

Sensor/actuator cable - SAC-4P-M12MS/5,0-600 FB - 1404004

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, 4-position, PP-EPDM halogen-free, gray RAL 7035, Plug straight M12, coding: A, on free cable end, cable length: 5 m, Hygienic design, with plastic knurl

Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Easy to clean, thanks to the special hygienic design
- ✓ Contamination can be detected quickly – thanks to the light color

Key Commercial Data

| | |
|--------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 677509 |
| GTIN | 4046356677509 |

Technical data

Dimensions

| | |
|-----------------|-----|
| Length of cable | 5 m |
|-----------------|-----|

Ambient conditions

| | |
|---------------------------------|-----------------------------------|
| Ambient temperature (operation) | -40 °C ... 105 °C (Plug / socket) |
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |
| | IP69K |

General

| | |
|-----------------------|----------|
| Rated current at 40°C | 4 A |
| Rated voltage | 250 V AC |
| | 250 V DC |
| Number of positions | 4 |

Sensor/actuator cable - SAC-4P-M12MS/5,0-600 FB - 1404004

Technical data

General

| | |
|------------------------------|--|
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| | Material conformance FDA 21 CFR 177.2600 |
| Status display | No |
| Protective circuit/component | unwired |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm (M12 connector) |

Material

| | |
|--------------------------|---------------|
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | PP |
| Material of grip body | PP |
| Material, knurls | Polypropylene |

Standards and Regulations

| | |
|--------------------------|--|
| Standards/specifications | M12 connector IEC 61076-2-101 |
| | Material conformance FDA 21 CFR 177.2600 |

Cable

| | |
|---|---------------------------------------|
| Cable type | Halogen-free PP gray |
| Cable type (abbreviation) | 600 |
| Cable abbreviation | Li9Y9Y |
| Conductor cross section | 4x 0.34 mm ² (Signal line) |
| AWG signal line | 22 |
| Conductor structure signal line | 42x 0.10 mm |
| Core diameter including insulation | 1.27 mm ±0.02 mm (Signal line) |
| Thickness, insulation | ≥ 0.21 mm (Core insulation) |
| Wire colors | brown, white, blue, black |
| Overall twist | 4 wires, twisted |
| Length of twist, overall twist | 48 mm |
| External sheath, color | gray RAL 7035 |
| Outer sheath thickness | approx. 0.8 mm |
| External cable diameter D | 4.7 mm ±0.15 mm |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Number of bending cycles | 4000000 |
| Minimum bending radius, drag chain applications | 10 x D |
| Traversing path | 10 m |

Sensor/actuator cable - SAC-4P-M12MS/5,0-600 FB - 1404004

Technical data

Cable

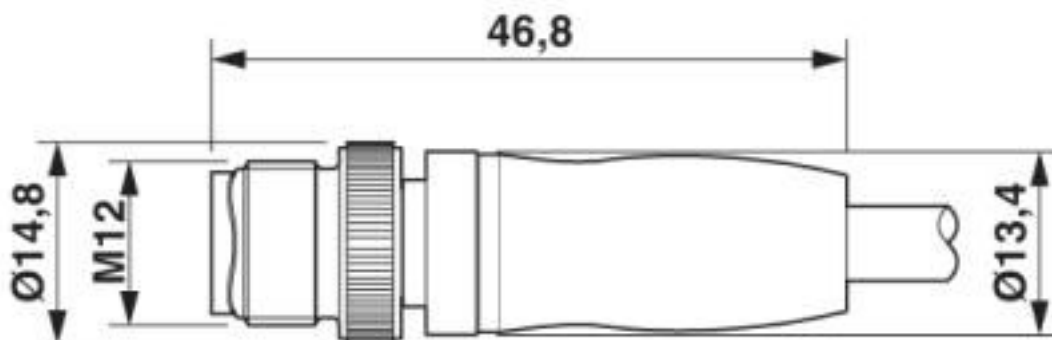
| | |
|---------------------------------|---|
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s ² |
| Torsion force | ± 270 °/m (4,000,000 torsion cycles, max. 25 torsion cycles/min) |
| Cable weight | 30 kg/km |
| Outer sheath, material | PP-EPDM |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Conductor resistance | 58 Ω/km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V AC |
| Test voltage, cable | ≥ 3000 V AC (Spark test) |
| Special properties | FDA compliant according to FDA 21 CFR 177.2600 |
| | highly flexible |
| | Flexible cable conduit capable |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| Other resistance | Resistant to cold bending and cold impacts According to DIN EN 60811-1-4 (-40 °C) |
| Ambient temperature (operation) | -40 °C ... 105 °C (cable, fixed installation) |
| | -25 °C ... 105 °C (cable, flexible installation) |

Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Sensor/actuator cable - SAC-4P-M12MS/5,0-600 FB - 1404004

Circuit diagram



Contact assignment of the M12 plug

Sensor/actuator cable - SAC-4P-M12MS/5,0-600 FB - 1404004

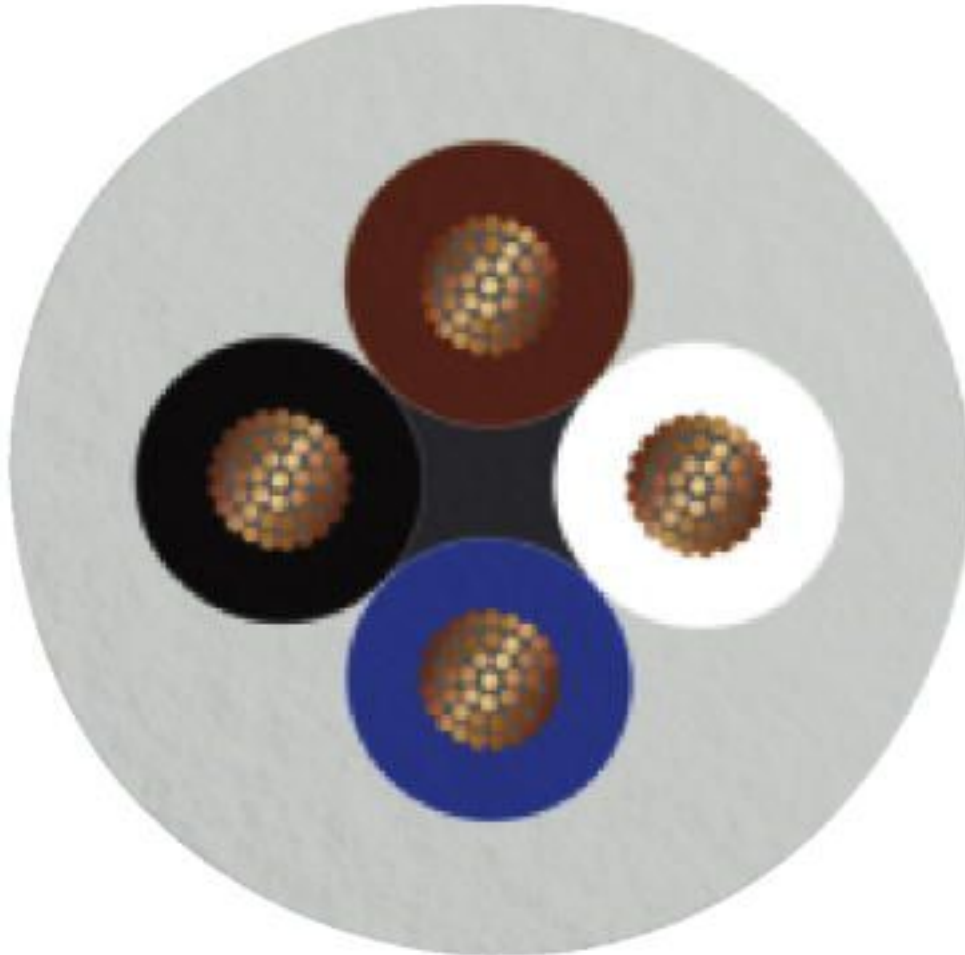
Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

Sensor/actuator cable - SAC-4P-M12MS/5,0-600 FB - 1404004

Cable cross section



Halogen-free PP gray [600]

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27060311 |
| eCl@ss 4.0 | 27060300 |
| eCl@ss 4.1 | 27060300 |
| eCl@ss 5.0 | 27061800 |
| eCl@ss 5.1 | 27061800 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

Sensor/actuator cable - SAC-4P-M12MS/5,0-600 FB - 1404004

Classifications

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 31251501 |
| UNSPSC 19.0 | 31251501 |
| UNSPSC 20.0 | 31251501 |
| UNSPSC 21.0 | 31251501 |

Approvals

Approvals

Approvals

EAC-RoHS / EAC

Ex Approvals

Approval details

| | | |
|----------|--|--------------------------|
| EAC-RoHS | | RU D- DE.HB35.B.00387 |
|----------|--|--------------------------|

| | | |
|-----|--|--------------------------|
| EAC | | RU C- DE.BL08.B.00286 |
|-----|--|--------------------------|

Accessories

Accessories

Cutting tools

Sensor/actuator cable - SAC-4P-M12MS/5,0-600 FB - 1404004

Accessories

Diagonal cutter - CUTFOX-S VDE - 1212207



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

Stripping tool

Stripping tool - WIREFOX SAC - 1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 4.4 to 7 mm, any stripping length

Stripping tool - WIREFOX 10 - 1212150



Stripping tool, for cables and conductors from 0.02 - 10 mm², self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm² stranded/1.5 mm² solid, replaceable stripping blade

Phoenix Contact 2020 © - 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>

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1404004](#)