



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## Sensor/Actuator cable - SAC-3P-20,0-542/ FR SCO BK - 1417928

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, 3-position, PVC, yellow RAL 1021, free cable end, on Socket angled M12 SPEEDCON, A-coded, Cable length: 20 m



### Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	100.0 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	3
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired

## Sensor/Actuator cable - SAC-3P-20,0-542/ FR SCO BK - 1417928

### Technical data

#### General

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
Overall twist	3 wires, twisted
External sheath, color	yellow
External cable diameter D	4.7 mm ±0.2 mm
Minimum bending radius, flexible installation	8 x D
Cable weight	30 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
Other resistance	UV resistant

# Sensor/Actuator cable - SAC-3P-20,0-542/ FR SCO BK - 1417928

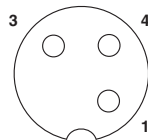
## Technical data

### Cable

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

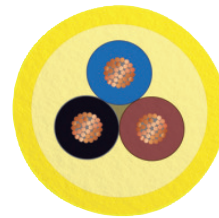
## Drawings

Schematic diagram



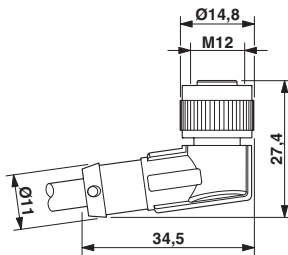
Pin assignment M12 socket, 3-pos., A-coded, view female side

Cable cross section



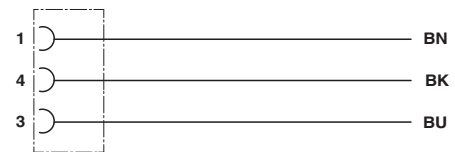
PVC yellow 105 °C [542]

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 socket

## Classifications

### eCl@ss

eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

### ETIM

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

## Accessories

Accessories

Protective cap



## Sensor/Actuator cable - SAC-3P-20,0-542/ FR SCO BK - 1417928

### 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-3P-20,0-542/ FR SCO BK - 1417928

### 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

---

---