

SAC-5P-M12MS/ 0,13-186/M12FS - Sensor/actuator cable



1437229

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Sensor/actuator cable, 5-position, PUR, black-gray RAL 7021, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 0.13 m

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1437229 |
| Packing unit | 25 pc |
| Minimum order quantity | 25 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF03 |
| Product key | AF1CDA |
| GTIN | 4046356458825 |
| Weight per piece (including packing) | 32.2 g |
| Weight per piece (excluding packing) | 32.2 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

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Technical data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Number of positions | 5 |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | A |

Insulation characteristics

| | |
|----------------------|----|
| Overvoltage category | II |
| Degree of pollution | 3 |

Material specifications

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

Electrical properties

| | |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage U_N | 48 V AC |
| | 60 V DC |
| Nominal current I_N | 4 A |

Mechanical properties

Mechanical data

| | |
|-----------------------------|------------|
| Insertion/withdrawal cycles | ≥ 100 |
|-----------------------------|------------|

Signaling

| | |
|------------------------|----|
| Status display | no |
| Status display present | no |

Connector

Connection 1

| | |
|---------------------|-------------------|
| Type | Plug straight M12 |
| Number of positions | 5 |
| Coding type | A |

Connection 2

| | |
|------|---------------------|
| Type | Socket straight M12 |
|------|---------------------|

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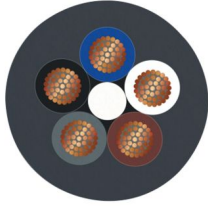
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| | |
|---------------------|---|
| Number of positions | 5 |
| Coding type | A |

Cable/line

| | |
|--------------|--------|
| Cable length | 0.13 m |
|--------------|--------|

PUR POWER 0.75 mm² black [186]

| | |
|---|---|
| Dimensional drawing |  |
| Cable weight | 67 kg/km |
| Number of positions | 5 |
| Shielded | no |
| Cable type | PUR POWER 0.75 mm ² black [186] |
| Conductor structure signal line | 42x 0.15 mm |
| AWG signal line | 18 |
| Conductor cross-section | 5x 0.75 mm ² (power line) |
| Wire diameter incl. insulation | 1.7 mm ±0.05 mm |
| External cable diameter | 6.30 mm ±0.2 mm |
| Outer sheath, material | PUR |
| External sheath, color | black-gray RAL 7021 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PVC |
| Single wire, color | brown, white, blue, black, gray |
| Thickness, insulation | ≥ 0.23 mm (Core insulation) ≥ 0.76 mm (Outer cable sheath) |
| Overall twist | 5 wires around filler to the core |
| Max. conductor resistance | max. 26 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 1 MΩ*km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V |
| Test voltage | ≥ 3000 V |
| Smallest bending radius, movable installation | 63 mm |
| Dynamic load capacity (bending) | Max. bending cycles: 2000000, Bending radius: 63 mm, Traversing path: 5 m, Traversing rate: 3 m/s, Acceleration: 5 m/s ² |
| Flame resistance | in accordance with DIN UL-Style 20549 |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation) |

Environmental and real-life conditions

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Ambient conditions

| | |
|---------------------------------|--|
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| | -25 °C ... 80 °C (cable, fixed installation) |
| | -5 °C ... 80 °C (Cable, flexible installation) |

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Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

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Schematic diagram



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

Schematic diagram



Pin assignment M12 socket, 5-pos., A-coded, socket side view

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Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27060311 |
| ECLASS-15.0 | 27060311 |

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Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

China RoHS

| | |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com