

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

<https://www.phoenixcontact.com/us/products/1409561>

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, PVC, yellow, Plug straight M12, coding: A, on Socket angled M12, coding: A, cable length: 0.5 m



Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1409561 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF13 |
| Product key | AF1IGB |
| GTIN | 4055626018171 |
| Weight per piece (including packing) | 50.8 g |
| Weight per piece (excluding packing) | 49.8 g |
| Customs tariff number | 85444290 |
| Country of origin | US |

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

<https://www.phoenixcontact.com/us/products/1409561>

Technical data

Notes

| | |
|---------|---|
| General | These cable assemblies are UL/cUL listed for use in Class I, Division 2 (CID2) hazardous locations. |
|---------|---|

Product properties

| | |
|----------------------|-------------------------------------|
| Product type | Sensor/actuator cable |
| Application | U.S. cables for hazardous locations |
| Number of positions | 4 |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | A |

Insulation characteristics

| | |
|----------------------|----|
| Overvoltage category | II |
| Degree of pollution | 3 |

Material specifications

| | |
|--|---|
| Material | TPE-U (Locking clip) |
| 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 |
| Outer sheath, material | PVC |

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

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

<https://www.phoenixcontact.com/us/products/1409561>

Conductor connection

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

Connector

Connection 1

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

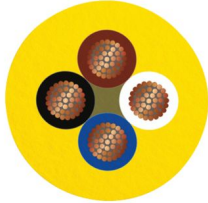
Connection 2

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

Cable/line

| | |
|--------------|-------|
| Cable length | 0.5 m |
|--------------|-------|

PVC yellow 105 °C [542]

| | |
|---------------------------------|--|
| Dimensional drawing |  |
| Cable weight | 36 kg/km |
| UL AWM Style | 2517 (105 °C / 300 V) |
| Number of positions | 4 |
| Shielded | no |
| Cable type | PVC yellow 105 °C [542] |
| Conductor structure signal line | 7x 0.25 mm |
| AWG signal line | 22 |
| Wire diameter incl. insulation | 1.27 mm ±0.03 mm |
| External cable diameter | 5.00 mm ±0.2 mm |
| Outer sheath, material | PVC |
| External sheath, color | yellow |
| Conductor material | Tin-plated Cu litz wires |
| Material wire insulation | PVC |
| Single wire, color | brown, blue, black, white |
| Overall twist | 4 wires, twisted |
| Max. conductor resistance | max. 50.5 Ω/km (20 °C) |
| Insulation resistance | ≥ (550 M Ohms/m @ 500V) |
| Nominal voltage, cable | 300 V |

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

<https://www.phoenixcontact.com/us/products/1409561>

| | |
|---|---|
| Minimum bending radius, flexible installation | 8 x D |
| Smallest bending radius, movable installation | 40 mm |
| Flame resistance | FT4 |
| Other resistance | UV resistant |
| Special properties | UL standards PLTC and ITC |
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation) |
| | -5 °C ... 105 °C (Cable, flexible installation) |

Environmental and real-life conditions

Ambient conditions

| | |
|---|----------------------------------|
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |
| Ambient temperature (operation) (male connector/female connector) | -25 °C ... 90 °C (Plug / socket) |
| Ambient temperature (operation) (Locking clip) | -40 °C ... 65 °C (Locking clip) |

Approvals

Conformity/Approvals

| | |
|------------------|------------------------------------|
| UL, USA / Canada | Class I, Div. 2, Groups A, B, C, D |
|------------------|------------------------------------|

Standards and regulations

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

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

<https://www.phoenixcontact.com/us/products/1409561>

Drawings

Dimensional drawing



EXCLIP mounted plug

Dimensional drawing



EXCLIP mounted socket

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

<https://www.phoenixcontact.com/us/products/1409561>

Dimensional drawing



EXCLIP plug

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

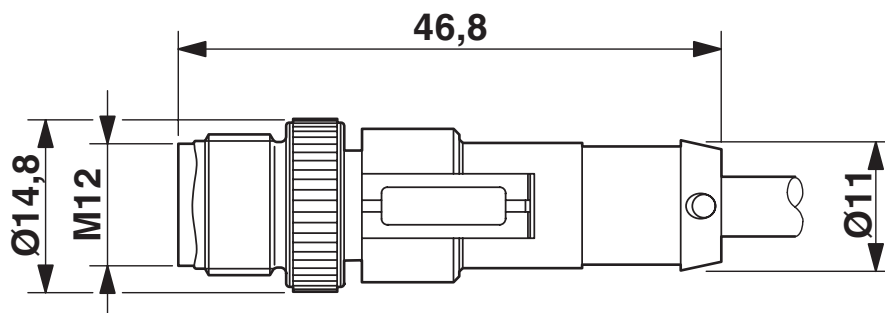
<https://www.phoenixcontact.com/us/products/1409561>

Dimensional drawing



EXCLIP socket

Dimensional drawing



Plug, M12 x 1, straight, shielded

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable

1409561

<https://www.phoenixcontact.com/us/products/1409561>

Dimensional drawing



M12 x 1 socket, angled

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

<https://www.phoenixcontact.com/us/products/1409561>

Schematic diagram



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

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable

1409561

<https://www.phoenixcontact.com/us/products/1409561>

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-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

<https://www.phoenixcontact.com/us/products/1409561>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1409561>



EAC-RoHS

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



cUL Listed

Approval ID: FILE E 359524

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 150 V | 4 A | - | - |



UL Listed

Approval ID: FILE E 359524

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 150 V | 4 A | - | - |

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

<https://www.phoenixcontact.com/us/products/1409561>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

SAC-HZ-4P-MS/0,5-542/FR SCO BK - Sensor/actuator cable



1409561

<https://www.phoenixcontact.com/us/products/1409561>

Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

China RoHS

| | |
|--|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

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