| Status display | No |
| Protective circuit/component | unwired |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.2 Nm (M8 connectors) |

### 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

| | |
|---|---|
| Standards/specifications | M8 connector IEC 61076-2-104 |

### Cable

| | |
|---|---|
| Cable type | PVC, gray, 105°C |
| UL AWM style | 2517 (105 °C / 300 V) |
| AWG signal line | 24 |
| Core diameter including insulation | 1.12 mm ±0.03 mm |
| Wire colors | brown, blue, black |
| Type of pair shielding | Plastic-coated aluminum foil, aluminum side inside |
| Overall twist | Conductors, fillers, and drain wire are twisted with left-hand lay |
| Shielding | Plastic-coated aluminum foil connection with a drain wire |
| External cable diameter D | 4.17 mm ±0.2 mm |
| Minimum bending radius, flexible installation | 8 x D |
| Cable weight | 26.04 kg/km |
| External sheath, color | gray |
| Outer sheath, material | PVC |
| Material conductor insulation | PVC (Signal line) |
| Conductor material | Tin-plated Cu litz wires |

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## Technical data

### Cable

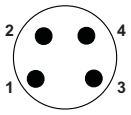
| | |
|---|---|
| Insulation resistance | ≥ (550 M Ohms/m @ 500V) |
| Conductor resistance | max. 80.2 Ω/km (20 °C) |
| Nominal voltage, cable | 300 V |
| Other resistance | UV resistant |
| Flame resistance | FT4 |
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation) |

### Environmental Product Compliance

| | |
|---|---|
| REACh SVHC | Lead 7439-92-1 |

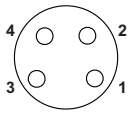
## Drawings

Schematic diagram



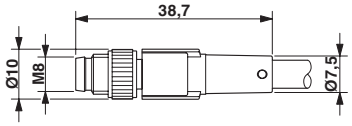

Pin assignment M8 plug, 4-pos., view male side

Schematic diagram



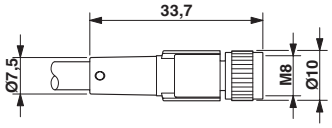

Pin assignment M8 socket, 4-pos., view female side

Dimensional drawing




M8 x 1 male plug, straight version

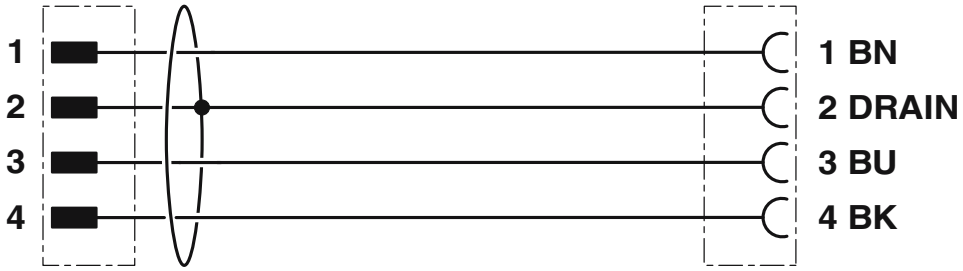
Dimensional drawing




Socket M8 x 1, straight

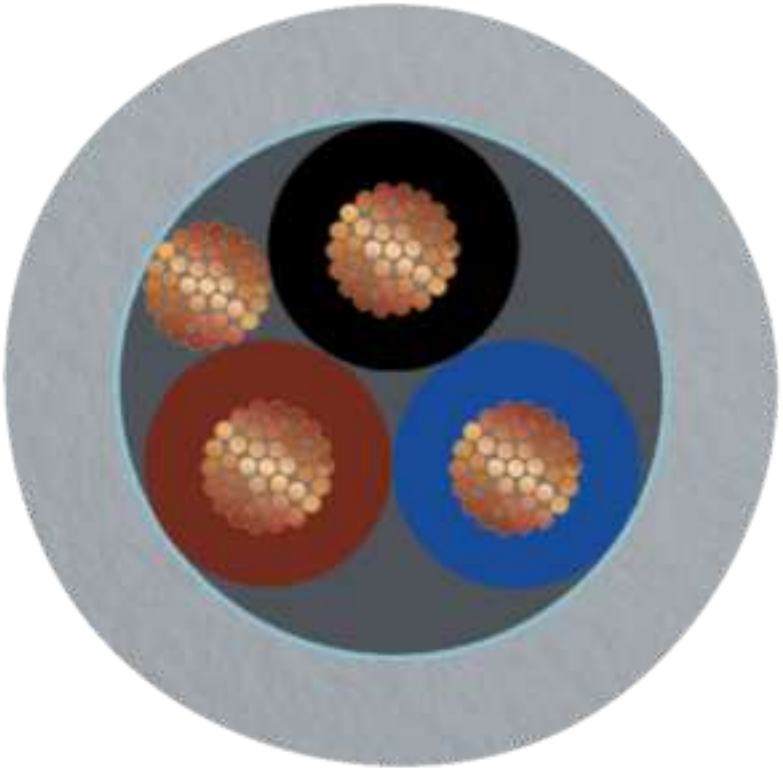
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Circuit diagram




Contact assignment of M8 plugs/sockets

Cable cross section



# Sensor/actuator cable - SAC-4P-M8MS/1,5-680/M8FS FDP - 1096002

## Classifications

### eCl@ss

| | |
|---|---|
| eCl@ss 10.0.1 | 27060311 |
| eCl@ss 11.0 | 27060311 |
| eCl@ss 9.0 | 27060311 |

### UNSPSC

| | |
|---|---|
| UNSPSC 19.0 | 31251501 |
| UNSPSC 20.0 | 31251501 |
| UNSPSC 21.0 | 31251501 |

## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

### Approval details

| | | | |
|---|---|---|---|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |

| | |
|---|---|
| Nominal voltage UN | 30 V |
| Nominal current IN | 4 A |

| | | | |
|---|---|---|---|
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |

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# Sensor/actuator cable - SAC-4P-M8MS/1,5-680/M8FS FDP - 1096002

## Approvals

cULus Listed

## Accessories

### Accessories

Plug for cable screw gland

Screw plug - PROT-M 8 MS-PA-CHAIN - 1430860

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



Protective cap

Sealing cap - PROT-M 8 FS-PA-CHAIN - 1430857

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 plugs



Screwdriver tools

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

Torque tool

# Sensor/actuator cable - SAC-4P-M8MS/1,5-680/M8FS FDP - 1096002

## Accessories

Torque screwdriver - TSD 02 SAC - 1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

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