

Sensor/Actuator cable - SAC-4P-M12MS/1,5-600 HD - 1403947

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Sensor/Actuator cable, 4-position, PP-EPDM halogen-free, Gray RAL 7035, Plug straight M12, A-coded, on free cable end, Cable length: 1.5 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 pc |
| GTIN |  4 046356 676946 |
| Weight per Piece (excluding packing) | 50.0 g |
| Custom tariff number | 85444290 |
| Country of origin | Poland |
| Note | Made to Order (non-returnable) |

Technical data

Dimensions

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

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Technical data

General

| | |
|------------------------------|--|
| Number of positions | 4 |
| Contact resistance | ≤ 5 mΩ |
| 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 |
| Surge voltage category | II |
| Pollution degree | 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 |

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

| | |
|---------------------------------|---|
| 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 |
| | partly suitable for use with drag chain |
| 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 |

Accessories

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Accessories

Cutting tools

Diagonal cutter - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

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

Adapter - SAC BIT M12-W14 - 1212513



SAC nut, for assembling M12 connectors with hexagonal high-grade steel knurl, with 4 mm hexagonal drive

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

Torque tool

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Accessories

Torque screwdriver - TSD 04 SAC - 1208429



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

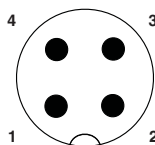
Torque screwdriver - TSD-M 1,2NM - 1212224



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

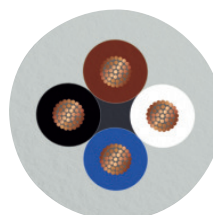
Drawings

Schematic diagram



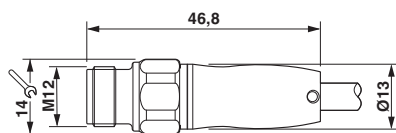
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Cable cross section



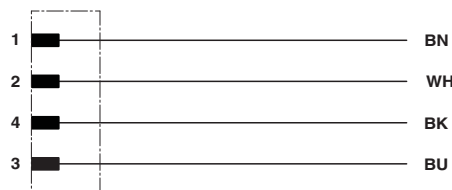
Halogen-free PP gray [600]

Dimensioned drawing



M12 x 1 plug, straight

Circuit diagram



Contact assignment of the M12 plug and the M12 socket