

Sensor/Actuator cable - SAC-5P-5,0-600/M12FR-3L HD - 1404060

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://download.phoenixcontact.com>)



Sensor/Actuator cable, 5-position, PP-EPDM halogen-free, Gray RAL 7035, Free cable end, on Socket angled M12, A-coded, with 3 LEDs, Cable length: 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
- ✓ Convenient: increased machine availability thanks to quick and easy diagnostics



Key commercial data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 677974 |
| Weight per Piece (excluding packing) | 165.0 g |
| Custom tariff number | 85444290 |
| Country of origin | Poland |

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 | 24 V |

Sensor/Actuator cable - SAC-5P-5,0-600/M12FR-3L HD - 1404060

Technical data

General

| | |
|------------------------------|--|
| Number of positions | 5 |
| 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 | 3 LEDs |
| Protective circuit/component | Unwired |
| Surge voltage category | II |
| Pollution degree | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.6 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 |

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 |
| 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 |
| Cable weight | 34 kg/km |
| Outer sheath, material | PP-EPDM |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |

Sensor/Actuator cable - SAC-5P-5,0-600/M12FR-3L HD - 1404060

Technical data

Cable

| | |
|---------------------------------|--|
| 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 |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| 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 | 27061801 |

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

Accessories

Cutting tools

Cable-cutting tool - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

Sensor/Actuator cable - SAC-5P-5,0-600/M12FR-3L HD - 1404060

Accessories

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

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

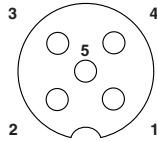


Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

Sensor/Actuator cable - SAC-5P-5,0-600/M12FR-3L HD - 1404060

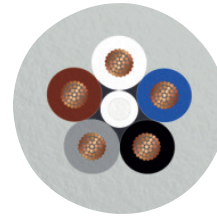
Drawings

Schematic diagram



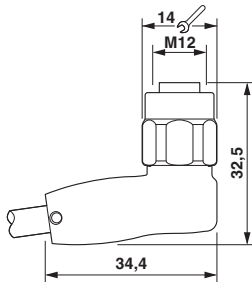
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section



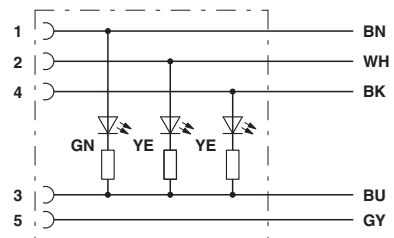
Halogen-free PP gray [600]

Dimensioned drawing



Socket M12 x 1, angled, with LED

Circuit diagram



Contact assignment of M12 sockets with LED