

# SACC-M12MSB-5CON-PG9 SH XL PB - Data connector



1401096

<https://www.phoenixcontact.com/gb/products/1401096>

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Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Plug straight M12, coding: B, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg11, external cable diameter 8 mm ... 10 mm

## Your advantages

- Safe use in the field, thanks to a high degree of protection
- Screw connection: proven connection technology for a large selection of different conductors
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference

## Commercial data

Item number	1401096
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AF2CBA
Product key	AF2CBA
GTIN	4046356523349
Weight per piece (including packing)	55.01 g
Weight per piece (excluding packing)	55.01 g
Customs tariff number	85366990
Country of origin	HU

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## Technical data

### Notes

Assembly note	<b>NOTE:</b> Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties.
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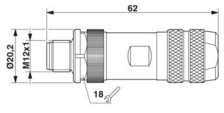
### Product properties

Product type	Circular connector (cable-side)
Application	Data
Sensor type	PROFIBUS
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	B
Cable outlet	straight
Pg screw connection	Pg11

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Dimensions

Dimensional drawing	
Length	62 mm
Wrench size, union nut	16 mm

### External dimensions

Outside diameter	8 mm ... 10 mm
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### Housing

Diameter housing	20.2 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	CuZn
Contact surface material	Au
Contact carrier material	PA

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Material for screw connection	Zinc die-cast, nickel-plated
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## Connection data

### Conductor connection

Connection method	Screw connection
Connection cross section	0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> (without ferrule)
	0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> (with ferrule)
	0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> (solid)
Connection cross section AWG	24 ... 18 (without ferrule)
	26 ... 20 (with ferrule)
Stripping length of the individual wire	5 mm
Tightening torque	0.4 Nm (M12 knurl)
	0.2 Nm (Screw terminal blocks)
	1 Nm ... 1.4 Nm (Pressure nut with 8 mm ... 12 mm external cable diameter)

## Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
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	Plug
Head cable outlet	straight
Head thread type	M12
Coding	B

## Cable/line

Signal type/category	PROFIBUS
	INTERBUS
Stripping length of the individual wire	5 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67
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Ambient temperature (operation) (male connector/female connector)	-40 °C ... 85 °C (Plug / socket)
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## Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

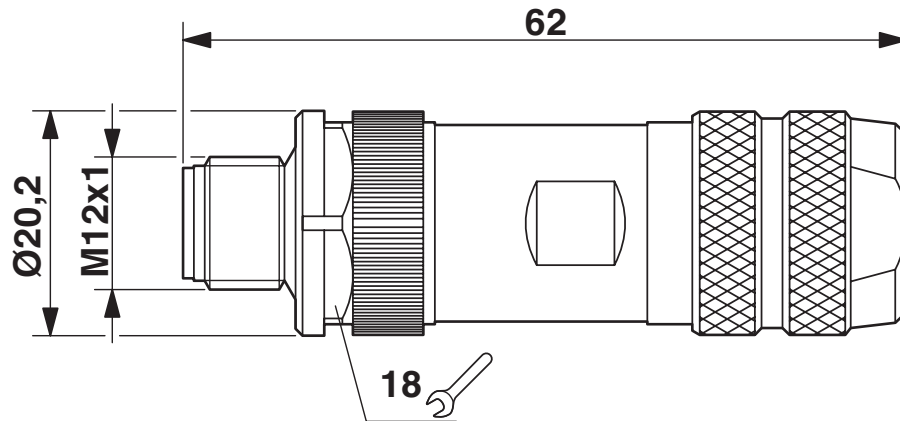
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## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

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Functional drawing

## Assembly steps for M 12 male/female connector and conductor



Slide parts onto the conductor



Strip conductor, widen shield and lay around the shielding ring, cut off projecting mesh.



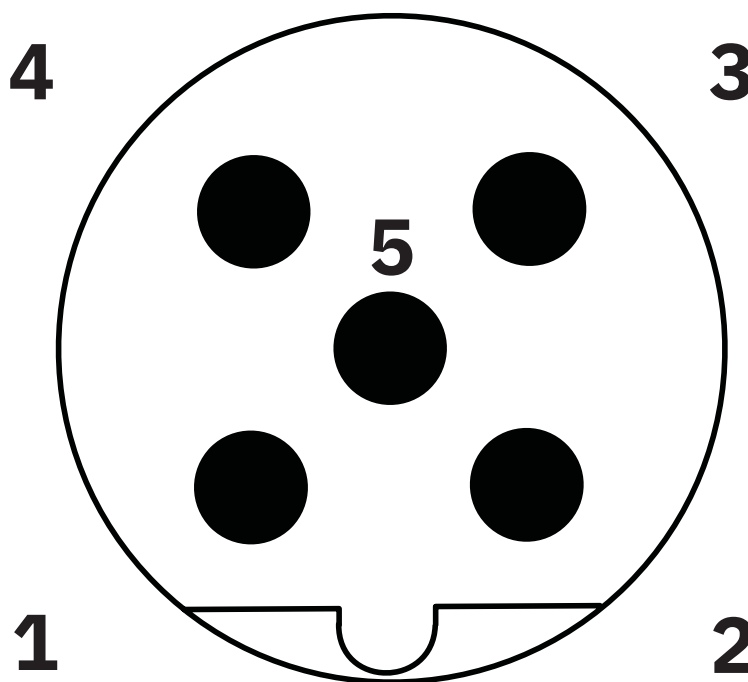
Slide cores through the housing, mount shielding ring, gasket and clamping cage. Tighten pressure screw to fix the cable. Screw down cores, mount male/female connector part and tighten pressure screw.

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Schematic diagram



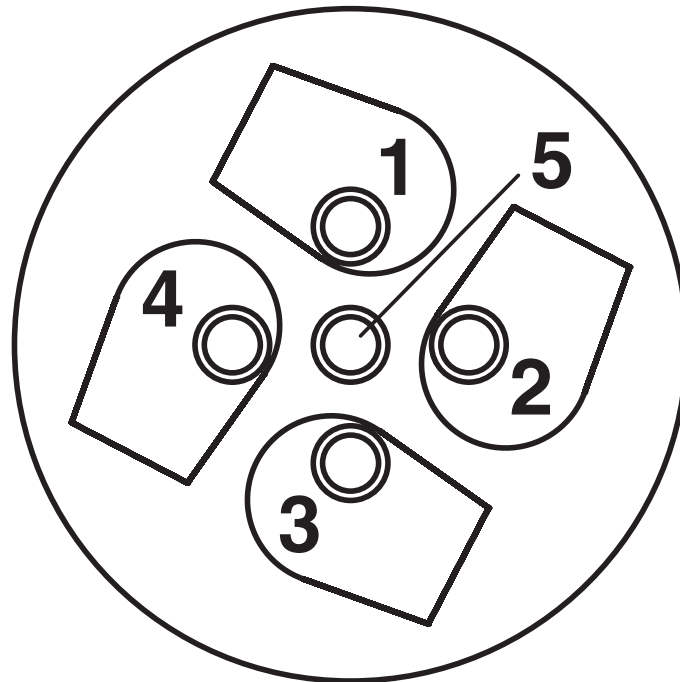
Pin assignment M12 male connector, 5-pos., B-coded, male side

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Schematic diagram



Cable connection side M12 (screw connection)

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1401096>

 <b>cUL Recognized</b> Approval ID: FILE E 221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	60 V	4 A	-	-

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	60 V	4 A	-	-

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## Classifications

### ECLASS

ECLASS-13.0	27440116
ECLASS-15.0	27440116

### ETIM

ETIM 9.0	EC002635
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	ffec5ff1-6478-4a76-8c92-a26898204c51

### EF3.0 Climate Change

CO2e kg	1.976 kg CO2e
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