

Sensor/actuator cable - SAC-5P-MS/0,3-600/M12FR-3L FB - 1404106

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Sensor/actuator cable, 5-position, PP-EPDM halogen-free, gray RAL 7035, Plug straight M12, A-coded, on Socket angled M12, A-coded, with 3 LEDs, cable length: 0.3 m, Hygienic design, with plastic knurl

Why buy this product

- ✓ 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
- ✓ Convenient: increased machine availability thanks to quick and easy diagnostics

Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 STK |
| GTIN |  4 046356 676588 |
| GTIN | 4046356676588 |
| Weight per Piece (excluding packing) | 40.000 g |
| Custom tariff number | 85444290 |
| Country of origin | Poland |

Technical data

Dimensions

| | |
|-----------------|-------|
| Length of cable | 0.3 m |
|-----------------|-------|

Ambient conditions

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

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Technical data

Ambient conditions

| | |
|--|-------|
| | IP68 |
| | IP69K |

General

| | |
|------------------------------|--|
| Rated current at 40°C | 4 A |
| Rated voltage | 24 V |
| | 24 V DC |
| Number of positions | 5 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| | Material conformance FDA 21 CFR 177.2600 |
| Status display | 3 LEDs |
| 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 |
| 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 | 5x 0.34 mm ² (Signal line) |
| AWG signal line | 22 |

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Cable

| | |
|---|---|
| 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, gray |
| Overall twist | 5 cores, twisted |
| Length of twist, overall twist | 55 mm |
| External sheath, color | gray RAL 7035 |
| Outer sheath thickness | approx. 0.7 mm |
| External cable diameter D | 5 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 |
| Torsion force | ± 270 °/m (4,000,000 torsion cycles, max. 25 torsion cycles/min) |
| Cable weight | 34 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 |
| 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) |

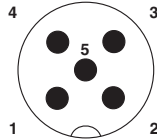
Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

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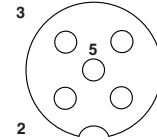
Drawings

Schematic diagram



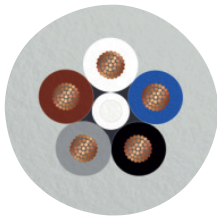
Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



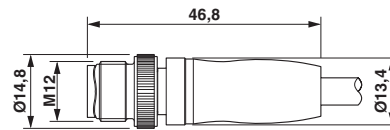
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section



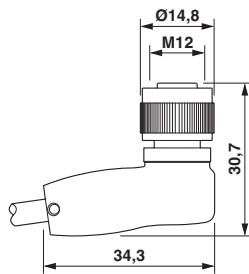
Halogen-free PP gray [600]

Dimensional drawing



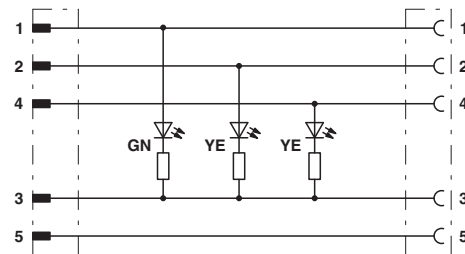
Plug, M12 x 1, straight, shielded

Dimensional drawing



Socket M12 x 1, angled, with LED

Circuit diagram



Contact assignment of M12 plugs / sockets with 3 LEDs

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 |

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eCl@ss

| | |
|------------|----------|
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

ETIM

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

UNSPSC

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