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Sensor/Actuator cable - SAC-4P-M12MS/0,6-600/M12FS HD - 1403969

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Sensor/Actuator cable, 4-position, PP-EPDM halogen-free, gray RAL 7035, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 0.6 m, Hygienic design, With high-grade steel knurl

Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Easy to clean, thanks to the special hygienic design
- Corrosion protection for all exposed metal parts, thanks to the use of stainless steel type 1.4404
- Contamination can be detected quickly – thanks to the light color

Key Commercial Data

| | |
|--------------|---------------------|
| Packing unit | 1 STK |
| GTIN | 4 046356 677257 |

Technical data

Dimensions

| | |
|-----------------|-------|
| Length of cable | 0.6 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 |
| Number of positions | 4 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| | Material conformance FDA 21 CFR 177.2600 PP |
| Status display | No |

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Technical data

General

| | |
|------------------------------|------------------------|
| 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 | High-grade steel |
| Sealing material | FKM |

Standards and Regulations

| | |
|-----------------------|----------------------|
| Standard designation | M12 connector |
| Standards/regulations | IEC 61076-2-101 |
| Standard designation | Material conformance |
| Standards/regulations | 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 |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s ² |

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Technical data

Cable

| | |
|---------------------------------|---|
| 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) |

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27279218 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

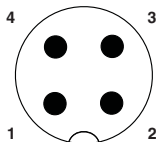
UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 31251501 |

Drawings

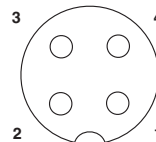
Sensor/Actuator cable - SAC-4P-M12MS/0,6-600/M12FS HD - 1403969

Schematic diagram



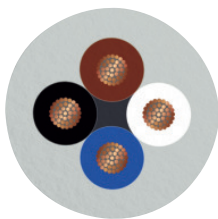
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



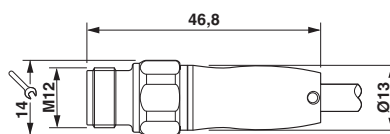
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



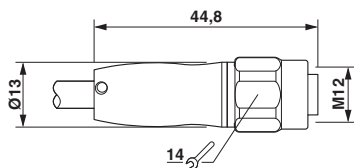
Halogen-free PP gray [600]

Dimensional drawing



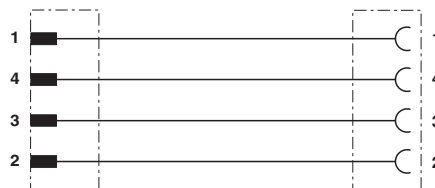
M12 x 1 plug, straight

Dimensional drawing



M12 x 1 socket, straight

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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