

SAC-HZ-4P-M12MR/ 0,5-542/M12FS - Sensor/actuator cable



1409566

<https://www.phoenixcontact.com/us/products/1409566>

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 angled M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 0.5 m



Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1409566 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF13 |
| Product key | AF1IGB |
| GTIN | 4055626018225 |
| Weight per piece (including packing) | 22.22 g |
| Weight per piece (excluding packing) | 22.22 g |
| Customs tariff number | 85444290 |
| Country of origin | US |

SAC-HZ-4P-M12MR/ 0,5-542/M12FS - Sensor/actuator cable



1409566

<https://www.phoenixcontact.com/us/products/1409566>

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-M12MR/ 0,5-542/M12FS - Sensor/actuator cable



1409566

<https://www.phoenixcontact.com/us/products/1409566>

Conductor connection

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

Connector

Connection 1

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

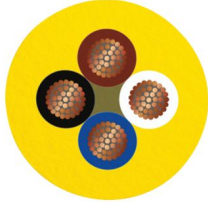
Connection 2

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

Cable/line

| | |
|--------------|-------|
| Cable length | 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) |

SAC-HZ-4P-M12MR/ 0,5-542/M12FS - Sensor/actuator cable



1409566

<https://www.phoenixcontact.com/us/products/1409566>

| | |
|---|--|
| Insulation resistance | ≥ (550 M Ohms/m @ 500V) |
| Nominal voltage, cable | 300 V |
| 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) |

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-M12MR/ 0,5-542/M12FS - Sensor/actuator cable

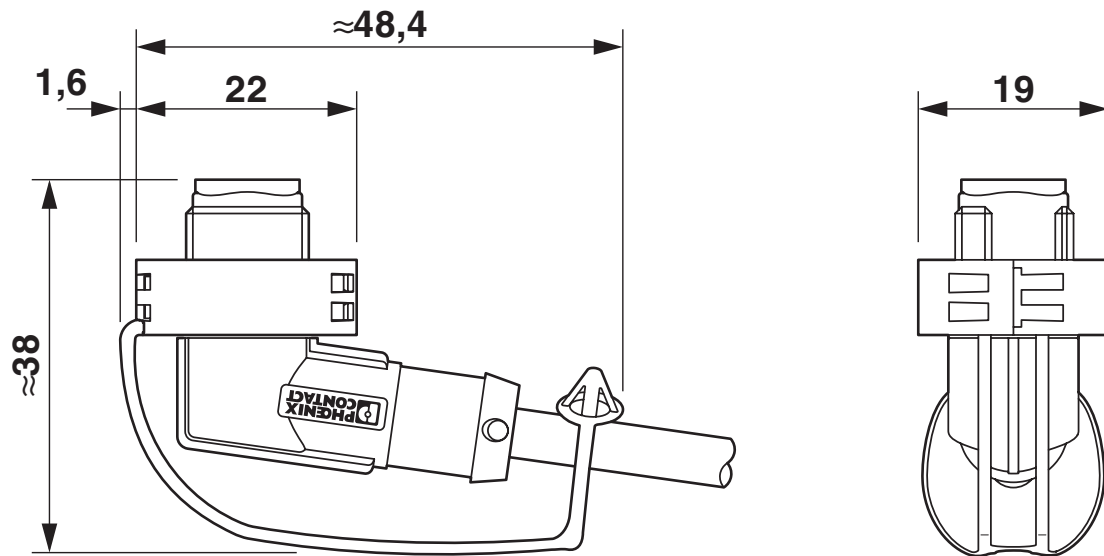


1409566

<https://www.phoenixcontact.com/us/products/1409566>

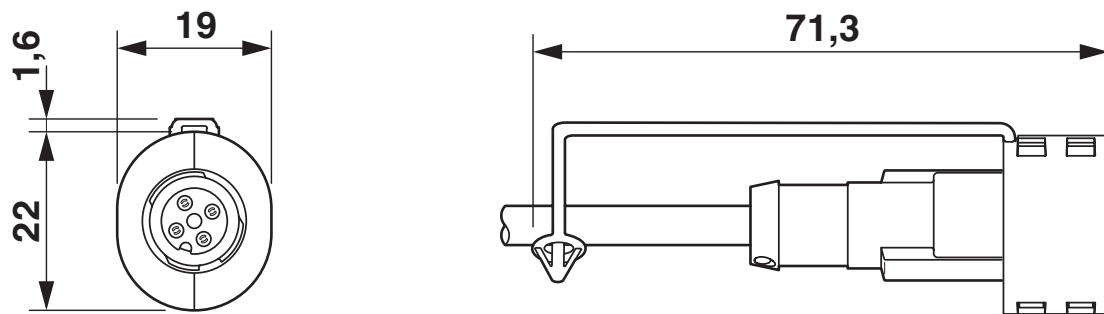
Drawings

Dimensional drawing



EXCLIP mounted plug

Dimensional drawing

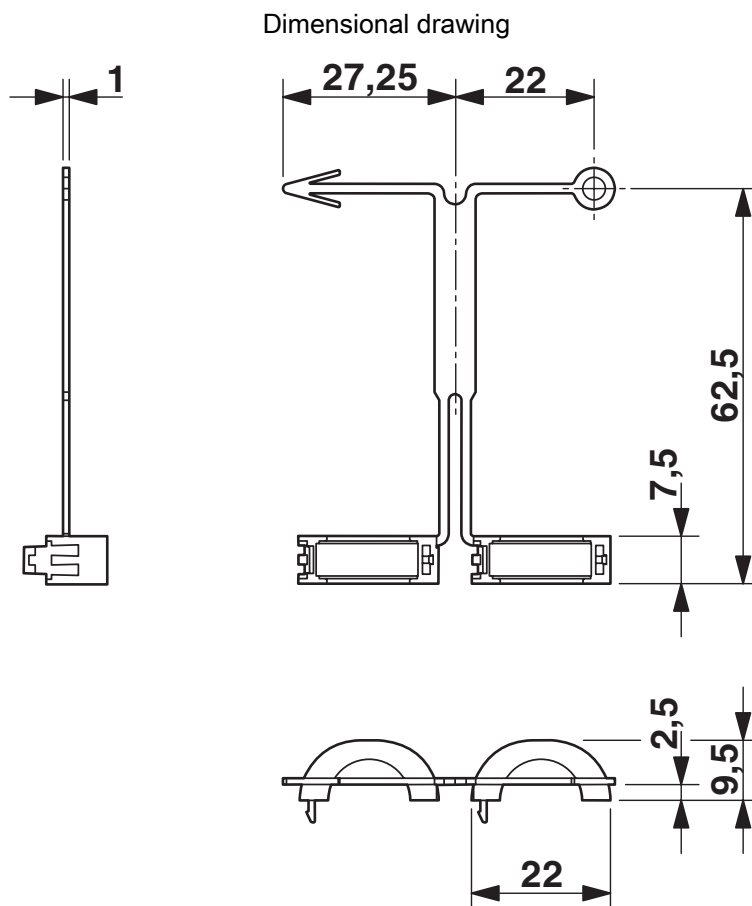


EXCLIP mounted socket

SAC-HZ-4P-M12MR/ 0,5-542/M12FS - Sensor/actuator cable

1409566

<https://www.phoenixcontact.com/us/products/1409566>



EXCLIP plug

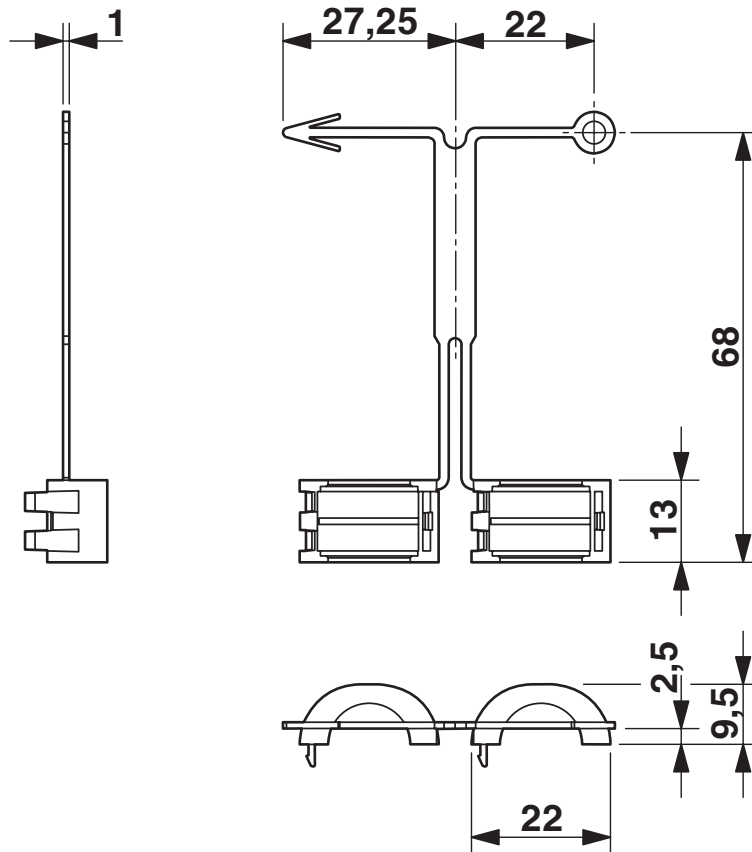
SAC-HZ-4P-M12MR/ 0,5-542/M12FS - Sensor/actuator cable



1409566

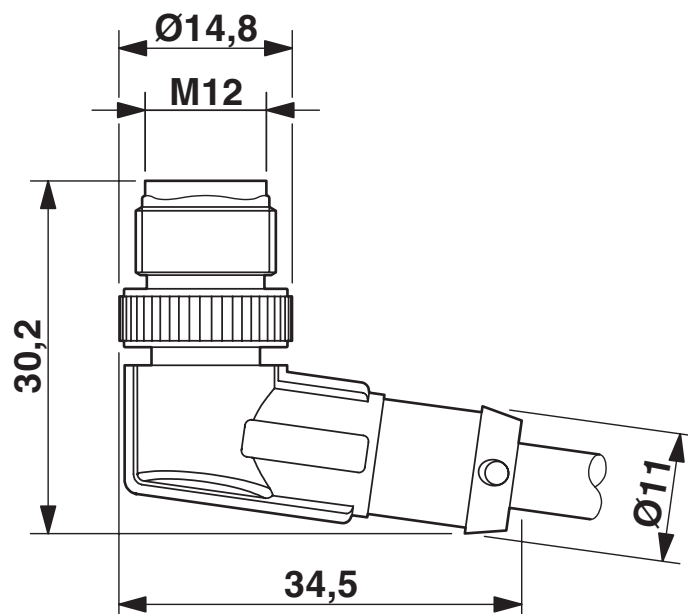
<https://www.phoenixcontact.com/us/products/1409566>

Dimensional drawing



EXCLIP socket

Dimensional drawing



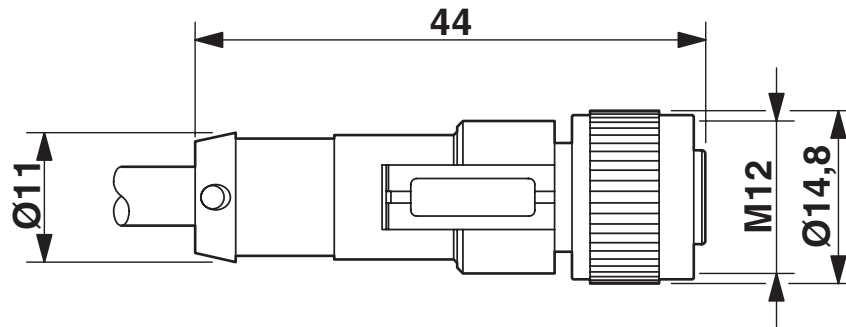
M12 x 1 male plug, angled

SAC-HZ-4P-M12MR/ 0,5-542/M12FS - Sensor/actuator cable

1409566

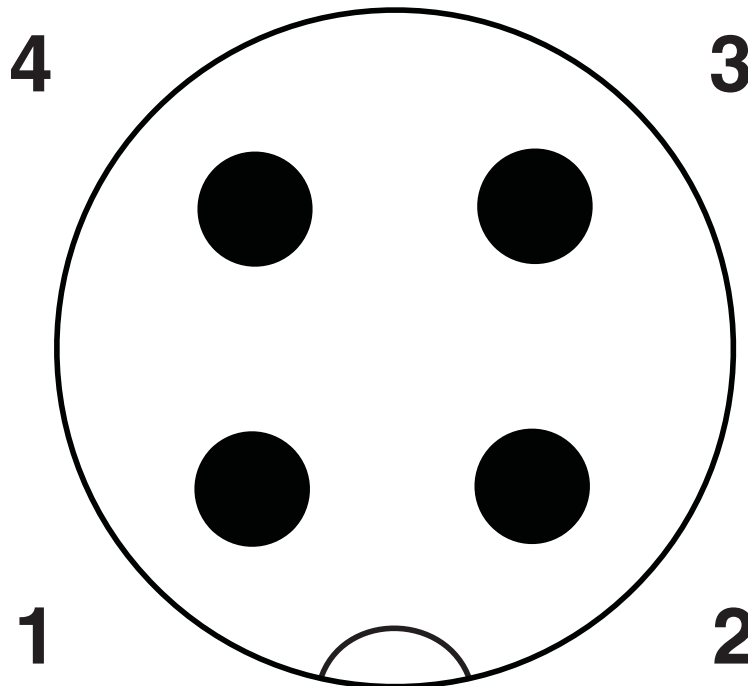
<https://www.phoenixcontact.com/us/products/1409566>

Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



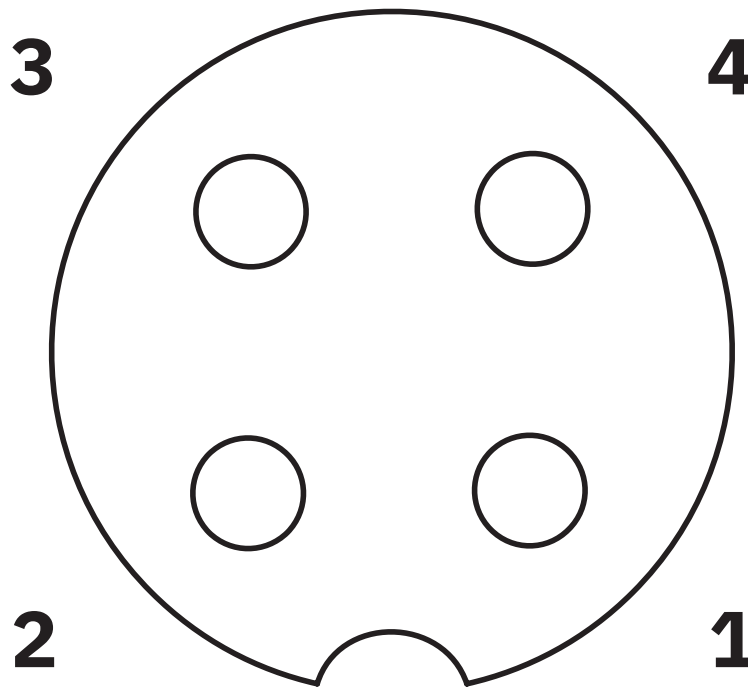
Pin assignment M12 plug, 4-pos., A-coded, view plug side

SAC-HZ-4P-M12MR/ 0,5-542/M12FS - Sensor/actuator cable

1409566

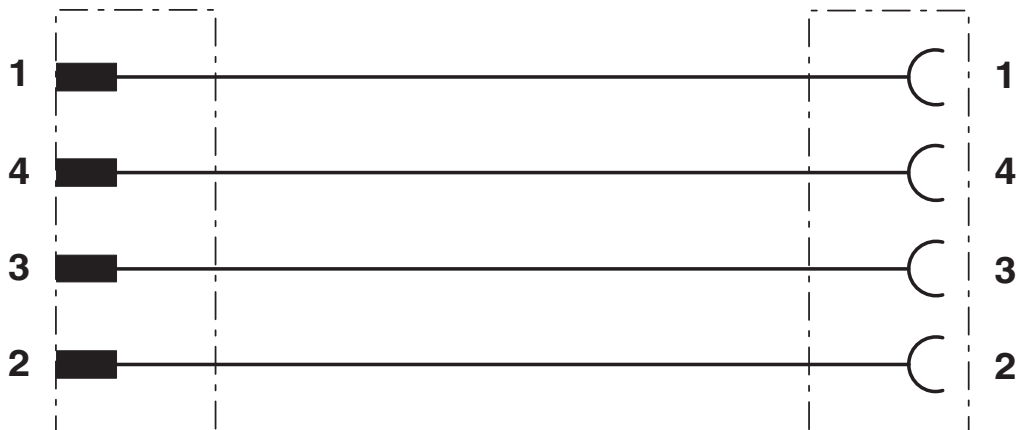
<https://www.phoenixcontact.com/us/products/1409566>

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-M12MR/ 0,5-542/M12FS - Sensor/actuator cable



1409566

<https://www.phoenixcontact.com/us/products/1409566>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

SAC-HZ-4P-M12MR/ 0,5-542/M12FS - Sensor/actuator cable



1409566

<https://www.phoenixcontact.com/us/products/1409566>

Environmental product compliance

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 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