

## Sensor/Actuator cable - SAC-4P-1,5-600/M12FR-3L HD - 1403964

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Sensor/Actuator cable, 4-position, PP-EPDM halogen-free, Gray RAL 7035, Free cable end, on Socket angled M12, A-coded, with 3 LEDs, Cable length: 1.5 m, Hygienic design, With high-grade steel knurl



### Key commercial data

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit           | 0                                                                                                       |
| Minimum order quantity | 1                                                                                                       |
| GTIN                   | <br>4 046356 677202 |
| Custom tariff number   | 85444290                                                                                                |
| Country of origin      | POLAND                                                                                                  |

### Technical data

#### General data

|                                 |                                                       |
|---------------------------------|-------------------------------------------------------|
| Rated current at 40°C           | 4 A                                                   |
| Rated voltage                   | 24 V                                                  |
| Number of positions             | 4                                                     |
| Volume resistance               | ≤ 5 mΩ                                                |
| Insulation resistance           | ≥ 100 MΩ                                              |
| Length of cable                 | 1.5 m                                                 |
| Ambient temperature (operation) | -40 °C ... 105 °C (Male connector / female connector) |

#### General characteristics

|                             |                                       |
|-----------------------------|---------------------------------------|
| Standards/regulations       | M12 plug-in connector IEC 61076-2-101 |
| Coding                      | A - standard                          |
| Surge voltage category      | II                                    |
| Pollution degree            | 3                                     |
| Degree of protection        | IP65/IP68/IP69K                       |
| Insertion/withdrawal cycles | ≥ 100                                 |
| Torque                      | 0.4 Nm (M12 plug-in connector)        |
| Contact material            | CuSn                                  |
| Contact surface material    | Ni/Au                                 |
| Contact carrier material    | PP                                    |

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## Technical data

### General characteristics

|                       |                  |
|-----------------------|------------------|
| Material of grip body | PP               |
| Material, knurls      | High-grade steel |
| Sealing material      | FKM              |
| Status display        | 3 LEDs           |

### Conductor data

|                                               |                                               |
|-----------------------------------------------|-----------------------------------------------|
| Cable type                                    | Halogen-free PP gray                          |
| Cable type (abbreviation)                     | 600                                           |
| Cable abbreviation                            | Li9Y9Y                                        |
| Conductor cross section                       | 4x 0.34 mm <sup>2</sup> (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                                        |
| 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 an ambient temperature of 20°C)   |
| Nominal voltage, conductor                    | ≤ 300 V AC                                    |
| Test voltage, conductor                       | ≥ 3000 V AC (Spark test)                      |
| Special properties                            | FDA compliant                                 |
| Halogen-free                                  | in accordance with DIN VDE 0472 part 815      |
| Ambient temperature (operation)               | -40 °C ... 105 °C (cable, fixed installation) |

## Classifications

### ETIM

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

### UNSPSC

|              |          |
|--------------|----------|
| UNSPSC 11    | 31251501 |
| UNSPSC 12.01 | 31251501 |

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### Classifications

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 13.2   | 31251501 |
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |

#### 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 |

### Accessories

#### Accessories

#### Tools

Cable-cutting tool - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

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 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

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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

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

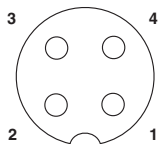
Adapter - SAC BIT M12-W14 - 1212513



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

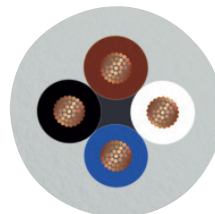
### Drawings

Schematic diagram



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

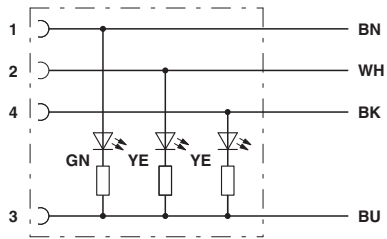
Cable cross section



Halogen-free PP gray [600]

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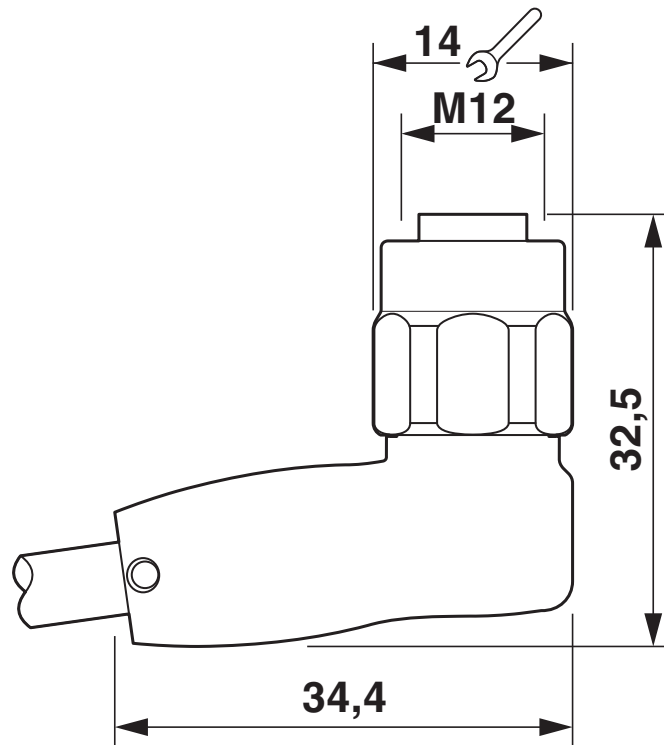
Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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Dimensioned drawing



Socket M12 x 1, angled, with LED





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#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.