

## Sensor/Actuator cable - SAC-4P- 20,0-542/ FR SH SCO BK - 1417969


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, shielded, free cable end, on Socket angled M12 SPEEDCON, Cable length: 20 m



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 055626 211541
GTIN	4055626211541
Weight per Piece (excluding packing)	100.000 g
Custom tariff number	85444290
Country of origin	United States

### Technical data

#### Dimensions

Length of cable	20 m
-----------------	------

#### Ambient conditions

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

#### General

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	4
Insulation resistance	≥ 100 MΩ
Coding	A - standard

# Sensor/Actuator cable - SAC-4P- 20,0-542/ FR SH SCO BK - 1417969

## Technical data

### General

Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
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

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Flammability rating according to UL 94	HB

### Cable

Cable type	PVC yellow 105 °C
Cable type (abbreviation)	542
UL AWM style	2517 (105 °C / 300 V)
AWG signal line	22
Core diameter including insulation	1.27 mm ±0.03 mm
Wire colors	brown, blue, black, white
Overall twist	4 wires, twisted
Shielding	Tinned copper braided shield
Optical shield covering	85 %
External sheath, color	yellow
External cable diameter D	5.5 mm ±0.2 mm
Minimum bending radius, flexible installation	12 x D
Cable weight	48 kg/km
Outer sheath, material	PVC
Material conductor insulation	PVC
Conductor material	Tin-plated Cu litz wires

# Sensor/Actuator cable - SAC-4P- 20,0-542/ FR SH SCO BK - 1417969

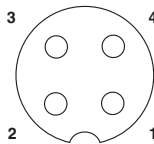
## Technical data

### Cable

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

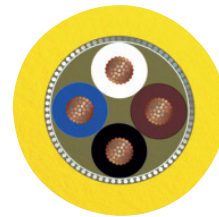
## Drawings

Schematic diagram



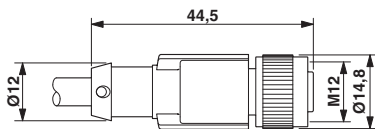
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



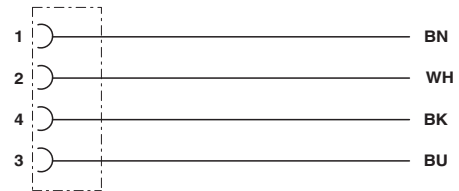
PVC yellow 105 °C [542]

Dimensional drawing



M12 x 1 socket, straight, shielded

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

## Classifications

eCl@ss

eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

ETIM

ETIM 5.0	EC001855
----------	----------

# Sensor/Actuator cable - SAC-4P- 20,0-542/ FR SH SCO BK - 1417969

## Classifications

### ETIM

ETIM 6.0	EC001855
----------	----------

### UNSPSC

UNSPSC 13.2	31251501
-------------	----------

## Approvals


### Approvals


#### Approvals


UL Listed / cUL Listed / cULus Listed

#### Ex Approvals

## Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal current IN	4 A		
Nominal voltage UN	300 V		

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal current IN	4 A		
Nominal voltage UN	300 V		

cULus Listed			
--------------	---	--	--

## Accessories

### Accessories

Protective cap

## Sensor/Actuator cable - SAC-4P- 20,0-542/ FR SH SCO BK - 1417969

### Accessories

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

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



---

### Safety locking

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-4P- 20,0-542/ FR SH SCO BK - 1417969

### 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

---

---