

SAC-12P- 3,0-35T/FR SH SCO - Sensor/actuator cable



1430174

<https://www.phoenixcontact.com/us/products/1430174>

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, free cable end, on Socket angled M12 SPEEDCON, coding: A, cable length: 3 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Save time, thanks to installation with SPEEDCON fast locking system
- Save space – with high-pos. connectors
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1430174 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF03 |
| Product key | AF1CNA |
| GTIN | 4046356322447 |
| Weight per piece (including packing) | 299.9 g |
| Weight per piece (excluding packing) | 299.8 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |

SAC-12P- 3,0-35T/FR SH SCO - Sensor/actuator cable



1430174

<https://www.phoenixcontact.com/us/products/1430174>

Technical data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Application | Standard |
| 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 |

Connection data

Conductor connection

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

Connector

Connection 1

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

Connection 2

| | |
|---------------------|----------------------------|
| Type | Socket angled M12 SPEEDCON |
| Number of positions | 12 |

SAC-12P- 3,0-35T/FR SH SCO - Sensor/actuator cable



1430174

<https://www.phoenixcontact.com/us/products/1430174>

| | |
|--------------|----------|
| Locking type | SPEEDCON |
| Coding type | A |

Cable/line

| | |
|--------------|-----|
| Cable length | 3 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 |

SAC-12P- 3,0-35T/FR SH SCO - Sensor/actuator cable



1430174

<https://www.phoenixcontact.com/us/products/1430174>

| | |
|---------------------------------|--|
| Flame resistance | According to DIN EN 60332-1-2 |
| | According to VW-1 |
| 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) (male connector/female connector) | -25 °C ... 85 °C (Plug / socket) |
| Ambient temperature (operation) (Cable, fixed installation) | -40 °C ... 80 °C (cable, fixed installation) |
| Ambient temperature (operation) (Cable, flexible installation) | -5 °C ... 80 °C (Cable, flexible installation) |

Standards and regulations

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

SAC-12P- 3,0-35T/FR SH SCO - Sensor/actuator cable

1430174

<https://www.phoenixcontact.com/us/products/1430174>

Drawings

Dimensional drawing



Socket M12-SPEEDCON, angled, shielded

Schematic diagram



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

SAC-12P- 3,0-35T/FR SH SCO - Sensor/actuator cable



1430174

<https://www.phoenixcontact.com/us/products/1430174>

Circuit diagram



Contact assignment of the M12 socket

SAC-12P- 3,0-35T/FR SH SCO - Sensor/actuator cable



1430174

<https://www.phoenixcontact.com/us/products/1430174>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1430174>

|  UL Listed Approval ID: E221474 | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 30 V | 1 A | - | - |

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

SAC-12P- 3,0-35T/FR SH SCO - Sensor/actuator cable



1430174

<https://www.phoenixcontact.com/us/products/1430174>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

SAC-12P- 3,0-35T/FR SH SCO - Sensor/actuator cable



1430174

<https://www.phoenixcontact.com/us/products/1430174>

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 | 11.875 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