

Sensor/Actuator cable - SAC-8P-M12MR/ 5,0-PUR SH - 1522833

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Sensor/Actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, shielded, Plug angled M12, A-coded, on free cable end, Cable length: 5 m

Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our standard: robust halogen-free PUR cable
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 017918 957629 |
| Weight per Piece (excluding packing) | 285.9 g |
| Custom tariff number | 85444290 |
| Country of origin | Poland |

Technical data

Dimensions

| | |
|--|-------|
| Length of cable | 5 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 |
| | IP67 |

General

| | |
|-----------------------|-----|
| Rated current at 40°C | 2 A |
|-----------------------|-----|

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Technical data

General

| | |
|------------------------------|-------------------------------|
| Rated voltage | 30 V |
| Number of positions | 8 |
| Contact resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Protective circuit/component | Unwired |
| Overvoltage category | II |
| Pollution degree | 3 |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm (M12 connector) |

Material

| | |
|--|---|
| Flammability rating according to UL 94 | HB |
| Contact material | CuZn |
| 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 |

Cable

| | |
|---|--|
| Cable type | PUR halogen-free black |
| Cable type (abbreviation) | PUR |
| Cable abbreviation | LiF9YC11Y |
| UL AWM style | 20549 / 10493 (80°C/300 V) |
| Conductor cross section | 8x 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 |
| Wire colors | Brown, white, green, yellow, gray, pink, blue, red |
| Overall twist | 8 wires around filler to the core |
| Shielding | Tinned copper braided shield |
| Optical shield covering | 85 % |
| External sheath, color | black RAL 9005 |
| External cable diameter D | 5.9 mm ±0.2 mm |
| Smallest bending radius, fixed installation | 47.2 mm |
| Smallest bending radius, movable installation | 59 mm (up to +60°C) |

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Technical data

Cable

| | |
|---------------------------------|--|
| Number of bending cycles | 4000000 |
| Bending radius | 59 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s ² |
| Outer sheath, material | PUR |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 1 GΩ*km (at 20 °C) |
| Conductor resistance | ≤ 78 Ω/km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V AC |
| Test voltage, cable | ≥ 3000 V AC (Spark test) |
| Test voltage Core/Shield | ≥ 2000 V AC (for 60 s) |
| Special properties | Flexible cable conduit capable |
| Flame resistance | in acc. with UL FT-2 |
| | according to UL 758/1581 (horizontal) |
| | in accordance with UL 758/1581 FT2 |
| | According to DIN EN 60332-2-2 (20 s) |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| | in accordance with DIN EN 50267-2-1 |
| Other resistance | 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) |

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 |

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Classifications

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000830 |
| 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 |

Approvals

Approvals


Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approvals submitted

Approval details

| | |
|---|------|
| UL Listed  | |
| Nominal current I _N | 2 A |
| Nominal voltage U _N | 30 V |

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Approvals

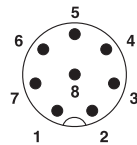
| | |
|--------------------------------|------|
| cUL Listed | |
| Nominal current I _N | 2 A |
| Nominal voltage U _N | 30 V |

EAC

cULus Listed

Drawings

Schematic diagram



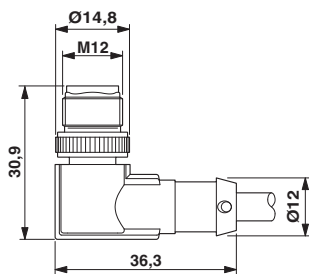
Pin assignment M12 plug, 8-pos., view plug side

Cable cross section



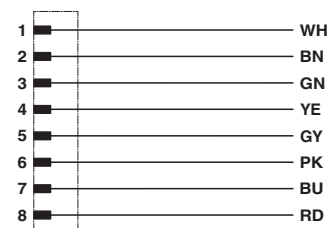
PUR halogen-free black [PUR]

Dimensional drawing



M12 x 1 male plug, angled, shielded

Circuit diagram



Contact assignment of the M12 plug