

SAC-4P- 5,0-28X/M12FR OD - Sensor/actuator cable



1407969

<https://www.phoenixcontact.com/us/products/1407969>

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, PE-X halogen-free, black-gray RAL 7021, free cable end, on Socket angled M12, coding: A, cable length: 5 m, for outdoor applications, with high-grade steel knurl

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1407969 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF03 |
| Product key | AF1CCA |
| GTIN | 4046356783491 |
| Weight per piece (including packing) | 233.9 g |
| Weight per piece (excluding packing) | 232.4 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

1407969

<https://www.phoenixcontact.com/us/products/1407969>

Technical data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Application | External areas |
| 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 | V0 |
| Seal material | FPM |
| Material of grip body | PP |
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | PP |
| Material for screw connection | Stainless steel |

Electrical properties

| | |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage U_N | 250 V AC |
| | 250 V DC |
| Nominal current I_N | 4 A |

Mechanical properties

Mechanical data

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

Signaling

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

Connection data

Conductor connection

| | |
|-------------------|------------------------|
| Tightening torque | 0.4 Nm (M12 connector) |
|-------------------|------------------------|

Connector

Connection 1

SAC-4P- 5,0-28X/M12FR OD - Sensor/actuator cable



1407969

<https://www.phoenixcontact.com/us/products/1407969>

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

Connection 2

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

Cable/line

| | |
|--------------|-----|
| Cable length | 5 m |
|--------------|-----|

PE-X black [28X]

| | |
|---|---|
| Dimensional drawing |  |
| Cable weight | 44 kg/km |
| Number of positions | 4 |
| Shielded | no |
| Cable type | PE-X black [28X] |
| Conductor structure signal line | 28x 0.15 mm |
| AWG signal line | 20 |
| Conductor cross-section | 4x 0.5 mm ² (Signal line) |
| Wire diameter incl. insulation | 1.6 mm ±0.05 mm (Signal line) |
| External cable diameter | 5.20 mm ±0.2 mm |
| Outer sheath, material | PE-X |
| External sheath, color | black-gray RAL 7021 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PE-X |
| Single wire, color | brown, white, blue, black |
| Thickness, insulation | approx. 0.30 mm (Core insulation) approx. 0.60 mm (Outer cable sheath) |
| Overall twist | 4 wires, twisted |
| Length of twist, overall twist | 61.6 mm |
| Max. conductor resistance | ≤ 39 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 100 MΩ*km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V AC |
| Test voltage | ≥ 3000 V AC |
| Smallest bending radius, fixed installation | 26 mm |
| Smallest bending radius, movable installation | 52 mm |
| Dynamic load capacity (bending) | Max. bending cycles: 2000000, Bending radius: 52 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 |

SAC-4P- 5,0-28X/M12FR OD - Sensor/actuator cable



1407969

<https://www.phoenixcontact.com/us/products/1407969>

| | |
|---------------------------------|--|
| | m/s ² |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| Flame resistance | according to DIN 60332-1-2 |
| | according to DIN EN 50266-2-5 |
| | according to IEC 60332-3-25 (bunched fire test) |
| Fume corrosiveness | according to IEC 60754 |
| Concentration of fumes | according to DIN EN 61034 |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | UV resistant (according to DIN VDE 0276-605) |
| Special properties | Irradiated |
| Ambient temperature (operation) | -40 °C ... 105 °C (cable, fixed installation) |
| | -15 °C ... 105 °C (Cable, flexible installation) |
| | 120 °C (at 48 h - see test report 19233) |
| | 180 °C (at 48 h - see test report 19233) |

Environmental and real-life conditions

Ambient conditions

| | |
|---|--|
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |
| | IP69K |
| Ambient temperature (operation) (male connector/female connector) | -40 °C ... 105 °C (Plug / socket) |
| Ambient temperature (operation) | -40 °C ... 105 °C (cable, fixed installation) |
| | -15 °C ... 105 °C (Cable, flexible installation) |

Standards and regulations

M12

| | |
|--------------------------|-----------------|
| Standard designation | M12 connector |
| Standards/specifications | IEC 61076-2-101 |

SAC-4P- 5,0-28X/M12FR OD - Sensor/actuator cable

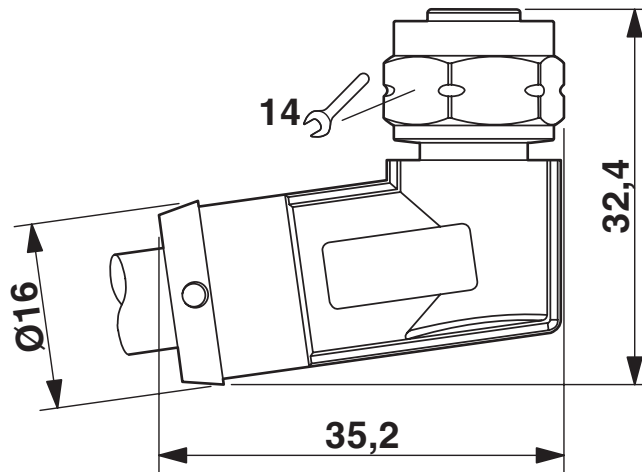
1407969

<https://www.phoenixcontact.com/us/products/1407969>



Drawings

Dimensional drawing



M12 x 1 socket, angled

Schematic diagram



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

Circuit diagram



Contact assignment of the M12 socket

SAC-4P- 5,0-28X/M12FR OD - Sensor/actuator cable



1407969

<https://www.phoenixcontact.com/us/products/1407969>

Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1407969>

DNV

Approval ID: TAE00002K4



EAC-RoHS

Approval ID: RU D-DE.HB35.B.00387

SAC-4P- 5,0-28X/M12FR OD - Sensor/actuator cable



1407969

<https://www.phoenixcontact.com/us/products/1407969>

Classifications

ECLASS

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

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC001855 |
|-----------|----------|

UNSPSC

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

SAC-4P- 5,0-28X/M12FR OD - Sensor/actuator cable



1407969

<https://www.phoenixcontact.com/us/products/1407969>

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% |
|-------------------------------------|----------------------------|

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 2.834 kg CO2e |
|---------|---------------|

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