

# SACC-FRB-2SC SH PB SCO - Data connector



1432871

<https://www.phoenixcontact.com/us/products/1432871>

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Data connector, PROFIBUS (12 Mbps), 2-position, shielded, Socket angled M12 SPEEDCON, B, Spring-cage connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm



## Your advantages

- Safe use in the field, thanks to a high degree of protection
- Save time, thanks to installation with SPEEDCON fast locking system
- Spring-cage connection: connect more securely, even in the case of shock and vibration, thanks to high contact forces
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference

## Commercial data

Item number	1432871
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF33
Product key	BF2CFC
Catalog page	Page 406 (C-4-2015)
GTIN	4046356348522
Weight per piece (including packing)	45.3 g
Weight per piece (excluding packing)	44.8 g
Customs tariff number	85366990
Country of origin	DE

## Technical data

### Mounting

Assembly instructions	AWG 18 wire cross section upon request
	The connector pin assignment can be rotated 45° to the cable outlet
	The wires can be connected both with ferrules and without ferrules
Connection method	Spring-cage connection

### Product properties

Product type	Circular connector (cable-side)
Sensor type	PROFIBUS
Number of positions	2
No. of cable outlets	1
Shielded	yes
Coding	B
Cable outlet	angled

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Dimensions

#### External dimensions

Outside diameter	4 mm ... 8 mm
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### Material specifications

Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU
Material for screw connection	Zinc die-cast, nickel-plated

### Connection data

#### Conductor connection

Connection method	Spring-cage connection
Connection cross section	0.14 mm² ... 0.5 mm²
Connection cross section AWG	26 ... 20
Stripping length of the individual wire	10 mm
Tightening torque	0.4 Nm (M12 knurl) 0.8 Nm (Connector with coupling sleeve)

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	3 Nm (Pressure nut with coupling sleeve)
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## Electrical properties

Contact resistance	≤ 8 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	60 V DC
	48 V AC
Nominal current I <sub>N</sub>	4 A

## Mechanical properties

## Mechanical data

Insertion/withdrawal cycles	≥ 100
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## Connector

## Connection 1

Head design	Socket
Head cable outlet	angled
Head thread type	M12
Head locking type	SPEEDCON
Coding	B

## Cable/line

Signal type/category	PROFIBUS, 12 Mbps
Stripping length of the individual wire	10 mm

## Environmental and real-life conditions

## Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-40 °C ... 85 °C (Plug / socket)

## Standards and regulations

## M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	Shock, vibration
Standards/specifications	EN 50155:2001

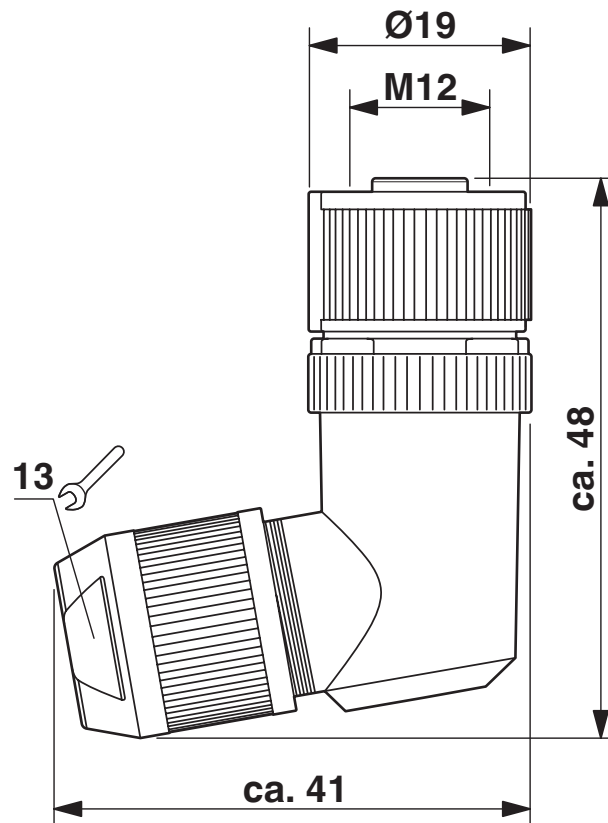
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## Drawings

Dimensional drawing



Socket M12-SPEEDCON, angled, shielded

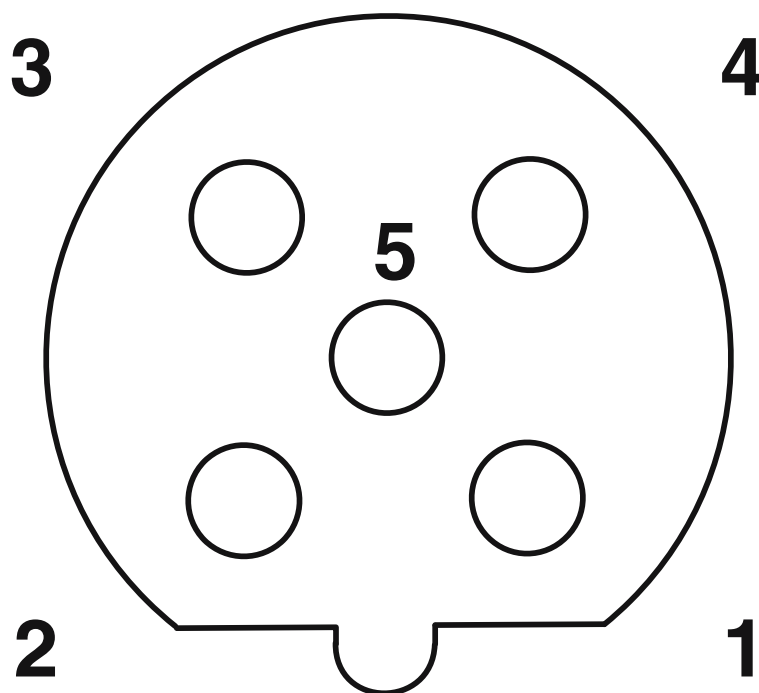
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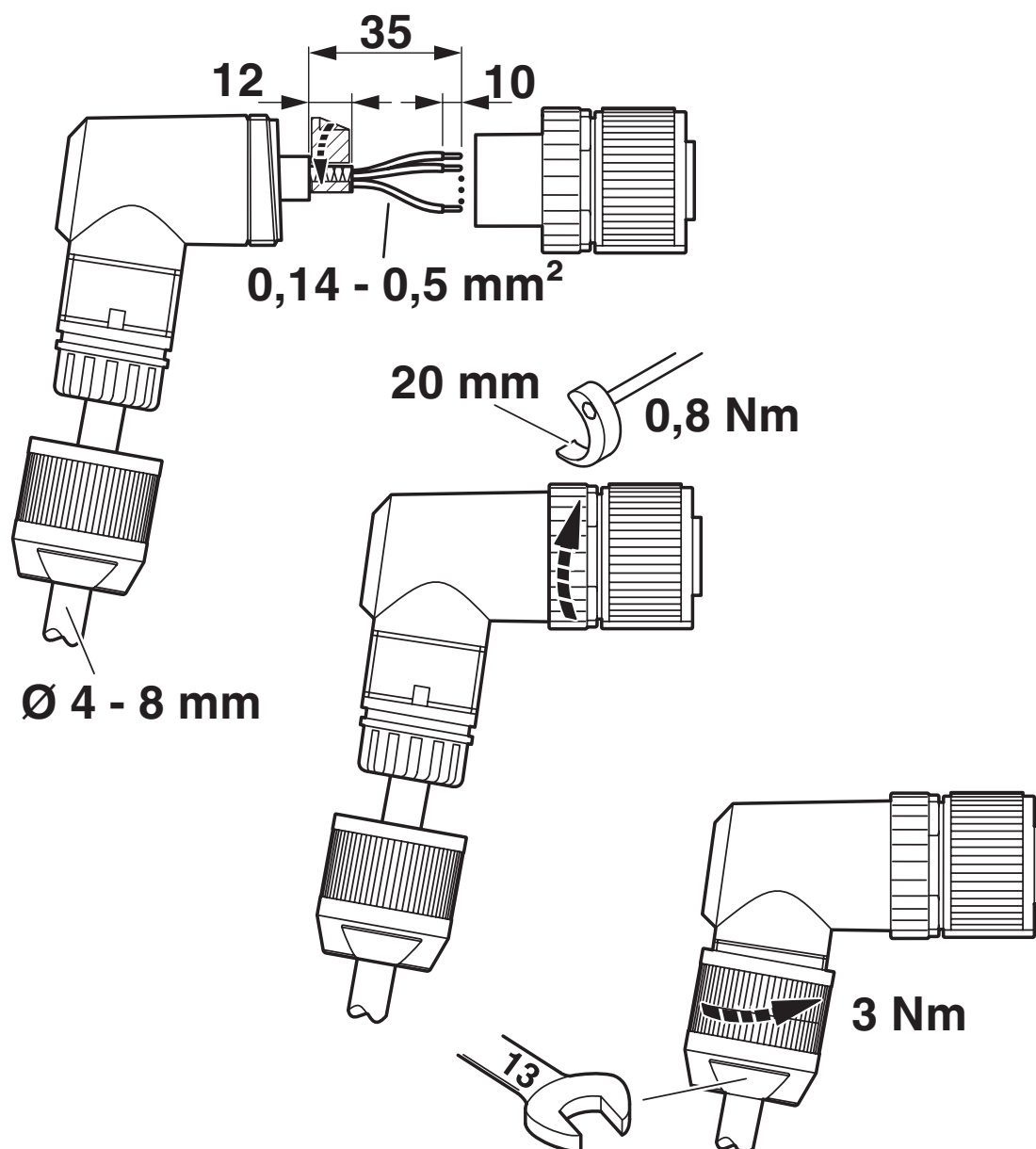
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Schematic diagram



Connector pin assignment M12 socket, 5-pos., B-coded

Functional drawing



Slide the pressure nut and sleeve housing along the cable, strip the cable, shorten the shield, strip the single wires, connect the wires, in the case of a straight sleeve housing gently twist the wires together, stick the shielding foil around the shortened shield, in the case of a cable outside diameter < 6 mm stick an additional shielding foil around the wire pack, screw the sleeve housing to the plug insert, screw the pressure nut tight.

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## Classifications

### ECLASS

ECLASS-11.0	27440102
ECLASS-13.0	27440116

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values



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## Accessories

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

1430899

<https://www.phoenixcontact.com/us/products/1430899>

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



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### SAC-2P-910/... - Bus system cable

1511491

<https://www.phoenixcontact.com/us/products/1511491>

Bus system cable, PROFIBUS, 2-position halogen-free, shielded, free cable end, on free cable end, cable length: Free entry (0.5 ... 400 m)



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## ALU-SB - Shielding foil

1404531

<https://www.phoenixcontact.com/us/products/1404531>

Shielding foil, for fixing the braided shield of shielded cables. Length: 4 cm, width: 1.2 cm



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## TSD 04 SAC - Torque screwdriver

1208429

<https://www.phoenixcontact.com/us/products/1208429>

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



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## TSD 08 SAC - Torque screwdriver

1212597

<https://www.phoenixcontact.com/us/products/1212597>



Torque screw driver with preset torque of 0.8 Nm, with 4 mm hexagon for accommodating SAC bits, two-component handle with non-slip grip

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## SACC BIT M12-D20 - Tool

1208445

<https://www.phoenixcontact.com/us/products/1208445>



Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive

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

1212224

<https://www.phoenixcontact.com/us/products/1212224>



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

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## TSD-M 3NM - Torque screwdriver

1212225

<https://www.phoenixcontact.com/us/products/1212225>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 1.2 - 3 Nm

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

1212600

<https://www.phoenixcontact.com/us/products/1212600>



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

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## VS-CABLE-STRIP-VARIO - Stripping tool

1657407

<https://www.phoenixcontact.com/us/products/1657407>

Stripping tool, for the multi-level stripping of shielded cables



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