Bus system flush-type plug - SACCBP-MSB-5CON-PG9/0,5-900SCO - 1437643

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Bus system flush-type male connector, INTERBUS, 5-pos., M12, shielded, B-coded, SPEEDCON, rear/screw mounting with Pg9 thread, with 0.5 m bus line

Your advantages

- Pre-assembled with cables in various standard lengths for immediate use
- Customer-specific assemblies and cable lengths can be supplied
- Sealed on the cable side for optimum tightness of seal
- Cable designs for all common networks and fieldbuses
- For high transmission safety: shield connection to the housing with optional EMC nut

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 458382
GTIN	4046356458382

Technical data

Dimensions

Length of cable	0.5 m

Ambient conditions

Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
	-40 °C ... 85 °C (without mechanical actuation)
Degree of protection	IP67 (When plugged in)
	IP65 (When plugged in)

General

Note	The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using

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Technical data

General

	a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.
Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Rated surge voltage	1.5 kV
Number of positions	5
Insulation resistance	100 MΩ
Coding	B - inverse
Standards/regulations	M12 connector IEC 61076-2-101
Signal type/category	INTERBUS, 16 Mbps
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	> 100
Torque	2 Nm ... 3 Nm (Installation-side)

Material

Flammability rating according to UL 94	V0
Sealing material	FKM

Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
Flammability rating according to UL 94	V0
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	• The products are suitable for applications in plant, controller, and electrical device engineering.
	• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
	• Assembled products may not be manipulated or improperly opened.
	• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).
	• When using the product in direct connection with third-party manufacturers, the user is responsible.

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Technical data

Standards and Regulations

	• For operating voltages > 50 V AC, conductive connector housings must be grounded
	• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
	• Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product
	• Only use tools recommended by Phoenix Contact
	• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	• Ensure that the protective or functional ground has been properly connected.
	• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector
	• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

Cable

Cable type	INTERBUS
Cable type (abbreviation)	900
Signal type/category	INTERBUS
Cable structure	3 x 2 x 0.22 mm²
Conductor cross section	3x 2x 0.22 mm²
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Wire colors	Green-yellow, white-brown, gray-pink
Twisted pairs	2 cores to the pair
Overall twist	3 pairs to the core
Shielding	Braided copper wires
External sheath, color	may green RAL 6017
External cable diameter D	8 mm
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	15 x D
Number of bending cycles	5000000
Bending radius	120 mm
Traversing path	10 m
Traversing rate	1.6 m/s
Acceleration	3.2 m/s²
Cable weight	70 kg/km

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Technical data

Cable

Outer sheath, material	PUR
Material conductor insulation	PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 5 GΩ*km
Loop resistance	≤ 159.80 Ω/km
Cable capacity	≤ 60 nF/km (At 800 Hz)
Wave impedance	120 Ω ±20 % (at 64 kHz)
	100 Ω ±15 % (with 1 MHz)
Near end crosstalk attenuation (NEXT)	≥ 61 dB (at 772 kHz)
	≥ 59 dB (with 1 MHz)
	≥ 55 dB (at 2 MHz)
	≥ 50 dB (at 4 MHz)
	≥ 46 dB (at 8 MHz)
	≥ 44 dB (at 10 MHz)
	≥ 41 dB (at 16 MHz)
	≥ 40 dB (at 20 MHz)
Attenuation	≤ 15 dB/km (at 256 kHz)
	≤ 24 dB/km (at 772 kHz)
	≤ 27 dB/km (with 1 MHz)
	≤ 52 dB/km (at 4 MHz)
	≤ 84 dB/km (at 10 MHz)
	≤ 112 dB/km (at 16 MHz)
	≤ 119 dB/km (at 20 MHz)
Signal speed	0.66 c
Coupling resistance	< 250.00 mΩ/m (at 30 MHz)
Nominal voltage, cable	250 V (Peak value, not for high-power applications)
Test voltage Core/Core	1500 V_{rms}
Test voltage Core/Shield	1000 V_{rms}
Flame resistance	according to VDE 0472, Part 4, test type B
	according to IEC 60332-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 70 °C (cable, flexible installation)

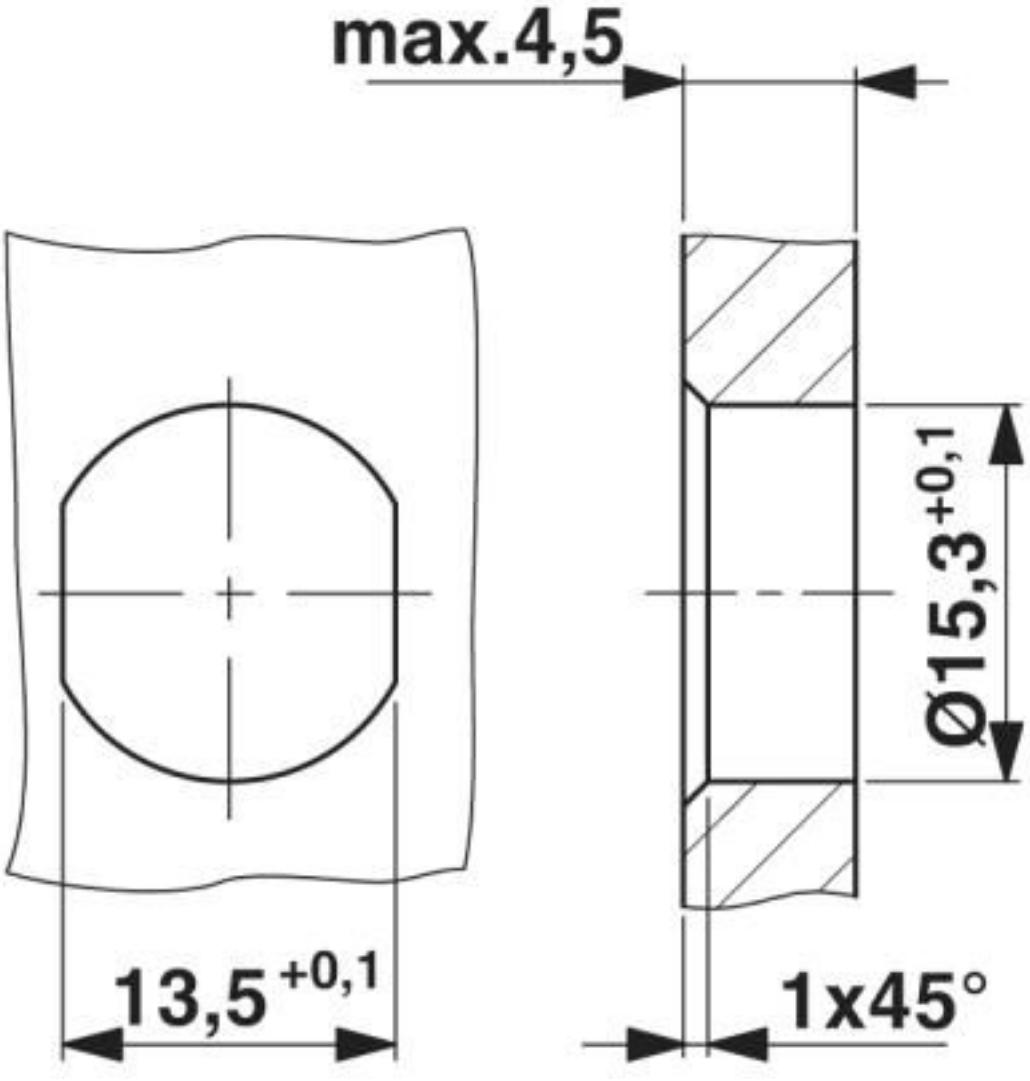
Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

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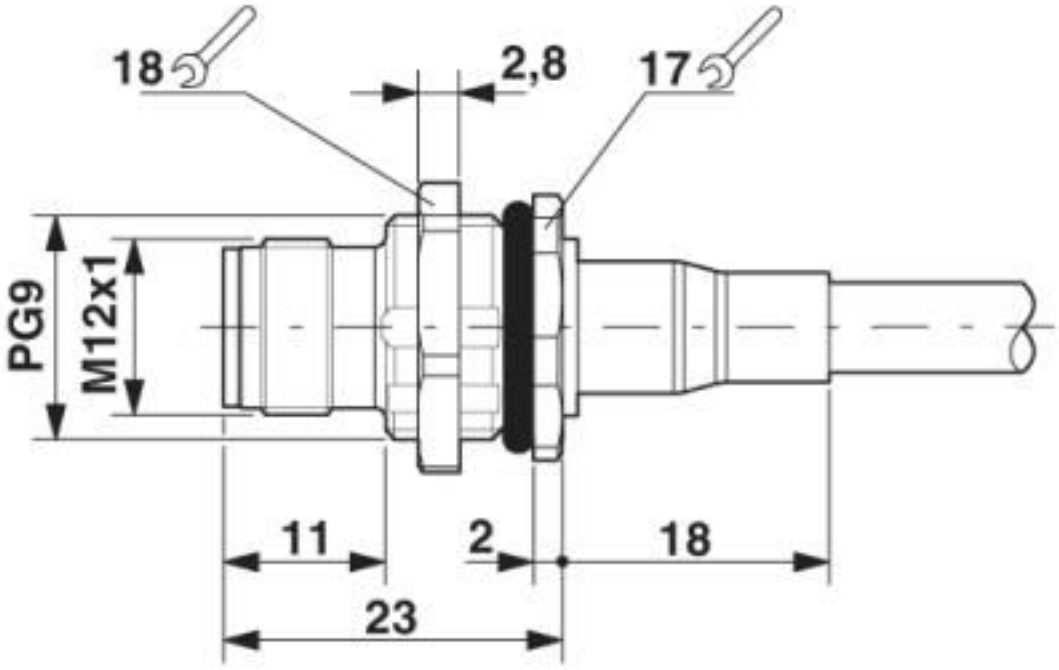
Dimensional drawing



Housing cutout for Pg9 fastening thread, mounting panel with feed-through hole (alternatively with surface as protection against rotation)

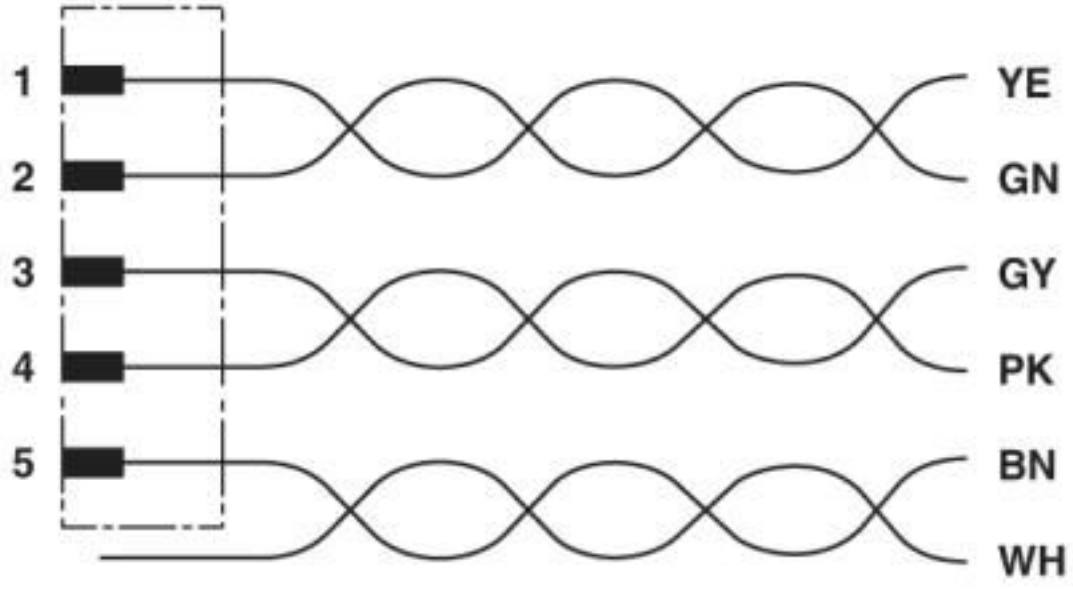
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Dimensional drawing



M12 panel feed-through

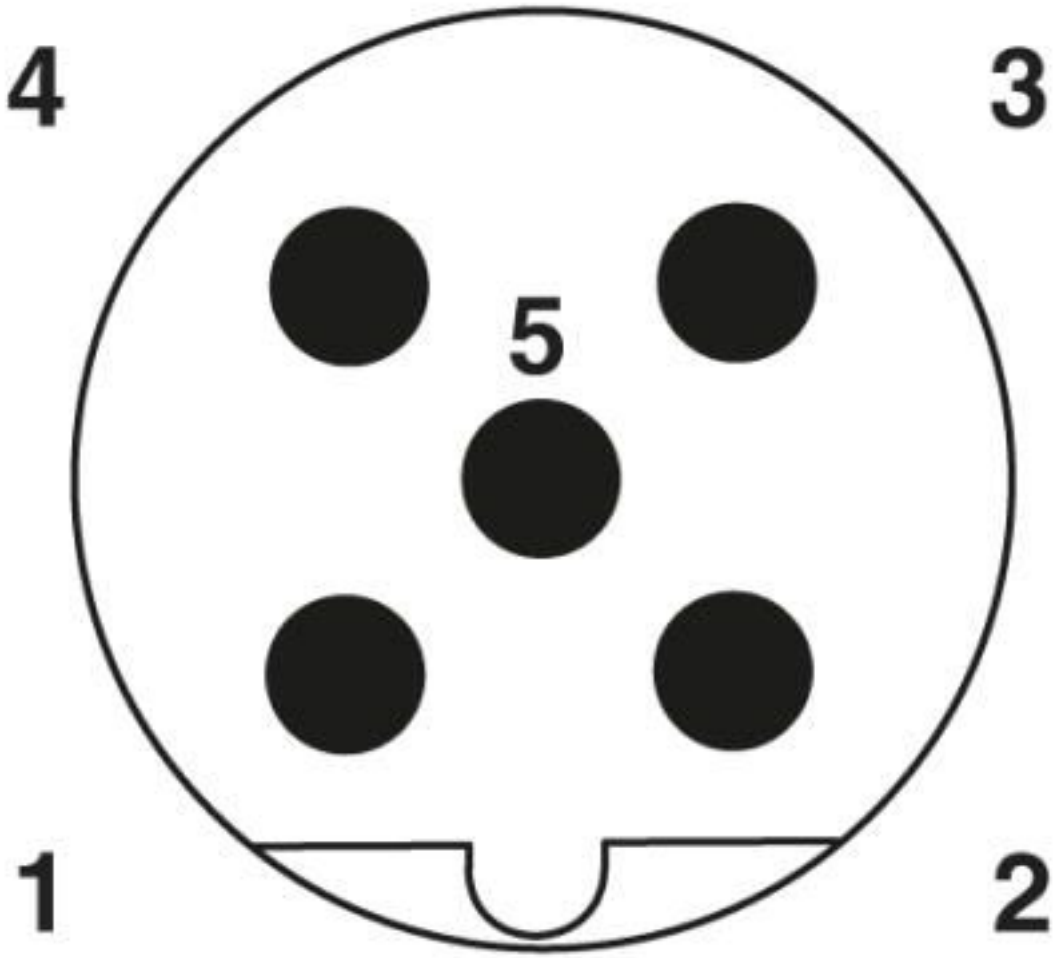
Circuit diagram



Contact assignment of the M12 plug

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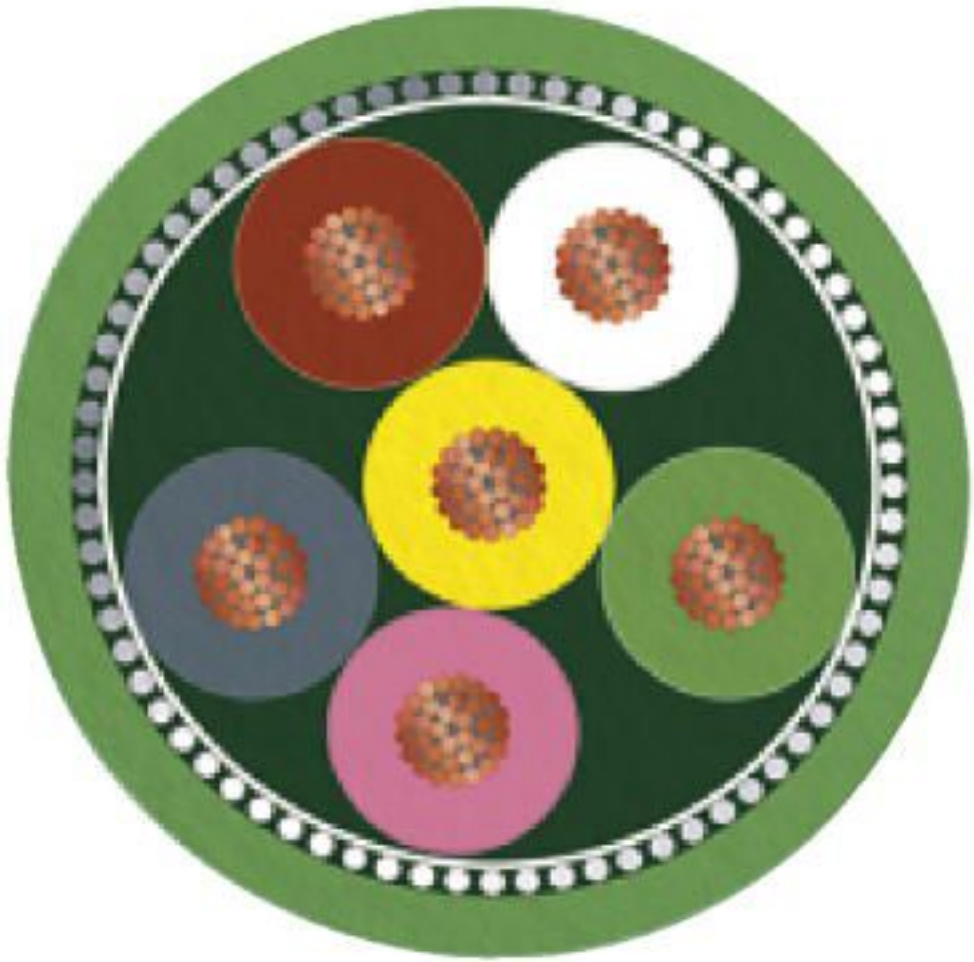
Schematic diagram



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

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Cable cross section



INTERBUS [900]

Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCl@ss 5.0	27143400
eCl@ss 5.1	27143400
eCl@ss 6.0	27279200
eCl@ss 7.0	27440103
eCl@ss 8.0	27440103
eCl@ss 9.0	27440102

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Classifications

ETIM

ETIM 3.0	EC002061
ETIM 4.0	EC002061
ETIM 5.0	EC002061
ETIM 6.0	EC002061

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	39121413
UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

EAC	EAC	B.01687

Accessories

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EMC nut

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Accessories

EMV nut - SACC-PG9-KD-NUT-SH - 1440177



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