

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



1401096

<https://www.phoenixcontact.com/us/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

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Commercial Data

Item number	1401096
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	B07
Product Key	BF2CBA
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	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	5
No. of cable outlets	1
Shielded	yes
Coding	B - inverse
Cable outlet	straight
Pg screw connection	Pg11

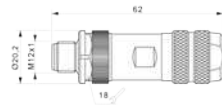
Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Ambient conditions

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

Dimensions

Dimensional drawing	
Length	62 mm

External dimensions

Outside diameter	8 mm ... 10 mm
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Housing

Diameter housing	20.2 mm
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Connector

Insertion/withdrawal cycles	≥ 100
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Header 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12

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Coding	B-coded
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Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	$\leq 3 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A

Material specifications

Flammability rating according to UL 94	V0
Sealing material	NBR
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA
Cable gland material	Zinc die-cast, nickel-plated

Connection data

Conductor connection

Connection method	Screw connection
Connection cross section	0.25 mm ² ... 0.75 mm ² (without ferrule)
	0.25 mm ² ... 0.75 mm ² (without ferrule)
	0.25 mm ² ... 0.75 mm ² (without ferrule)
Connection cross section AWG	24 ... 18 (without ferrule)
	26 ... 20 (with ferrule)
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)

Standards and regulations

Standards/specifications	IEC 61076-2-101
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Cable / line

Cable structure

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

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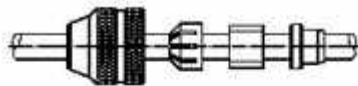
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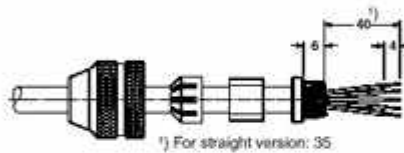
Drawings

Functional drawing

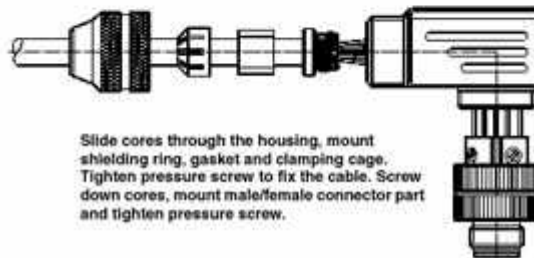
Assembly steps for M 12 male/female connector and conductor



Slide parts onto the conductor

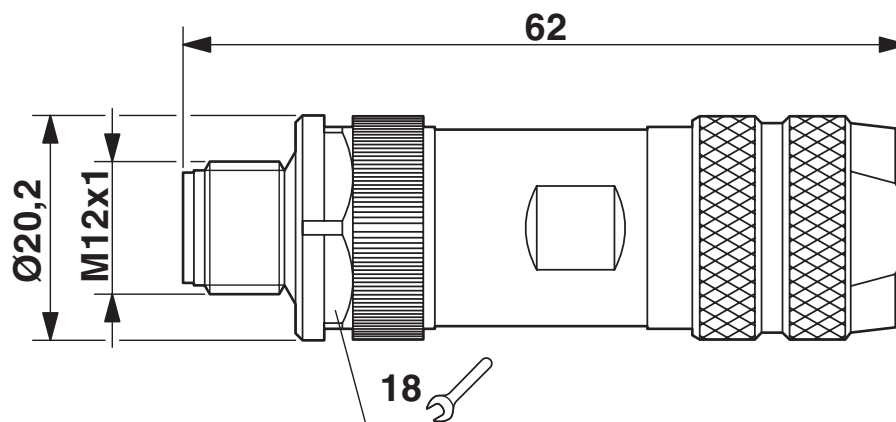


Strip conductor, widen shield and lay around the shielding ring, cut off projecting mesh.



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.

Dimensional drawing



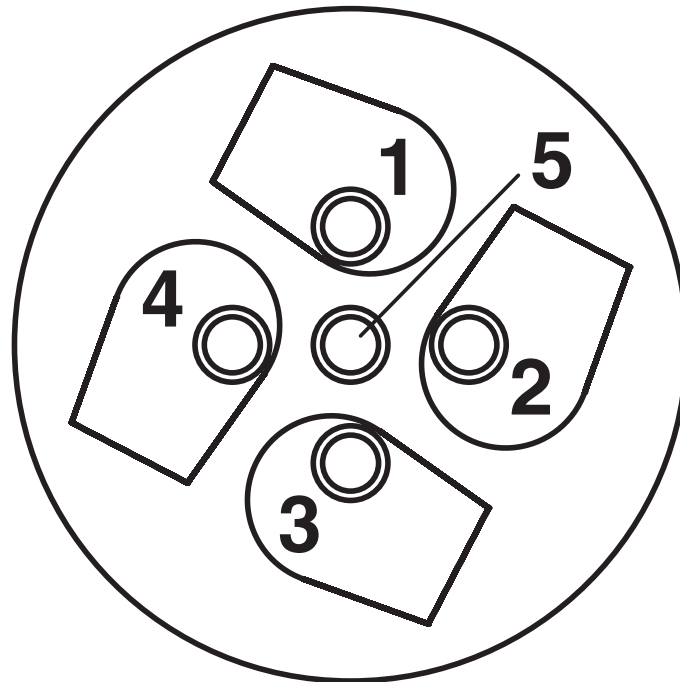
Plug, M12 x 1, straight, shielded

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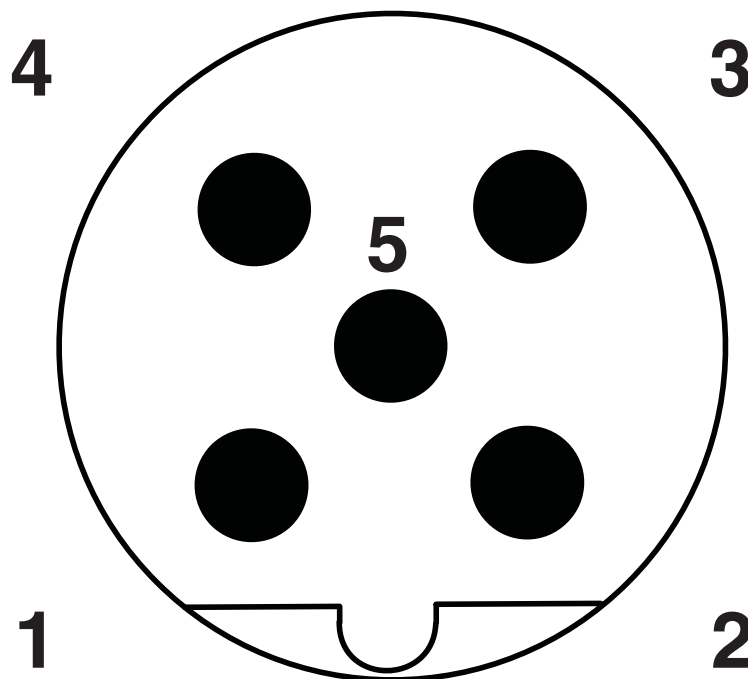
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Schematic diagram



Cable connection side M12 (screw connection)

Schematic diagram



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

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Approvals

 cUL Recognized Approval ID: FILE E 221474				
	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	125 V	4 A	-	-

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cULus Recognized				
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Classifications

ECLASS

ECLASS-10.0.1	27440102
ECLASS-9.0	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

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

Torque screwdriver

Torque screwdriver - TSD 04 SAC - 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

Tool

Tool - SACC BIT M12-D20 - 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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Torque screwdriver

Torque screwdriver - TSD-M 1,2NM - 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

Adapter insert

Adapter insert - TSD-M SAC-BIT ADAPTER - 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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Sealing cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

<https://www.phoenixcontact.com/us/products/1430873>

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



Ferrule

Ferrule - A 0,25- 5 - 3202465

<https://www.phoenixcontact.com/us/products/3202465>

Ferrule, length: 5 mm, color: silver



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Crimping pliers

Crimping pliers - CRIMPFOX 6H - 1212046

<https://www.phoenixcontact.com/us/products/1212046>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.14 mm² ... 6 mm², unlockable pressure lock, lateral entry

Stripping tool

Stripping tool - VS-CABLE-STRIP-VARIO - 1657407

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

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



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Screwdriver

Screwdriver - SZF 1-0,6X3,5 - 1204517

<https://www.phoenixcontact.com/us/products/1204517>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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