

Sensor/actuator cable - SAC-5P-M12MS/ 5,3-802 SN - 1419968

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Sensor/actuator cable, 5-position, PUR, gray RAL 7001, cable length: 5.3 m, for robots and drag chains, Customer version

Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Flexible: cable supports a high degree of torsion and bending
- ✓ Reliable solution for the body shop as cable is resistant to welding sparks

Key Commercial Data

| | |
|------------------------|---------------|
| Packing unit | 1 pc |
| Minimum order quantity | 100 pc |
| GTIN | |
| GTIN | 4055626198149 |

Technical data

Dimensions

| | |
|-----------------|-------|
| Length of cable | 5.3 m |
|-----------------|-------|

General

| | |
|------------------------------|-------------------------------|
| Rated current at 40°C | 4 A |
| Rated voltage | 48 V AC 60 V DC |
| Number of positions | 5 |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Protective circuit/component | unwired |
| Overvoltage category | II |
| Degree of pollution | 3 |

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Technical data

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 |

Standards and Regulations

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

Cable

| | |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Note | Due to the extremely robust outer sheath, this cable should only be stripped in 5 cm increments. |
| Cable type | PUR, halogen-free, highly stranded, resistant to welding sparks, gray |
| Cable type (abbreviation) | 802 |
| Cable abbreviation | Li12Y11Y-HF |
| 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 | 1.3 mm ±0.05 mm (Signal line) |
| Wire colors | Black, brown, blue, white, green/yellow |
| Overall twist | 5 wires around filler to the core |
| External sheath, color | gray RAL 7001 |
| External cable diameter D | 5.1 mm ±0.2 mm |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 5 x D |
| Number of bending cycles | 10000000 |
| Minimum bending radius, drag chain applications | 7,5 x D |
| Traversing path | 5 m |
| Traversing rate | 3.3 m/s |
| Acceleration | 5 m/s ² |
| Number of bending cycles | 15000000 |
| Bending radius | 50 mm |
| Traversing path | 0.9 m |
| Traversing rate | 5 m/s |
| Acceleration | 30 m/s ² |
| Torsion force | ± 360 °/m (1 000 000 torsion cycles) |
| Outer sheath, material | PUR |
| Material conductor insulation | PES |
| Conductor material | Bare Cu litz wires |

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Technical data

Cable

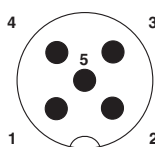
| | |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Insulation resistance | ≥ 20 MΩ*km |
| Conductor resistance | approx. 53 Ω/km |
| Nominal voltage, cable | 300 V |
| Test voltage, cable | 1200 V |
| Special properties | Cable jacket is welding spark-resistant, recyclable, matt, low-adhesion, abrasion-resistant, flame-retardant, and self-extinguishing |
| | Free from silicone and cadmium |
| | Free of substances which would hinder coating with paint or varnish |
| Flame resistance | DIN VDE 0472 part 804, test type B |
| | IEC 60332-1 |
| | in acc. with UL FT-2 |
| Halogen-free | The cable is halogen-free |
| Resistance to oil | according to VDE 0472 Part 803 |
| Other resistance | Highly resistant to acids, alkaline solutions and solvents |
| | Silicone-free |
| Ambient temperature (operation) | -40 °C ... 90 °C (cable, fixed installation) |
| | -30 °C ... 90 °C (cable, flexible installation) |
| | to 120 °C (for 3000 h) |

Environmental Product Compliance

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

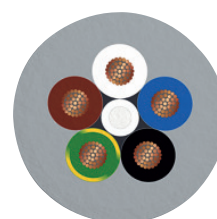
Drawings

Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side

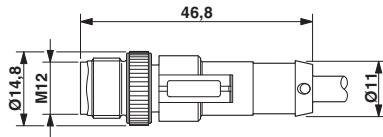
Cable cross section



PUR, halogen-free, highly stranded, resistant to welding sparks, gray [802]

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Dimensional drawing



Circuit diagram



Plug, M12 x 1, straight, shielded

Contact assignment of the M12 plug

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details

| | | | |
|--------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |
| Nominal voltage UN | | 125 V | |
| Nominal current IN | | 4 A | |

| | | | |
|--------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |
| Nominal voltage UN | | 125 V | |
| Nominal current IN | | 4 A | |

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

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