

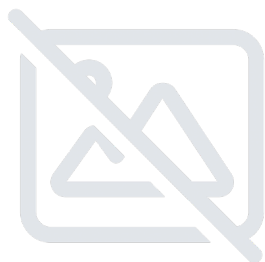
SAC-12P-MS/ 1,0-35T/MS SH SCO - Sensor/actuator cable



1446728

<https://www.phoenixcontact.com/us/products/1446728>

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, 12-position, PUR/PVC, black RAL 9005, shielded, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 1 m

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1446728 |
| Packing unit | 1 pc |
| Minimum order quantity | 25 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF03 |
| Product key | AF1CNA |
| GTIN | 4046356640282 |
| Weight per piece (including packing) | 128 g |
| Weight per piece (excluding packing) | 128 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |

SAC-12P-MS/ 1,0-35T/MS SH SCO - Sensor/actuator cable



1446728

<https://www.phoenixcontact.com/us/products/1446728>

Technical data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Number of positions | 12 |
| 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 | V0 |
| Seal material | NBR |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Contact material | CuZn |
| Contact surface material | Ni/Au |
| Contact carrier material | PA 6.6 |
| Material for screw connection | Zinc die-cast, nickel-plated |

Electrical properties

| | |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage U_N | 30 V AC |
| | 30 V DC |
| Nominal current I_N | 1.5 A |

Signaling

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

Connector

Connection 1

| | |
|---------------------|----------------------------|
| Type | Plug straight M12 SPEEDCON |
| Number of positions | 12 |
| Locking type | SPEEDCON |
| Coding type | A |

Connection 2

| | |
|---------------------|------------------------------|
| Type | Socket straight M12 SPEEDCON |
| Number of positions | 12 |
| Locking type | SPEEDCON |
| Coding type | A |


SAC-12P-MS/ 1,0-35T/MS SH SCO - Sensor/actuator cable



1446728

<https://www.phoenixcontact.com/us/products/1446728>

Cable/line

| | |
|---|---|
| Cable length | 1 m |
| Black PUR/PVC twisted pair [35T] | |
| Dimensional drawing |  |
| Cable weight | 87 kg/km |
| UL AWM Style | 20233 / 1061 (80°C/300 V) |
| Number of positions | 12 |
| Shielded | yes |
| Cable type | Black PUR/PVC twisted pair [35T] |
| Conductor structure signal line | 18x 0.10 mm |
| AWG signal line | 26 |
| Conductor cross section | 12x 0.14 mm ² (Signal line) |
| Wire diameter incl. insulation | 1 mm ±0.05 mm (Signal line) |
| External cable diameter | 8.50 mm ±0.2 mm |
| Outer sheath, material | PUR |
| External sheath, color | black RAL 9005 |
| Conductor material | Tin-plated Cu litz wires |
| Material wire insulation | PVC |
| Single wire, color | white-brown, green-yellow, gray-pink, blue-red, black-violet, gray/pink-red/blue |
| Twisted pairs | 2 cores to the pair |
| Overall twist | Six pairs around the filler to the core |
| Optical shield covering | 85 % |
| Max. conductor resistance | ≤ 142 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 10 MΩ*km (at 20 °C) |
| Nominal voltage, cable | 42 V AC |
| Test voltage | 1500 V AC |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Smallest bending radius, fixed installation | 43 mm |
| Smallest bending radius, movable installation | 85 mm |
| Dynamic load capacity (bending) | Max. bending cycles: 2000000, Bending radius: 85 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ² |
| Flame resistance | According to DIN EN 60332-1-2 According to VW-1 |

SAC-12P-MS/ 1,0-35T/MS SH SCO - Sensor/actuator cable



1446728

<https://www.phoenixcontact.com/us/products/1446728>

| | |
|---------------------------------|--|
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | hydrolysis and microbe resistant (in accordance with EN 50396) |
| Special properties | Flexible cable conduit capable |
| Ambient temperature (operation) | -40 °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) | -25 °C ... 90 °C (Plug / socket) |
| | -40 °C ... 80 °C (cable, fixed installation) |
| | -5 °C ... 80 °C (Cable, flexible installation) |

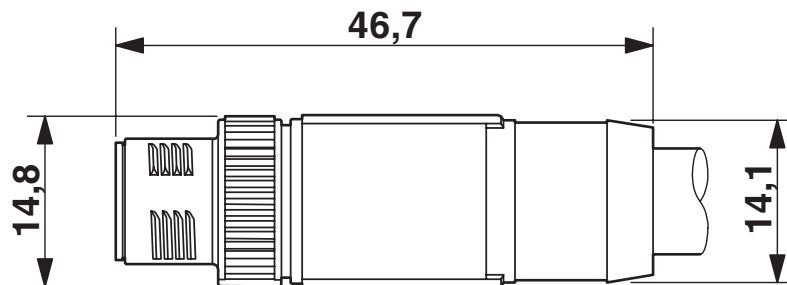
SAC-12P-MS/ 1,0-35T/MS SH SCO - Sensor/actuator cable

1446728

<https://www.phoenixcontact.com/us/products/1446728>

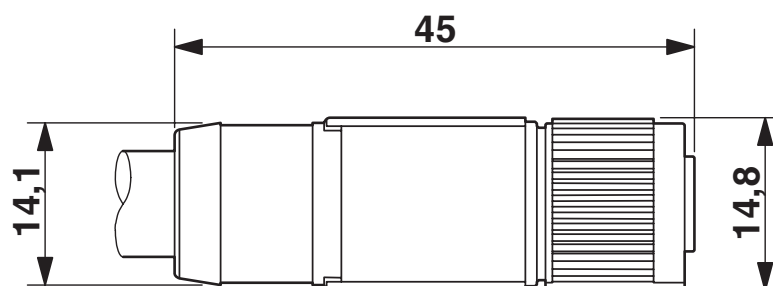
Drawings

Dimensional drawing



M12 SPEEDCON plug, straight, shielded

Dimensional drawing



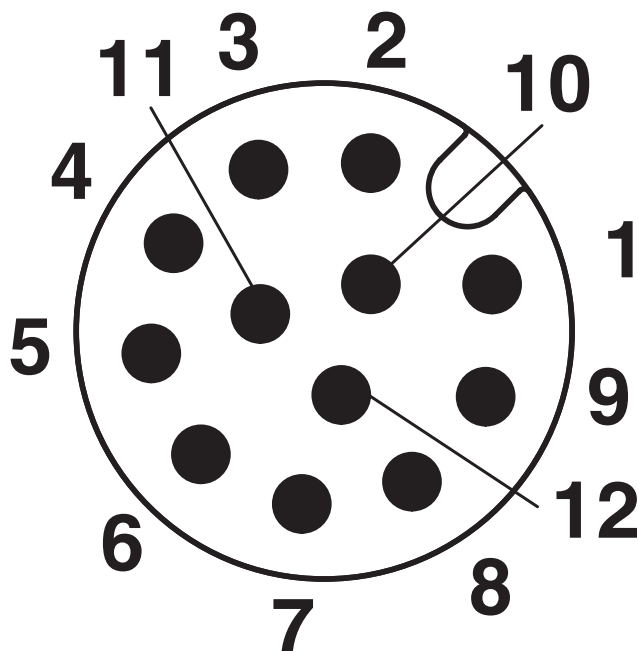
Socket M12-SPEEDCON, straight, shielded

SAC-12P-MS/ 1,0-35T/MS SH SCO - Sensor/actuator cable

1446728

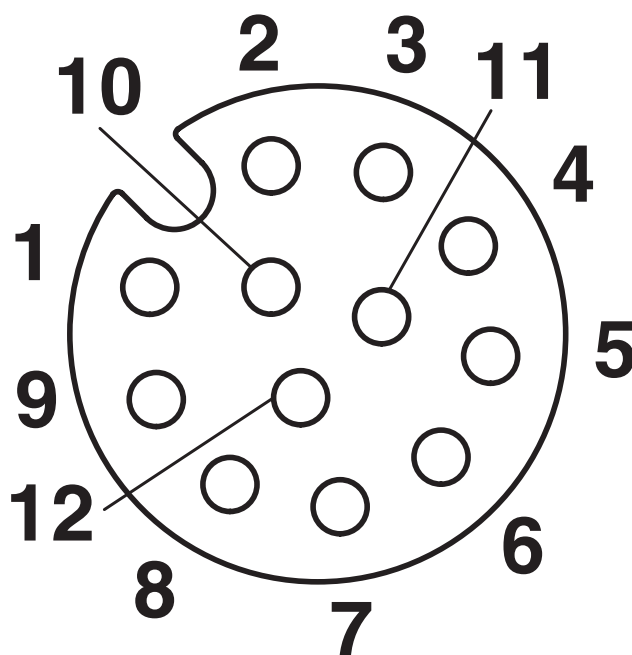
<https://www.phoenixcontact.com/us/products/1446728>

Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view

Schematic diagram



Pin assignment M12, 12-pos., female side view

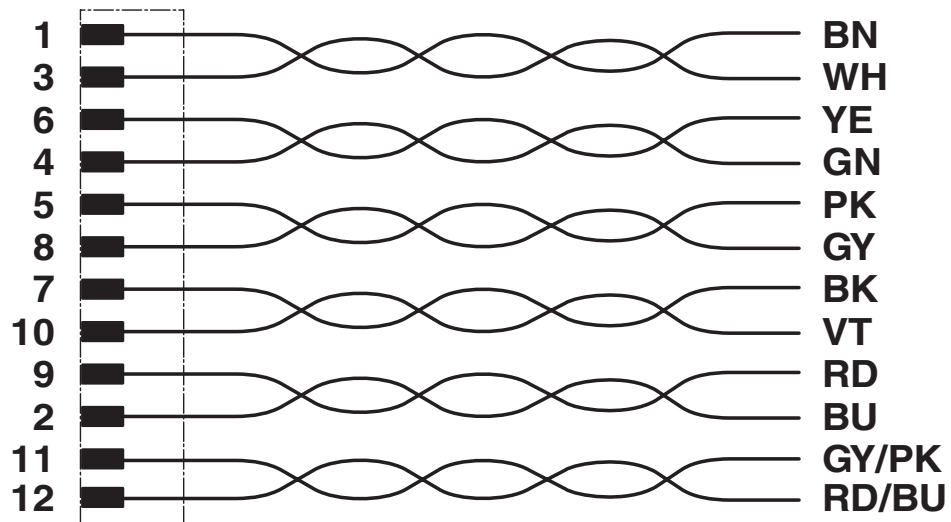
SAC-12P-MS/ 1,0-35T/MS SH SCO - Sensor/actuator cable



1446728

<https://www.phoenixcontact.com/us/products/1446728>

Circuit diagram



Contact assignment of the M12 plug


SAC-12P-MS/ 1,0-35T/MS SH SCO - Sensor/actuator cable



1446728
<https://www.phoenixcontact.com/us/products/1446728>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1446728>

| keine | <div>UL Listed Approval ID: E221474</div> | | | |
|-------|---|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | 30 V | 1 A | - | - |

SAC-12P-MS/ 1,0-35T/MS SH SCO - Sensor/actuator cable



1446728

<https://www.phoenixcontact.com/us/products/1446728>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

SAC-12P-MS/ 1,0-35T/MS SH SCO - Sensor/actuator cable



1446728

<https://www.phoenixcontact.com/us/products/1446728>

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 2025 © - 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