

Sensor/actuator cable - SAC-3P-M12MS/1,0-150/A-1L-Z - 1400620

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Sensor/actuator cable, 3-position, PUR halogen-free, irradiated, highly flexible, orange RAL 2003, Plug straight M12, A-coded, on Valve connector A, with 1 LED, connected with Z diode, cable length: 1 m

As shown in the illustration but with an orange conductor



Key Commercial Data

| | |
|------------------------|---------------|
| Packing unit | 1 pc |
| Minimum order quantity | 100 pc |
| GTIN | |
| GTIN | 4046356509275 |

Technical data

Dimensions

| | |
|-----------------|-----|
| Length of cable | 1 m |
|-----------------|-----|

Ambient conditions

| | |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| | -20 °C ... 85 °C (valve plug) |
| Degree of protection | IP65 |
| | IP67 |

General

| | |
|-----------------------|-------------------------------|
| Rated current at 40°C | 4 A |
| Rated voltage | 24 V AC |
| | 24 V DC |
| Number of positions | 3 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |

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Technical data

General

| | |
|------------------------------|-------------------------------|
| | Valve connector EN 175301-803 |
| Status display | 1 LED |
| Protective circuit/component | Z diode |
| Overvoltage category | III |
| Degree of pollution | 3 |
| Insertion/withdrawal cycles | ≥ 100 (M12 connector) |
| Torque | 0.4 Nm (M12 connector) |
| | 0.6 Nm (Valve 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 |
| Valve plug contact material | CuSn |
| Valve plug contact surface material | Sn |
| Valve plug contact insert material | PA 6.6 |
| Material housing valve plug | TPU |
| Material, knurls | Zinc die-cast, nickel-plated |
| Sealing material | TPU (Seal molded) |

Standards and Regulations

| | |
|--|-----------------|
| Standard designation | M12 connector |
| Standards/regulations | IEC 61076-2-101 |
| Standard designation | Valve connector |
| Standards/regulations | EN 175301-803 |
| Flammability rating according to UL 94 | HB |

Cable

| | |
|------------------------------------|--------------------------------------|
| Cable type | PUR irradiated halogen-free orange |
| Cable type (abbreviation) | 150 |
| Cable abbreviation | Li12Y11X |
| Conductor cross section | 3x 0.5 mm ² (Signal line) |
| AWG signal line | 20 |
| Conductor structure signal line | 28x 0.15 mm |
| Core diameter including insulation | 1.46 mm ±0.02 mm (Signal line) |
| Thickness, insulation | ≥ 0.21 mm (Core insulation) |
| | approx. 0.6 mm (Outer cable sheath) |
| Wire colors | black 1, black 2, green/yellow |
| Overall twist | 3 wires, twisted |
| External sheath, color | orange RAL 2003 |

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Technical data

Cable

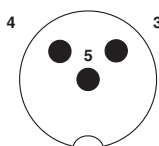
| | |
|---------------------------------|--|
| External cable diameter D | 4.5 mm ±0.15 mm |
| Number of bending cycles | 5000000 |
| Bending radius | 45 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Cable weight | 31 kg/km |
| Outer sheath, material | PUR |
| Material conductor insulation | TPE-E |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 100 MΩ*km (at 20 °C) |
| Conductor resistance | max. 39 Ω/km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V |
| Test voltage, cable | ≥ 3000 V |
| Special properties | Silicone-free |
| | Irradiated |
| Flame resistance | in accordance with DIN UL-Style 20549 |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, fixed installation) |
| | -5 °C ... 80 °C (cable, flexible installation) |

Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

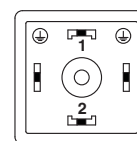
Drawings

Schematic diagram



Pin assignment M12 plug, 3-pos., valve connector

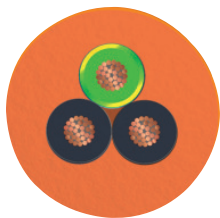
Schematic diagram



Valve connector pin assignment, type A

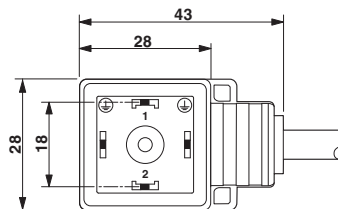
Sensor/actuator cable - SAC-3P-M12MS/1,0-150/A-1L-Z - 1400620

Cable cross section



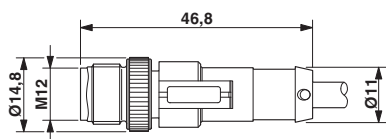
PUR irradiated halogen-free orange [150]

Dimensional drawing



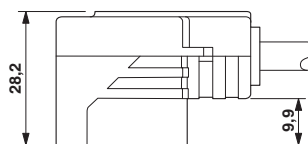
Valve connector, type A

Dimensional drawing



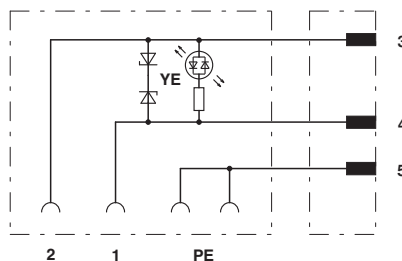
Plug, M12 x 1, straight, shielded

Dimensional drawing



Valve connector, type A, side view

Circuit diagram



Contact assignment of M12 plug and valve connector

Approvals

Approvals

Approvals


CSA / CSAus / cCSAus


Ex Approvals

Approval details

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Approvals

| | | | |
|--------------------|---|---|-------|
| CSA |  | http://www.csagroup.org/services-industries/product-listing/ | 13631 |
| Nominal voltage UN | | 24 V | |
| Nominal current IN | | 4 A | |

| | | | |
|--------------------|---|---|-------|
| CSAus |  | http://www.csagroup.org/services-industries/product-listing/ | 13631 |
| Nominal voltage UN | | 24 V | |
| Nominal current IN | | 4 A | |

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|--------|--|--|--|
| cCSAus |  | | |
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