

# Connector - SACC-M12FS-4PL SH



1424668

<https://www.phoenixcontact.com/gb/products/1424668>

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Connector, Universal, 4-position, shielded, Socket straight M12, Coding: A, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

## Your advantages

- Time-saving Push-Lock connection: Tool-free connection and disconnection of conductors by opening the contact levers
- Intuitive connection: Easy assignment of individual litz wires with color-coded and numerical identification of the contact levers
- Integrated Push-in Technology: Wire rigid and pretreated conductors easily by means of simple, direct insertion
- Shock- and vibration-resistant connection: Proven spring-cage technology guarantees secure and reliable contacting
- Safely shielded: Reliable 360° shield connection even under extreme mechanical strain

## Commercial Data

Item number	1424668
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF2CFA
Product Key	BF2CFA
Catalog Page	Page 19 (C-2-2019)
GTIN	4055626375953
Weight per Piece (including packing)	41.603 g
Weight per Piece (excluding packing)	39.418 g
Customs tariff number	85366990
Country of origin	DE

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## Technical Data

### Notes

Assembly instruction:

**NOTE:** Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties.

### Product properties

Product type	Circular connector (cable-side)
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	A - standard
Cable outlet	straight

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Ambient conditions

Degree of protection	IP65 IP67
Ambient temperature (operation)	-40 °C ... 85 °C (Plug / socket)

### Dimensions

Dimensional drawing	
Length	59 mm

### External dimensions

Outside diameter	4 mm ... 8 mm
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### Housing

Diameter housing	19 mm
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### Connector

Insertion/withdrawal cycles	≥ 100 (Quantity: 500 with Phoenix Contact mating connector)
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### Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12

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Coding	A-coded
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## Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	≤ 8 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage $U_N$	48 V AC
	60 V DC
Nominal current $I_N$	4 A (2 A when using 0.14 mm <sup>2</sup> conductors)

## Material specifications

Material	TPE-U (Clamping cage, weight: 1.1 g)
	PA 6 (Actuation lever)
Flammability rating according to UL 94	V0
Sealing material	NBR
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Cable gland material	Zinc die-cast, nickel-plated
Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, R25, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)
	PA 6: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

## Connection data

### Conductor connection

Connection method	Push-lock spring connection
Connection cross section	0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> (without ferrule)
	0.08 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> (with ferrule)
	0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> (solid)
Connection cross section AWG	26 ... 18 (without ferrule)
	28 ... 20 (with ferrule)
Tightening torque	0.4 Nm (M12 knurl)
	0.8 Nm (Connector with coupling sleeve)
	3 Nm (Pressure nut with coupling sleeve)

### Pin assignment

Contact   Color (signal designation)   Contact (optional)	1 = BN
	2 = WH
	3 = BU
	4 = BK

## Mounting

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Assembly instructions	The wires can be connected both with ferrules and without ferrules
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## Standards and regulations

### Testing

Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, R25, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)
	PA 6: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)
Standards/specifications	IEC 61076-2-101
Standards/specifications	EN 50155:2001

## Cable / line

### Cable structure

Signal type/category	Universal
Stripping length of the individual wire	7 mm

# Connector - SACC-M12FS-4PL SH

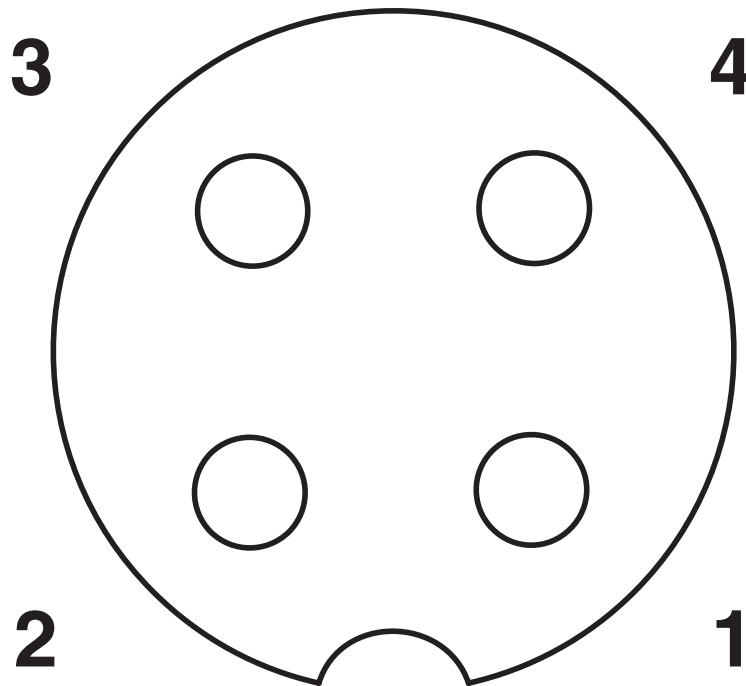


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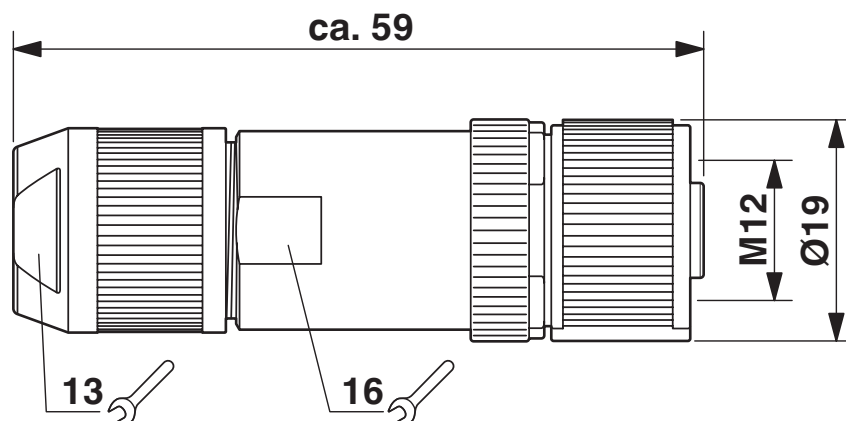
## Drawings

Schematic diagram



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

Dimensional drawing



Socket M12-SPEEDCON, straight, shielded

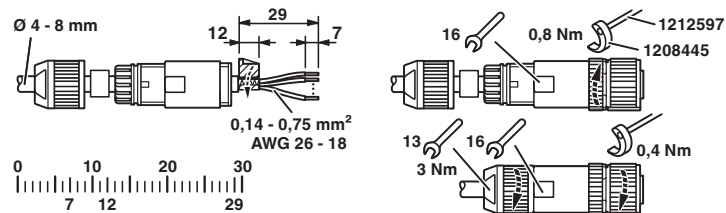
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## Functional drawing



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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## Approvals

**EAC**

Approval ID: RU C-DE.AI30.B.01102

**EAC**

Approval ID: RU C-DE.BL08.B.00511

**UL Listed**

Approval ID: E221474

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	60 V	4 A	-	26 - 18

**cUL Listed**

Approval ID: E221474

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	60 V	4 A	26 - 18	-

**cULus Listed**

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## Classifications

### ECLASS

ECLASS-9.0	27440102
ECLASS-10.0.1	27440102
ECLASS-11.0	27440102

### ETIM

ETIM 8.0	EC002635
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental Product Compliance

China RoHS

Environmentally friendly use period: unlimited = EFUP-e

No hazardous substances above threshold values

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