

SAC-4P-15,0-PUR/M12FS SH NC - Sensor/actuator cable



1417675

<https://www.phoenixcontact.com/us/products/1417675>

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, shielded, free cable end, on Socket straight M12, coding: A, cable length: 15 m, Shield not connected to knurl

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1417675 |
| Packing unit | 1 pc |
| Minimum order quantity | 50 pc |
| Note | Made to order (non-returnable) |
| Product key | AF1CCA |
| GTIN | 4055626119687 |
| Weight per piece (including packing) | 709.7 g |
| Weight per piece (excluding packing) | 709.7 g |
| Country of origin | PL |

SAC-4P-15,0-PUR/M12FS SH NC - Sensor/actuator cable



1417675

<https://www.phoenixcontact.com/us/products/1417675>

Technical data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Number of positions | 4 |
| No. of cable outlets | 1 |
| Shielded | yes |
| 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 | ≤ 10 MΩ |
| 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 | free cable end |
|------|----------------|

Connection 2


| | |
|---------------------|---------------------|
| Type | Socket straight M12 |
| Number of positions | 4 |
| Coding type | A |

SAC-4P-15,0-PUR/M12FS SH NC - Sensor/actuator cable

1417675

<https://www.phoenixcontact.com/us/products/1417675>

Cable/line

| | |
|---|--|
| Cable length | 15 m |
| PUR halogen-free black [PUR] | |
| Dimensional drawing |  |
| Cable weight | 36 kg/km |
| UL AWM Style | 20549 / 10493 (80°C/300 V) |
| Number of positions | 4 |
| Shielded | yes |
| 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 mm ² (Signal line) |
| Wire diameter incl. insulation | 1.27 mm ±0.02 mm (Signal line) |
| External cable diameter | 4.95 mm ±0.2 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 |
| Optical shield covering | 80 % |
| Max. conductor resistance | max. 58 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 100 GΩ*km (at 20 °C) |
| Wave impedance | ≥ 62 Ω (f = 10 MHz) |
| Cable capacity | ≤ 80 pF/m (Conductor-Conductor) ≤ 135 pF/m (Wire/shield) |
| 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 | 25 mm |
| Smallest bending radius, movable installation | 50 mm |
| Dynamic load capacity (bending) | Max. bending cycles: 10000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 |

SAC-4P-15,0-PUR/M12FS SH NC - Sensor/actuator cable



1417675

<https://www.phoenixcontact.com/us/products/1417675>

| | |
|---------------------------------|--|
| | m/s ² |
| Dynamic load capacity (torsion) | Torsion: ± 180 °/m, Torsion cycles: ≥ 5000000 , Torsional frequency: 35 cycles/min. |
| 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 |
| | 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 |
| | Resistant to salt water |
| | partly UV-resistant (in accordance with DIN EN ISO 4892-2-A) |
| | abrasion-resistant |
| Special properties | Flexible cable conduit capable |
| | Silicone-free |
| | Free of substances which would hinder coating with paint or varnish |
| | Low adhesion surface |
| 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 |
| | IP68 |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| | -25 °C ... 80 °C (cable, fixed installation) |
| | -5 °C ... 80 °C (Cable, flexible installation) |

SAC-4P-15,0-PUR/M12FS SH NC - Sensor/actuator cable

1417675

<https://www.phoenixcontact.com/us/products/1417675>

Drawings

Dimensional drawing



M12 x 1 socket, straight

SAC-4P-15,0-PUR/M12FS SH NC - Sensor/actuator cable

1417675

<https://www.phoenixcontact.com/us/products/1417675>

Schematic diagram



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

Circuit diagram



Contact assignment of the M12 socket

SAC-4P-15,0-PUR/M12FS SH NC - Sensor/actuator cable



1417675

<https://www.phoenixcontact.com/us/products/1417675>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1417675>

|  UL Listed Approval ID: FILE E 221474 | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 300 V | 4 A | - | - |

|  cUL Listed Approval ID: FILE E 221474 | | | | |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 300 V | 4 A | - | - |

SAC-4P-15,0-PUR/M12FS SH NC - Sensor/actuator cable



1417675

<https://www.phoenixcontact.com/us/products/1417675>

Classifications

ECLASS

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

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 26121600 |
|-------------|----------|

SAC-4P-15,0-PUR/M12FS SH NC - Sensor/actuator cable



1417675

<https://www.phoenixcontact.com/us/products/1417675>

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 2026 © - 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