

SAC-4P-M12MS/10,0-PUR BK - Sensor/actuator cable



1563410

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Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: A, on free cable end, cable length: 10 m

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1563410 |
| Packing unit | 5 pc |
| Minimum order quantity | 50 pc |
| Product key | AF1CCA |
| GTIN | 4046356303286 |
| Weight per piece (including packing) | 305.5 g |
| Weight per piece (excluding packing) | 309 g |
| Country of origin | DE |

Technical data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Number of positions | 4 |
| 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 |
| 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 |
| Outer sheath, material | PUR |
| Conductor material | Bare Cu litz wires |

Electrical properties

| | |
|---------------------------|---------------------------|
| Insulation resistance | $\geq 10 \text{ M}\Omega$ |
| Nominal voltage U_N | 250 V AC |
| | 250 V DC |
| Nominal current I_N | 4 A |
| Max. conductor resistance | 58 Ω/km |

Mechanical properties

Mechanical data

| | |
|-----------------------------|------------|
| Insertion/withdrawal cycles | ≥ 100 |
| Max. bending cycles | 4000000 |

Signaling

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

Connector

Connection 1

| | |
|---------------------|-------------------|
| Type | Plug straight M12 |
| Number of positions | 4 |

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Coding type

A

Connection 2

Type

free cable end

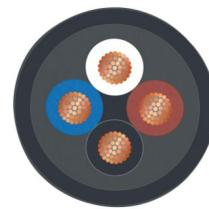
Cable/line

Cable length

10 m

PUR halogen-free black [PUR]

Dimensional drawing



Cable weight

30 kg/km

UL AWM Style

20549 / 10493 (80°C/300 V)

Number of positions

4

Shielded

no

Cable type

PUR halogen-free black [PUR]

Conductor structure signal line

42x 0.10 mm

AWG signal line

22

Conductor cross section

4x 0.34 mm² (Signal line)

Wire diameter incl. insulation

1.27 mm ±0.02 mm

External cable diameter

4.20 mm ±0.15 mm

Outer sheath, material

PUR

External sheath, color

black-gray RAL 7021

Conductor material

Bare Cu litz wires

Material wire insulation

PP

Single wire, color

brown, white, blue, black

Thickness, insulation

≥ 0.21 mm

Thickness, outer sheath

approx. 0.50 mm

Overall twist

4 wires, twisted

Max. conductor resistance

≤ 58 Ω/km

Insulation resistance

≥ 1 GΩ*km

Nominal voltage, cable

≤ 300 V

Test voltage

≥ 3000 V

Minimum bending radius, fixed installation

5 x D

Minimum bending radius, flexible installation

10 x D

Smallest bending radius, fixed installation

21 mm

Smallest bending radius, movable installation

42 mm

Dynamic load capacity (bending)

Max. bending cycles: 10000000, Bending radius: 42 mm,
Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3

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| | |
|---------------------------------|--|
| | m/s, Acceleration: 10 m/s ² |
| Dynamic load capacity (torsion) | Torsion: ± 180 °/m, Torsion cycles: ≥ 2000000 , Torsional frequency: 35 cycles/min. |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| Flame resistance | in accordance with UL 758/1581 FT2 DIN EN 60332-2-2 (20 s) |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant partly UV-resistant (in accordance with DIN EN ISO 4892-2-A) Low adhesion abrasion-resistant |
| Special properties | Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish flexible |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation) |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|--|
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| | -40 °C ... 80 °C (cable, fixed installation) |
| | -5 °C ... 80 °C (Cable, flexible installation) |

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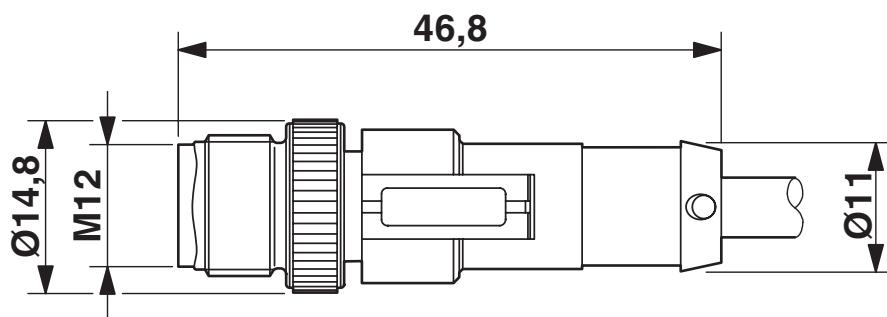
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Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

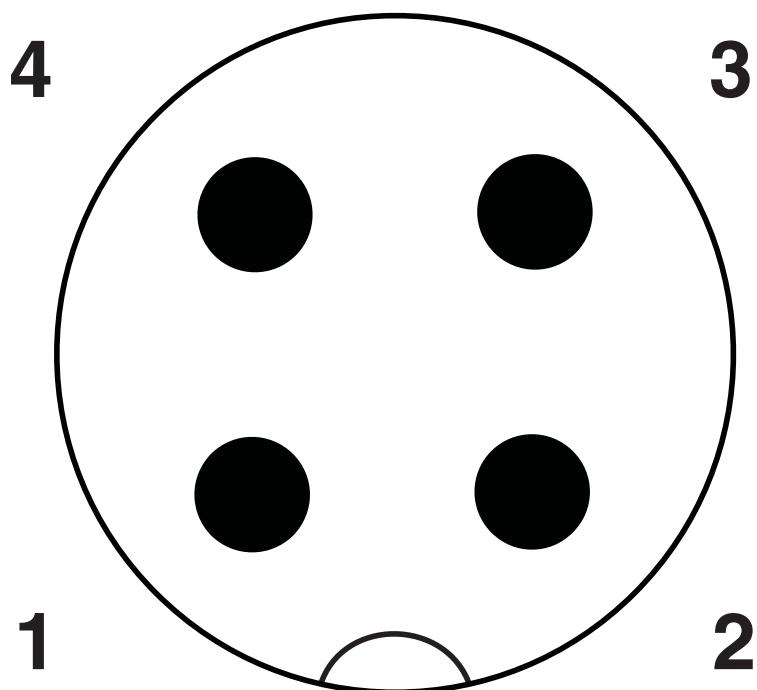
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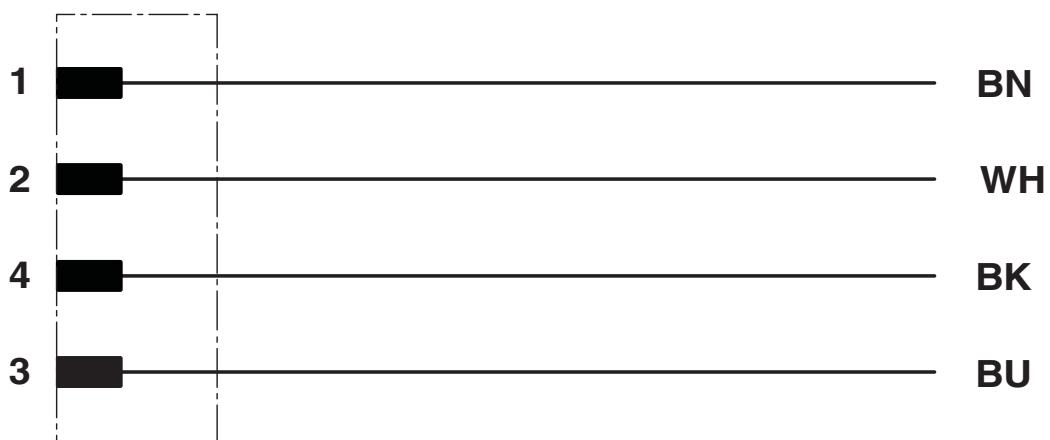


Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

Circuit diagram



Contact assignment of the M12 plug

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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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