

1539457

https://www.phoenixcontact.com/us/products/1539457

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug angled M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 15 m

Commercial data

| Item number | 1539457 |
|--------------------------------------|--------------------------------|
| Packing unit | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF03 |
| Product key | BF1CCA |
| GTIN | 4046356080422 |
| Weight per piece (including packing) | 451.3 g |
| Weight per piece (excluding packing) | 248.2 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |



1539457

https://www.phoenixcontact.com/us/products/1539457

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 | НВ |
|--|---|
| 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 | ≥ 100 MΩ |
|--------------------------------|----------|
| Nominal voltage U_N | 250 V AC |
| | 250 V DC |
| Nominal current I _N | 4 A |

Signaling

| Status display | No |
|------------------------|----|
| Status display present | No |

Connection data

Conductor connection

| T. 1 | |
|-------------------|--------|
| lightening torque | 0.4 Nm |

Connector

Connection 1

| Туре | Plug angled M12 SPEEDCON |
|---------------------|--------------------------|
| Number of positions | 4 |
| Locking type | SPEEDCON |
| Coding type | A |

Connection 2



1539457

https://www.phoenixcontact.com/us/products/1539457

| Туре | Socket straight M12 SPEEDCON |
|---------------------|------------------------------|
| Number of positions | 4 |
| Locking type | SPEEDCON |
| Coding type | A |

Cable/line

| Cable length | 15 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 |
| Max. bending cycles | 10000000 |



1539457

https://www.phoenixcontact.com/us/products/1539457

| Halogen-free | in accordance with DIN VDE 0472 part 815 |
|---------------------------------|---|
| | in accordance with DIN EN 50267-2-1 |
| Flame resistance | in accordance with UL 758/1581 FT2 |
| rianne resistance | |
| | 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) |

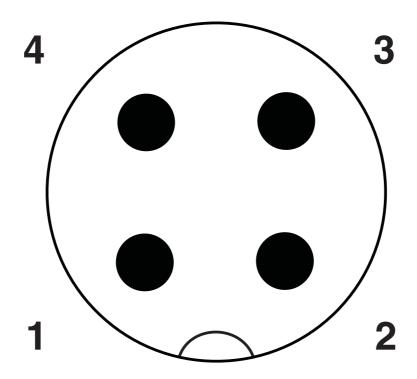


1539457

https://www.phoenixcontact.com/us/products/1539457

Drawings

Schematic diagram



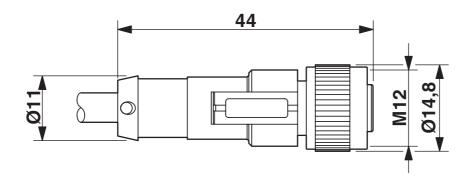
Pin assignment M12 plug, 4-pos., A-coded, view plug side



1539457

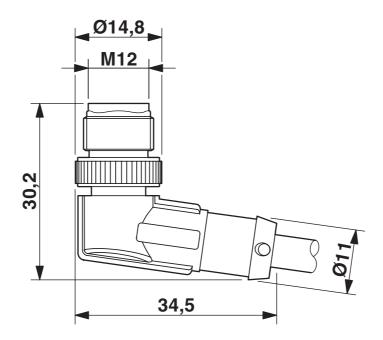
https://www.phoenixcontact.com/us/products/1539457

Dimensional drawing



M12 x 1 socket, straight

Dimensional drawing



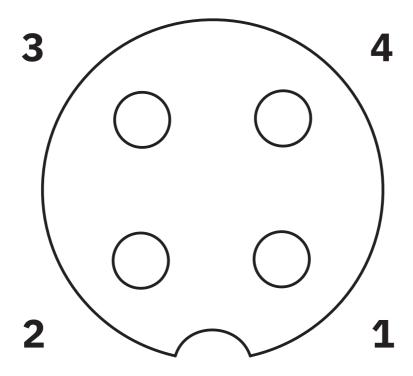
M12 x 1 male plug, angled



1539457

https://www.phoenixcontact.com/us/products/1539457

Schematic diagram



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



1539457

https://www.phoenixcontact.com/us/products/1539457

Classifications

ECLASS

| | ECLASS-11.0 | 27060311 | |
|--------|-------------|----------|--|
| | ECLASS-13.0 | 27060311 | |
| ETIM | | | |
| | ETIM 8.0 | EC001855 | |
| UNSPSC | | | |
| | UNSPSC 21.0 | 26121600 | |



1539457

https://www.phoenixcontact.com/us/products/1539457

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% | | |

Phoenix Contact 2024 @ - all rights reserved https://www.phoenixcontact.com

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