

SAC-4P-MS/ 2,0-186/FS SCO - Sensor/actuator cable



1555716

<https://www.phoenixcontact.com/us/products/1555716>

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, black-gray RAL 7021, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 2 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Save time, thanks to installation with SPEEDCON fast locking system
- High-performance: connectors and cables with a large conductor cross-section for power supply

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1555716 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF03 |
| Product key | AF1CCA |
| GTIN | 4046356173711 |
| Weight per piece (including packing) | 134.4 g |
| Weight per piece (excluding packing) | 134.9 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

Technical data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Application | Standard |
| 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 | Zinc die-cast, nickel-plated |

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 |
|-------------------|--------|

Connector

Connection 1

SAC-4P-MS/ 2,0-186/FS SCO - Sensor/actuator cable



1555716

<https://www.phoenixcontact.com/us/products/1555716>

| | |
|---------------------|----------------------------|
| Type | Plug straight M12 SPEEDCON |
| Number of positions | 4 |
| Locking type | SPEEDCON |
| Coding type | A |

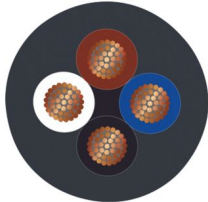
Connection 2

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

Cable/line

| | |
|--------------|-----|
| Cable length | 2 m |
|--------------|-----|

PUR POWER 0.75 mm² black [186]

| | |
|---------------------------------|---|
| Dimensional drawing |  |
| Cable weight | 57 kg/km |
| UL AWM Style | 20549 / 1061 (80°C/300 V) |
| Number of positions | 4 |
| Shielded | no |
| Cable type | PUR POWER 0.75 mm ² black [186] |
| Conductor structure signal line | 42x 0.15 mm |
| AWG signal line | 18 |
| Conductor cross-section | 4x 0.75 mm ² (power line) |
| Wire diameter incl. insulation | 1.75 mm ±0.05 mm |
| External cable diameter | 5.90 mm ±0.15 mm |
| Outer sheath, material | PUR |
| External sheath, color | black-gray RAL 7021 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PVC |
| Single wire, color | brown, white, blue, black |
| Thickness, insulation | ≥ 0.23 mm (Core insulation) ≥ 0.76 mm (Outer cable sheath) |
| Overall twist | 4 wires, twisted |
| Max. conductor resistance | max. 26 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 1 MΩ*km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V |
| Test voltage | ≥ 3000 V |

SAC-4P-MS/ 2,0-186/FS SCO - Sensor/actuator cable



1555716

<https://www.phoenixcontact.com/us/products/1555716>

| | |
|---|---|
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Smallest bending radius, fixed installation | 30 mm |
| Smallest bending radius, movable installation | 59 mm |
| Dynamic load capacity (bending) | Max. bending cycles: 2000000, Bending radius: 59 mm, Traversing path: 5 m, Traversing rate: 3 m/s, Acceleration: 5 m/s ² |
| Flame resistance | according to UL 758/1581 (horizontal) in accordance with UL 758/1581 FT2 |
| Resistance to oil | According to DIN EN 60811-2-1, 168 h at 100°C |
| Other resistance | hydrolysis and microbe resistant Low adhesion abrasion-resistant Resistant to salt water |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation) |

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

M12

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

Drawings

Dimensional drawing



M12 SPEEDCON plug, straight

Dimensional drawing



M12-SPEEDCON socket, straight

1555716

<https://www.phoenixcontact.com/us/products/1555716>

Schematic diagram



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

Schematic diagram



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

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

SAC-4P-MS/ 2,0-186/FS SCO - Sensor/actuator cable



1555716

<https://www.phoenixcontact.com/us/products/1555716>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1555716>

|  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 | - | - |

|  EAC-RoHS Approval ID: RU D-DE.HB35.B.00387 | |
|--|--|
|--|--|

SAC-4P-MS/ 2,0-186/FS SCO - Sensor/actuator cable



1555716

<https://www.phoenixcontact.com/us/products/1555716>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

SAC-4P-MS/ 2,0-186/FS SCO - Sensor/actuator cable



1555716

<https://www.phoenixcontact.com/us/products/1555716>

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 | 1.195 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