

## Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569


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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Sensor/actuator cable, 4-position, PVC, yellow, Plug angled M12 SPEEDCON, coding: A, on free cable end, cable length: 10 m



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 055626 018256
GTIN	4055626018256

### Technical data

#### Dimensions

Length of cable	10 m
-----------------	------

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

#### General

Note	These cable assemblies are UL/cUL listed for use in Class I, Division 2 (CID2) hazardous locations.
Rated current at 40°C	4 A
Rated voltage	250 V AC
	250 V DC
Number of positions	4
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101

# Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569

## Technical data

### General

Status display	No
Protective circuit/component	unwired
Overvoltage category	II
Degree of pollution	3
Torque	0.4 Nm (M12 connector)

### Material

Flammability rating according to UL 94	HB
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

### Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
Flammability rating according to UL 94	HB
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D

### Cable

Cable type	PVC yellow 105 °C
Cable type (abbreviation)	542
UL AWM style	2517 (105 °C / 300 V)
AWG signal line	22
Conductor structure signal line	30x 1.30 mm
Core diameter including insulation	1.27 mm ±0.03 mm
Wire colors	brown, blue, black, white
Overall twist	4 wires, twisted
External sheath, color	yellow
External cable diameter D	5 mm ±0.2 mm
Minimum bending radius, flexible installation	8 x D
Cable weight	36 kg/km
Outer sheath, material	PVC
Material conductor insulation	PVC
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ (550 M Ohms/m @ 500V)
Conductor resistance	max. 50.5 Ω/km (20 °C)
Nominal voltage, cable	300 V
Special properties	UL standards PLTC and ITC
Flame resistance	FT4
Other resistance	UV resistant

# Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569

## Technical data

### Cable

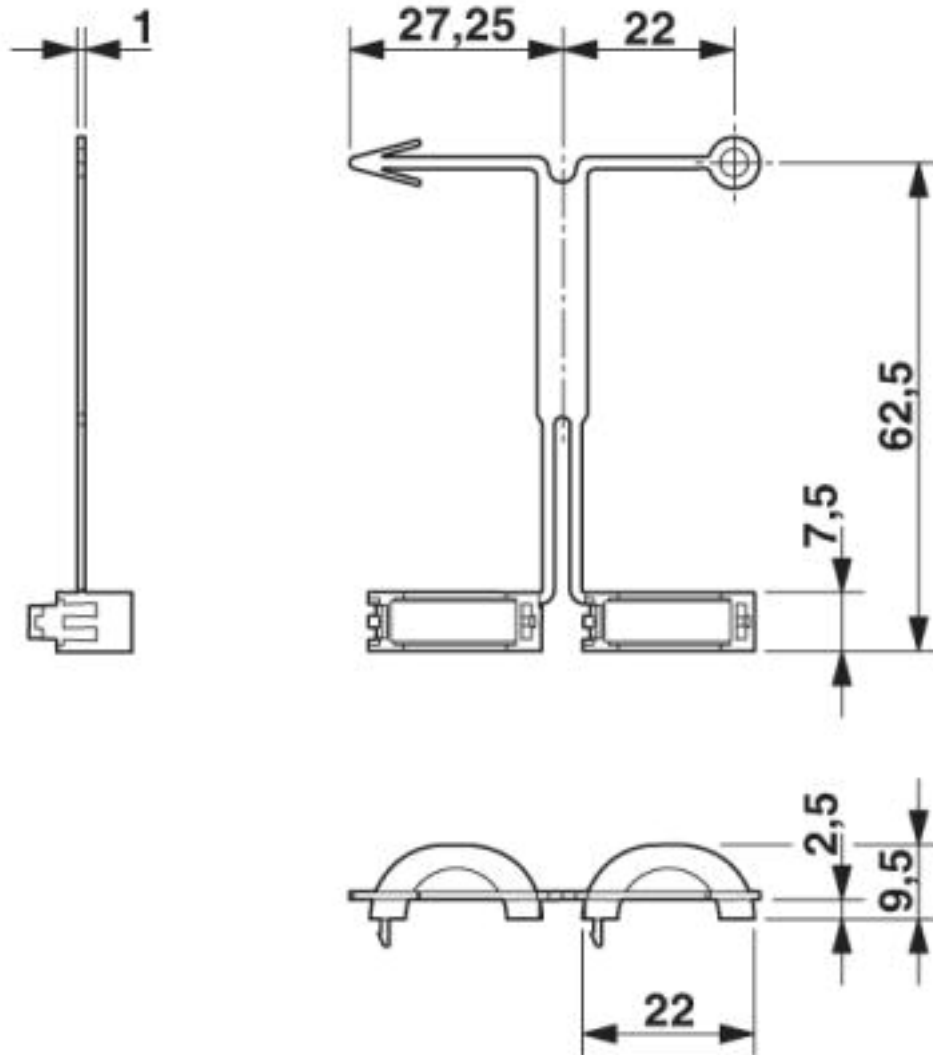
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation)
	-5 °C ... 105 °C (cable, flexible installation)

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

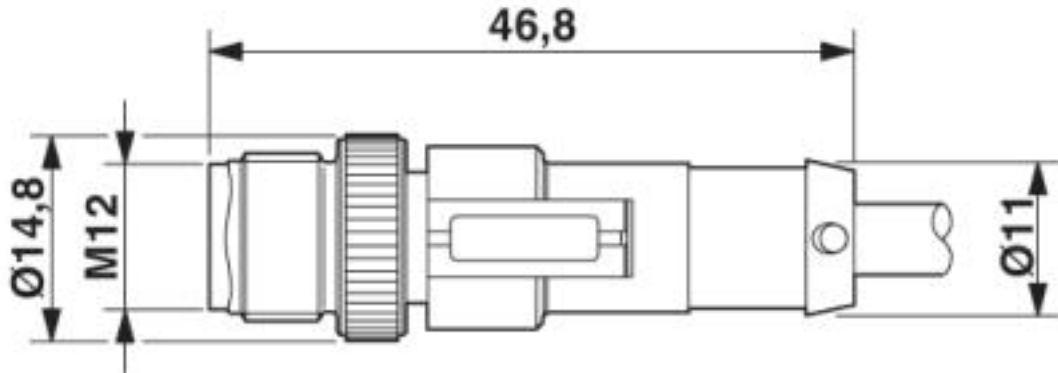
Dimensional drawing



EXCLIP plug

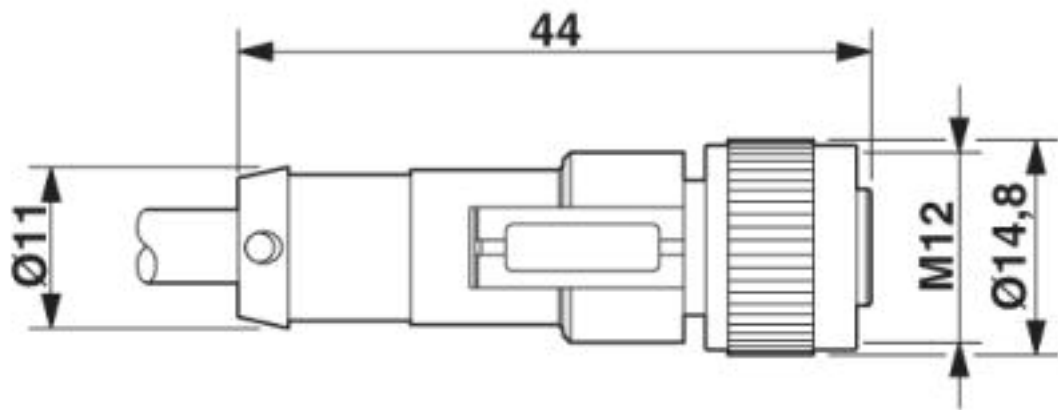
# Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569

Dimensional drawing



Plug, M12 x 1, straight, shielded

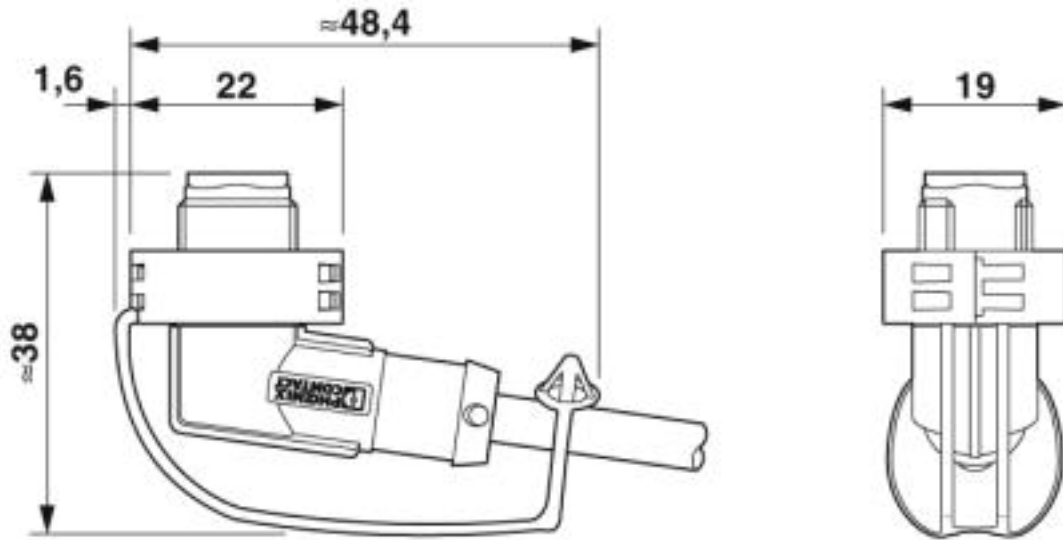
Dimensional drawing



M12 x 1 socket, straight

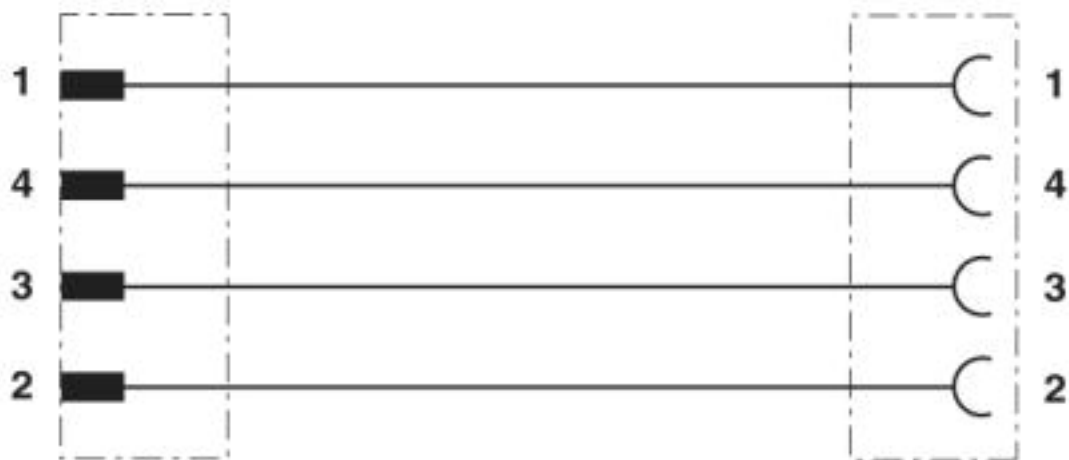
# Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569

Dimensional drawing



EXCLIP mounted plug

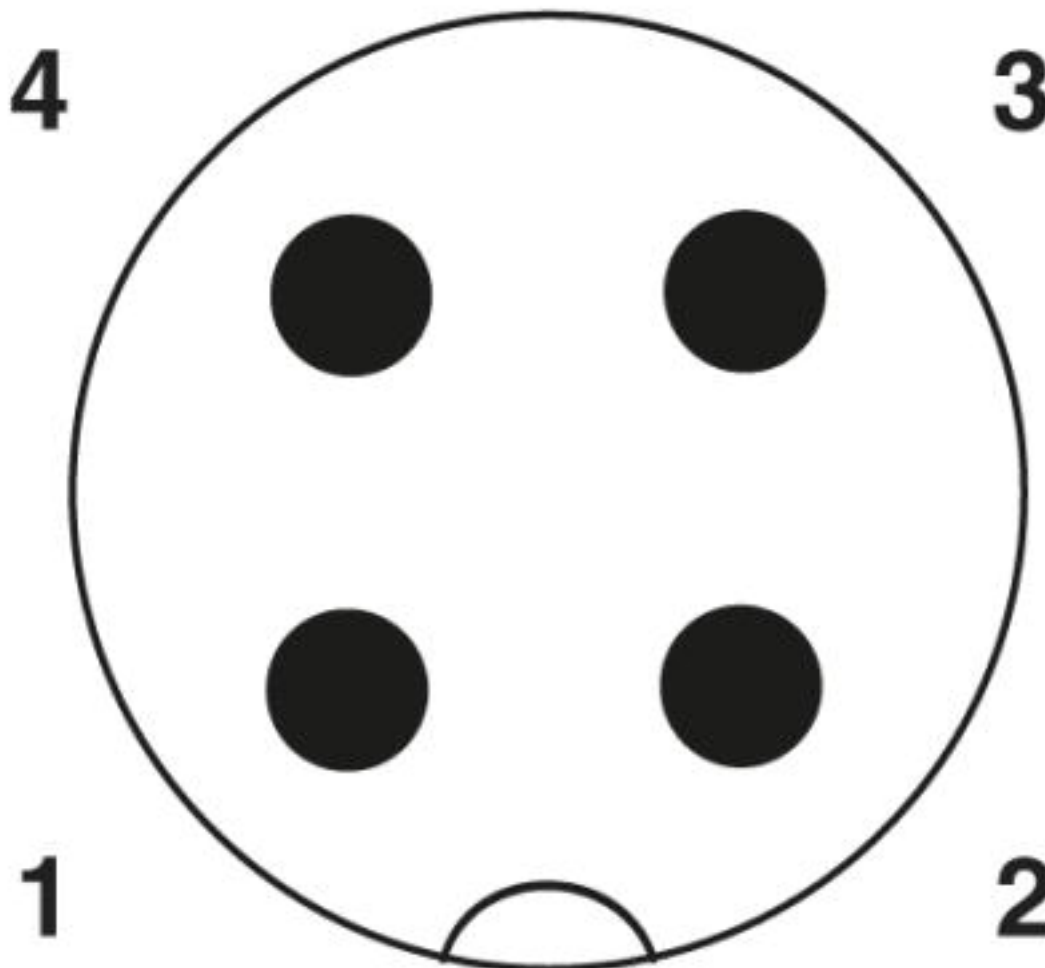
Circuit diagram



Contact assignment of the M12 plug and the M12 socket

# Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569

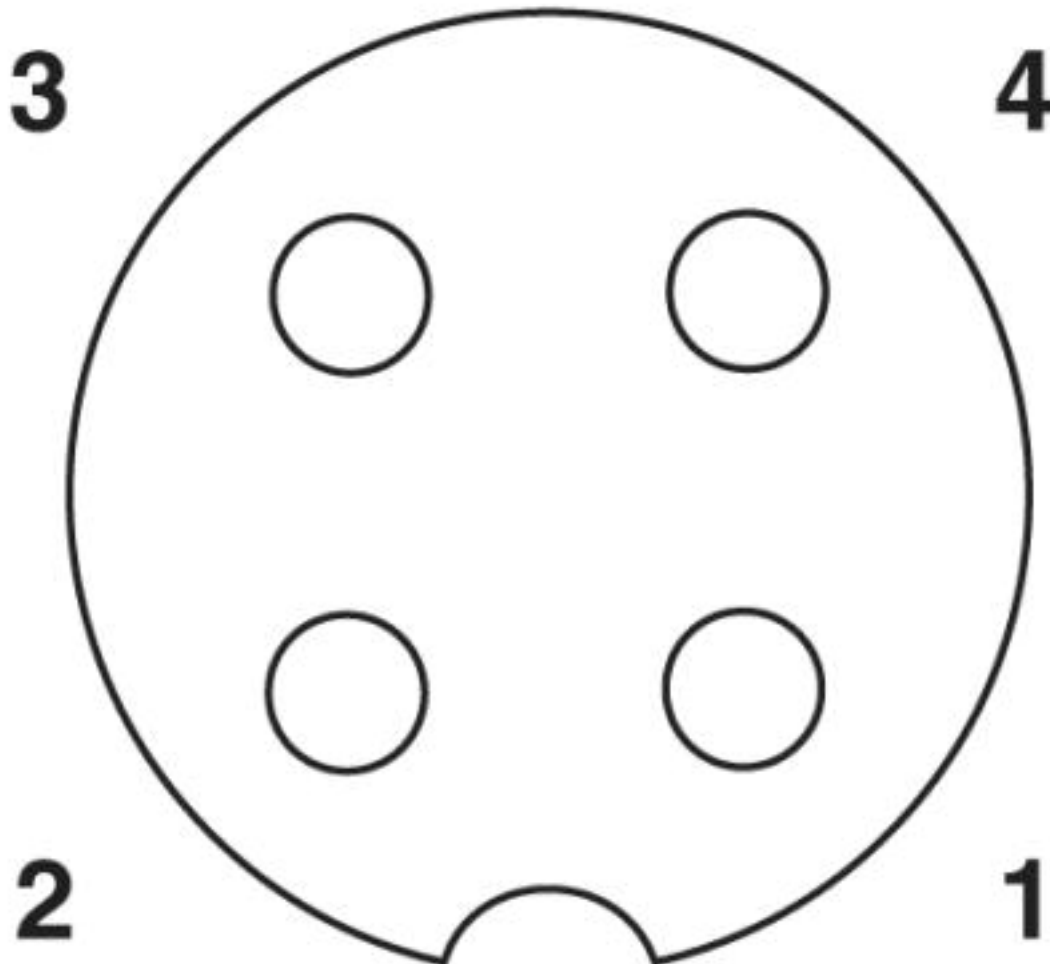
Schematic diagram



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

# Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569

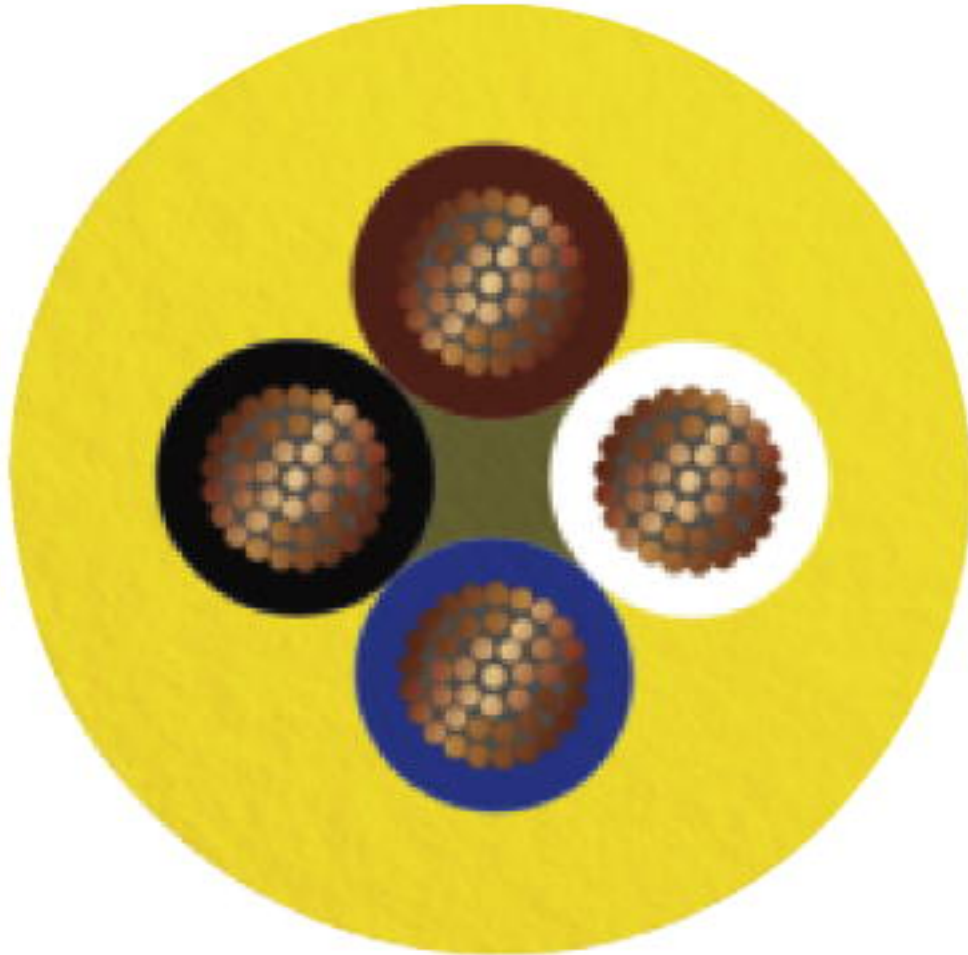
Schematic diagram



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

## Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569

Cable cross section



PVC yellow 105 °C [542]

### Classifications

eCl@ss

eCl@ss 10.0.1	27060311
eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311



# Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569

## Classifications

### ETIM

ETIM 4.0	EC001855
ETIM 5.0	EC001855
ETIM 6.0	EC001855
ETIM 7.0	EC001855

### UNSPSC

UNSPSC 13.2	31251501
UNSPSC 19.0	31251501
UNSPSC 20.0	31251501
UNSPSC 21.0	31251501

## Approvals

### Approvals

---

Approvals

EAC

---

Ex Approvals

UL Listed / cUL Listed / cULus Listed

---

### Approval details

EAC		RU D- DE.HB35.B.00387
-----	--	--------------------------

## Accessories

### Accessories

Plug for cable screw gland

Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



### Protective cap

## Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569

### Accessories

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



---

### Safety locking

Locking clip - SAC-M12-EXCLIP-M - 1558988



Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

Locking clip - SAC-M12-EXCLIP-F - 1558991



Locking clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

---

### Screwdriver tools

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

---

### Torque tool

## Sensor/actuator cable - SAC-HZ-4P-MR/10,0-542 SCO BK - 1409569

### Accessories

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

---

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

---

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>