

Sensor/Actuator cable - SAC-3P- 1,5-PUR/M 8FR-2L - 1671069

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Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, Free cable end, on Socket angled M8, with 2 LEDs, Cable length: 1.5 m

Product Features

- ✓ 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



Key commercial data

| | |
|----------------------|---|
| Packing unit | 1 PCE |
| GTIN |  4 017918 134914 |
| 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 | 3 |
| Volume resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Length of cable | 1.5 m |
| Stripping length of the free conductor end | 50 mm |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |

General characteristics

| | |
|-----------------------|--------------------------------------|
| Standards/regulations | M8 plug-in connector IEC 61076-2-104 |
|-----------------------|--------------------------------------|

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Technical data

General characteristics

| | |
|-----------------------------|---|
| Coding | A - standard |
| Surge voltage category | II |
| Pollution degree | 3 |
| Degree of protection | IP65 |
| Degree of protection | IP67 |
| Degree of protection | IP68 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.2 Nm (M8 plug-in connectors) |
| 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 |
| Status display | 2 LEDs |

Conductor data

| | |
|---|---------------------------------------|
| Cable type | PUR halogen-free black |
| Cable type (abbreviation) | PUR |
| Cable abbreviation | Li9Y11Y-HF |
| UL AWM style | 20549 |
| Conductor cross section | 3x 0.25 mm ² (signal line) |
| AWG signal line | 24 |
| Conductor structure signal line | 32x 0.10 mm |
| Core diameter including insulation | 1.17 mm ±0.02 mm (signal line) |
| Thickness, insulation | ≥ 0.38 mm (Core insulation) |
| Thickness, insulation | approx. 0.9 mm (Outer cable sheath) |
| Wire colors | brown, blue, black |
| Overall twist | 3 wires, twisted |
| Length of twist, overall twist | 40 mm |
| External sheath, color | Black-gray RAL 7021 |
| External cable diameter D | 4.4 mm ±0.15 mm |
| Smallest bending radius, fixed installation | 22 mm |
| Smallest bending radius, movable installation | 44 mm |
| Number of bending cycles | 4000000 |
| Bending radius | 44 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |

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Technical data

Conductor data

| | |
|---------------------------------|---|
| Acceleration | 10 m/s ² |
| Cable weight | 24 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 | ≤ 78 Ω/km (at 20 °C) |
| Nominal voltage, conductor | ≤ 300 V |
| Test voltage, conductor | ≥ 3000 V |
| Special properties | Flexible cable conduit capable |
| Special properties | Silicone-free |
| Special properties | Free of substances which would hinder coating with paint or varnish |
| Flame resistance | in accordance with DIN UL-Style 20549 |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | hydrolysis and microbe resistant |
| Other resistance | Highly resistant to acids, alkaline solutions and solvents |
| Other resistance | Resistant to salt water |
| Other resistance | partly UV-resistant in accordance with DIN EN ISO 4892-2-A |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, flexible installation) |

Classifications

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000830 |
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

UNSPSC

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

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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 |

Approvals

Approvals


Approvals


UL Listed / GOST / cUL Listed / GOST / cULus Listed

Ex Approvals

Approvals submitted

Approval details

| | |
|---|------|
| UL Listed  | |
| Nominal current I _N | 4 A |
| Nominal voltage U _N | 24 V |

| | |
|--|--|
| GOST  | |
|--|--|

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Approvals

| | |
|--------------------|------|
| cUL Listed | |
| | |
| Nominal current IN | 4 A |
| Nominal voltage UN | 24 V |

| | |
|------|--|
| GOST | |
|------|--|

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

Accessories

Accessories

Marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

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Accessories

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Conductor marker carrier - PATG 2/23 - 1013850



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 23 mm

Conductor marker carrier - PATG 3/23 - 1013863



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 23 mm

Conductor marker carrier - PATG 4/23 - 0808011



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 23 mm

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Protection and sealing elements

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Accessories

Screw plug - PROT-M 8 MS-PA-CHAIN - 1430860

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



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 \varnothing 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 screwdriver - TSD 02 SAC - 1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

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Accessories

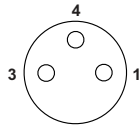
Tool - SAC BIT M8-D10 - 1208461



Nut for assembling sensor/actuator cables with M8 connector and for M8 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

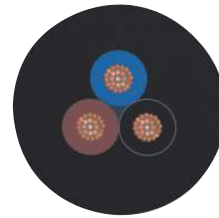
Drawings

Schematic diagram



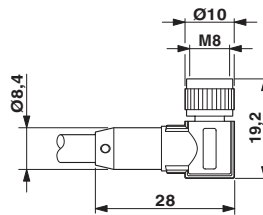
Pin assignment M8 socket, 3-pos., view female side

Cable cross section



PUR halogen-free black [PUR]

Dimensioned drawing



Socket M8 x 1, angled, with LED

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Circuit diagram

