

SAC-4P- 5,0-PUR/M12FR-2L-V2A - Sensor/actuator cable



1505290

<https://www.phoenixcontact.com/us/products/1505290>

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, free cable end, on Socket angled M12, coding: A, with 2 LEDs, cable length: 5 m

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1505290 |
| Packing unit | 5 pc |
| Minimum order quantity | 50 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF03 |
| Product key | AF1CCA |
| GTIN | 4017918857073 |
| Weight per piece (including packing) | 174.93 g |
| Weight per piece (excluding packing) | 167.69 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

SAC-4P- 5,0-PUR/M12FR-2L-V2A - Sensor/actuator cable



1505290

<https://www.phoenixcontact.com/us/products/1505290>

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 |
| 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 | Stainless steel |
| Outer sheath, material | PUR |
| Conductor material | Bare Cu litz wires |

Electrical properties

| | |
|---------------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage U_N | 24 V |
| 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 | 2 LEDs |
| Status display present | yes |

Connector

Connection 1

| | |
|------|----------------|
| Type | free cable end |
|------|----------------|

Connection 2

SAC-4P- 5,0-PUR/M12FR-2L-V2A - Sensor/actuator cable

1505290

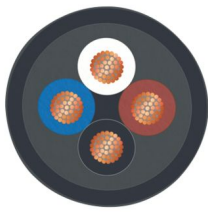
<https://www.phoenixcontact.com/us/products/1505290>

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

Cable/line

| | |
|--------------|-----|
| Cable length | 5 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 mm ² (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 m/s, Acceleration: 10 m/s ² |

SAC-4P- 5,0-PUR/M12FR-2L-V2A - Sensor/actuator cable



1505290

<https://www.phoenixcontact.com/us/products/1505290>

| | |
|---------------------------------|--|
| 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 |
| | 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) |

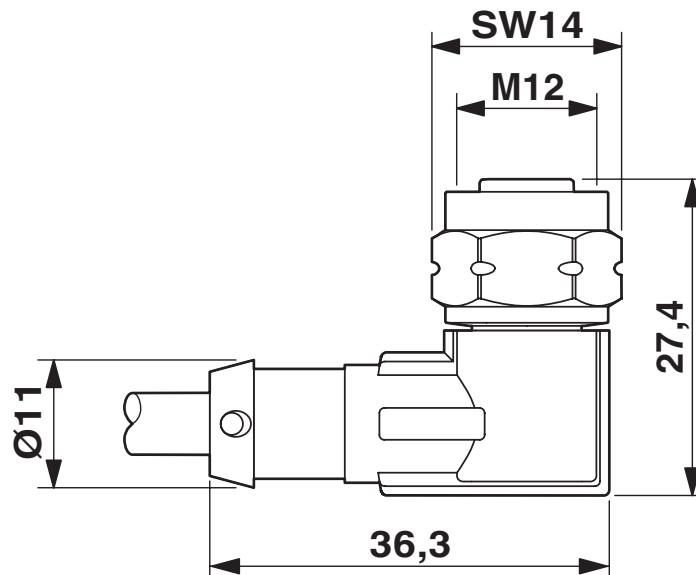
SAC-4P- 5,0-PUR/M12FR-2L-V2A - Sensor/actuator cable

1505290

<https://www.phoenixcontact.com/us/products/1505290>

Drawings

Dimensional drawing



Socket M12 x 1, angled, with LED

SAC-4P- 5,0-PUR/M12FR-2L-V2A - Sensor/actuator cable

1505290

<https://www.phoenixcontact.com/us/products/1505290>

Schematic diagram



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

Circuit diagram



Contact assignment of M12 sockets with LED

SAC-4P- 5,0-PUR/M12FR-2L-V2A - Sensor/actuator cable



1505290

<https://www.phoenixcontact.com/us/products/1505290>

Classifications

ECLASS

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

UNSPSC

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

SAC-4P- 5,0-PUR/M12FR-2L-V2A - Sensor/actuator cable



1505290

<https://www.phoenixcontact.com/us/products/1505290>

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