

Sensor/actuator cable - SAC-3P- 3,0-PUR/M12FS-2L - 1694198

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12, A-coded, with 2 LEDs, cable length: 3 m

Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our standard: robust halogen-free PUR cable
- ✓ Convenient: increased machine availability thanks to quick and easy diagnostics

RoHS

Key Commercial Data

| | |
|--------------|---|
| Packing unit | 1 pc |
| GTIN |  4 017918 177379 |
| GTIN | 4017918177379 |
| Sales Key | 02 |

Technical data

Dimensions

| | |
|--|-------|
| Length of cable | 3 m |
| Stripping length of the free conductor end | 50 mm |

Ambient conditions

| | |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection | IP65/IP68/IP69K |

General

| | |
|-----------------------|-------------|
| Rated current at 40°C | 4 A |
| Rated voltage | 24 V DC |
| Number of positions | 3 |
| Color handle area | transparent |
| Insulation resistance | ≥ 100 MΩ |

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Technical data

General

| | |
|------------------------------|-------------------------------|
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | 2 LEDs |
| Protective circuit/component | unwired |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm (M12 connector) |

Material

| | |
|--|---|
| Flammability rating according to UL 94 | HB |
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | TPU GF |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Material, knurls | Zinc die-cast, nickel-plated |
| Sealing material | NBR |

Standards and Regulations

| | |
|--|-----------------|
| Standard designation | M12 connector |
| Standards/regulations | IEC 61076-2-101 |
| Flammability rating according to UL 94 | HB |

Cable

| | |
|---|---------------------------------------|
| Cable type | PUR halogen-free black |
| Cable type (abbreviation) | PUR |
| Cable abbreviation | Li9Y11Y |
| UL AWM style | 20549 |
| Conductor cross section | 3x 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) |
| | approx. 0.5 mm (Outer cable sheath) |
| Wire colors | brown, blue, black |
| Overall twist | 3 wires, twisted |
| External sheath, color | black-gray RAL 7021 |
| External cable diameter D | 3.85 mm ±0.15 mm |
| Smallest bending radius, fixed installation | 19 mm |
| Smallest bending radius, movable installation | 38 mm |
| Number of bending cycles | 10000000 |
| Bending radius | 44 mm |

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Cable

| | |
|---------------------------------|---|
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s ² |
| Cable weight | 23 kg/km |
| Outer sheath, material | PUR |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 100 GΩ*km (at 20 °C) |
| Conductor resistance | max. 58 Ω/km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V |
| Test voltage, cable | ≥ 3000 V |
| Special properties | Flexible cable conduit capable |
| | Silicone-free |
| | Free of substances which would hinder coating with paint or varnish |
| Flame resistance | in accordance with UL 758/1581 FT2 |
| | DIN EN 60332-2-2 (20 s) |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | Highly resistant to acids, alkaline solutions and solvents |
| | hydrolysis and microbe resistant |
| | partly UV-resistant in accordance with DIN EN ISO 4892-2-A |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) |
| | -25 °C ... 80 °C (cable, flexible installation) |

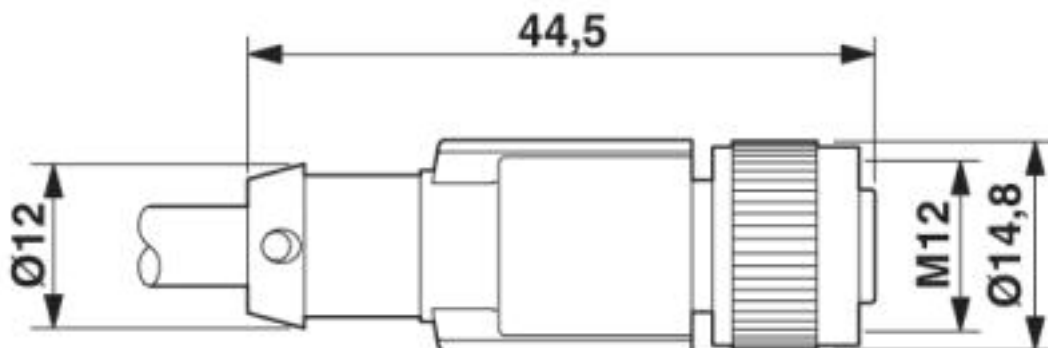
Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

Drawings

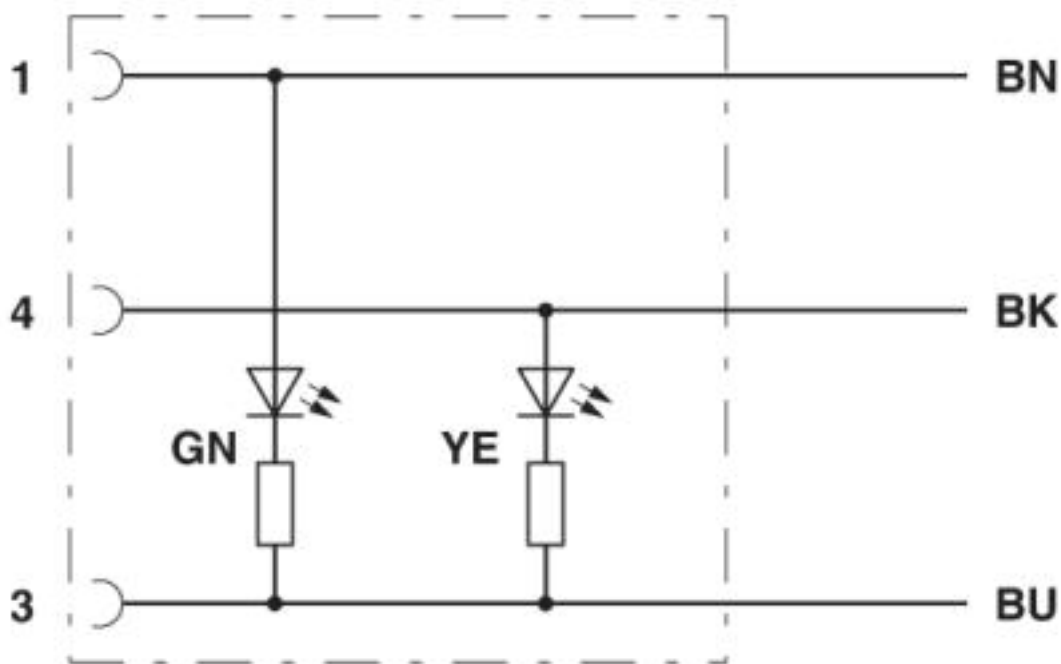
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Dimensional drawing



Socket M12 x 1, straight, with LED

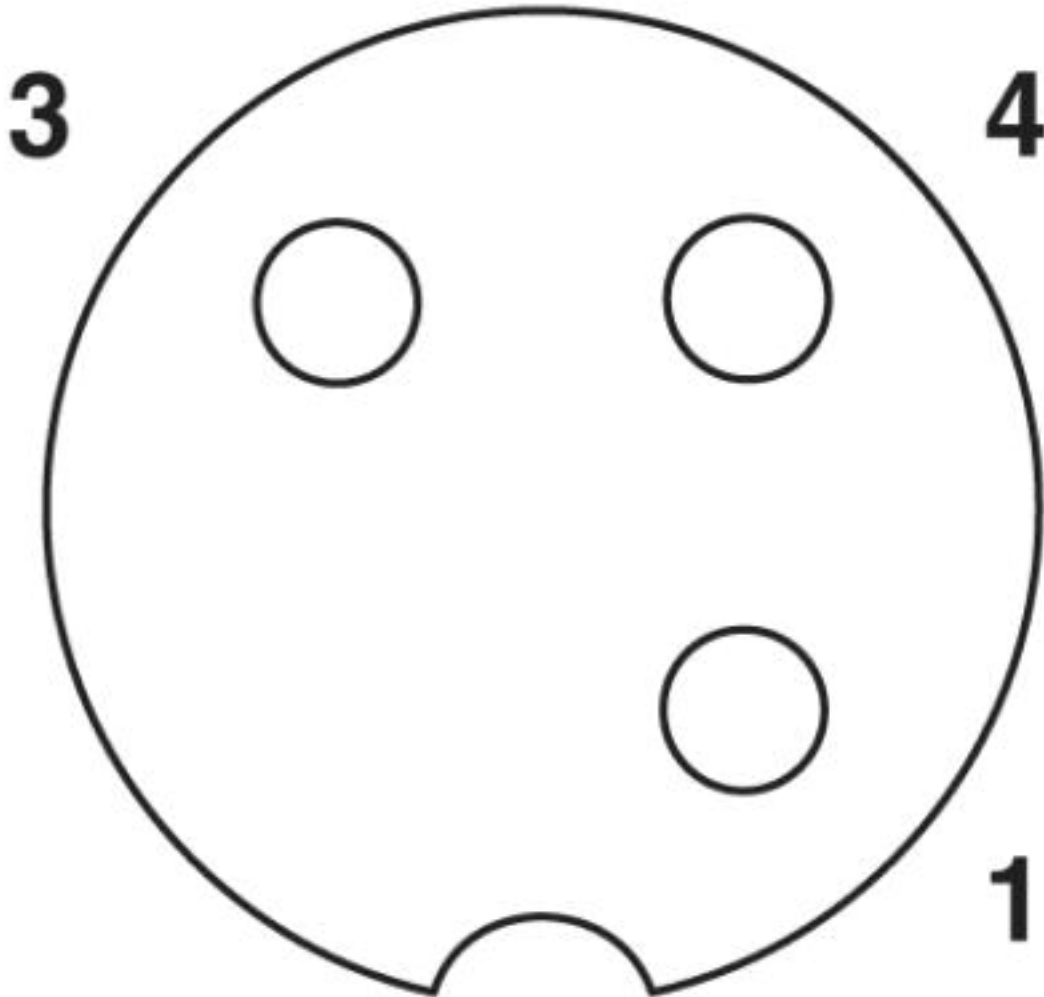
Circuit diagram



Contact assignment of M12 sockets with LED

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Schematic diagram



Pin assignment M12 socket, 3-pos., A-coded, view female side

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approval details

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Approvals

| | | | |
|--------------------|--|---|---------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |
| | | | |
| Nominal voltage UN | | 24 V | |
| Nominal current IN | | 4 A | |

| | | | |
|--------------------|--|---|---------------|
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |
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| | | |
|-----|--|---------------|
| EAC | | EAC-Zulassung |
|-----|--|---------------|

| | |
|--------------|--|
| cULus Listed | |
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