

Bus system flush-type plug - SACCBP-MS-5CON-PG9/1,0-920SCO - 1437575

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Bus system flush-type plug, DeviceNet/CANopen, 5-pos., M12, shielded, A-coded, SPEEDCON, rear/screw mounting with Pg9 thread, with 1.0 m bus cable, 2 x 0.2 mm², 2 x 0.32 mm²


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



DeviceNet CANopen SPEEDCON

Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 457705
GTIN	4046356457705

Technical data

Dimensions

Length of cable	1 m
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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 (Plug/socket in accordance with IEC 61076-2-101, cable technical data is to be observed)
Rated voltage	48 V AC
	60 V DC
Rated surge voltage	1.5 kV
Number of positions	5
Insulation resistance	100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Signal type/category	CANopen®
	DeviceNet™
Overvoltage category	II
Degree of pollution	3
Connection method	CAN Bus / DeviceNet
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.

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Technical data

Standards and Regulations

	<ul style="list-style-type: none"> 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).
	<ul style="list-style-type: none"> When using the product in direct connection with third-party manufacturers, the user is responsible.
	<ul style="list-style-type: none"> For operating voltages > 50 V AC, conductive connector housings must be grounded
	<ul style="list-style-type: none"> Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
	<ul style="list-style-type: none"> Observe the corresponding technical data. You will find information: <ul style="list-style-type: none"> On the product On the packing label In the supplied documentation Online at phoenixcontact.com/products under the product
	<ul style="list-style-type: none"> Only use tools recommended by Phoenix Contact
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> Ensure that the protective or functional ground has been properly connected.
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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	CANopen [®] /DeviceNet [™] , PUR, violet
Cable type (abbreviation)	920
UL AWM style	21198 (80°C/300 V)
Signal type/category	CANopen [®]
	DeviceNet [™]
Cable structure	2xAWG24/19+2xAWG22/19
Conductor cross section	2x 0.25 mm ² (Data cable)
	2x 0.34 mm ² (Power supply)
	1x 0.34 mm ² (Drain wire)
AWG signal line	24
AWG power supply	22
Conductor structure signal line	19x 0.13 mm
Conductor structure, voltage supply	19x 0.15 mm
Core diameter including insulation	1.95 mm ±0.05 mm (Data cable)
	1.4 mm ±0.05 mm (Power supply)
Wire colors	Red-black, blue-white
Twisted pairs	2 cores to the pair

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Technical data

Cable

Type of pair shielding	Plastic-coated aluminum foil, aluminum side outside
Overall twist	2 pairs around a drain wire in the center to the core
Shielding	Tinned copper braided shield
Optical shield covering	80 %
External sheath, color	violet RAL 4001
External cable diameter D	6.7 mm \pm 0.3 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	5000000
Bending radius	70 mm
Minimum bending radius, drag chain applications	10 x D
Traversing path	4.5 m
Traversing rate	3 m/s
Acceleration	3 m/s ²
Cable weight	90 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE (Data cable)
	PE (Power supply)
Conductor material	Tin-plated Cu litz wires
Insulation resistance	$\geq 5 \text{ G}\Omega \cdot \text{km}$ (Data cable)
	$\geq 5 \text{ G}\Omega \cdot \text{km}$ (Power supply)
Loop resistance	$\leq 181.80 \text{ }\Omega/\text{km}$ (Data cable)
	$\leq 114.80 \text{ }\Omega/\text{km}$ (Power supply)
Cable capacity	nom. 40 nF/km (Data cable)
Wave impedance	120 $\Omega \pm 10 \%$ (with 1 MHz)
Attenuation	$\leq 22.9 \text{ dB/km}$ (with 1 MHz)
	$\leq 16.4 \text{ dB/km}$ (At 500 kHz)
	$\leq 9.5 \text{ dB/km}$ (At 125 kHz)
Nominal voltage, cable	$\leq 300 \text{ V}$ (Peak value, not for high-power applications)
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000 V (50 Hz, 1 min.)
Flame resistance	UL 1581, Sec. 1060 (FT-1)
	IEC 60332-1
	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Halogen-free	in accordance with DIN VDE 0472 part 815
	according to IEC 60754-1
Other resistance	Low adhesion
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (cable, flexible installation)

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Technical data

Cable

Ambient temperature (storage/transport)	-40 °C ... 80 °C
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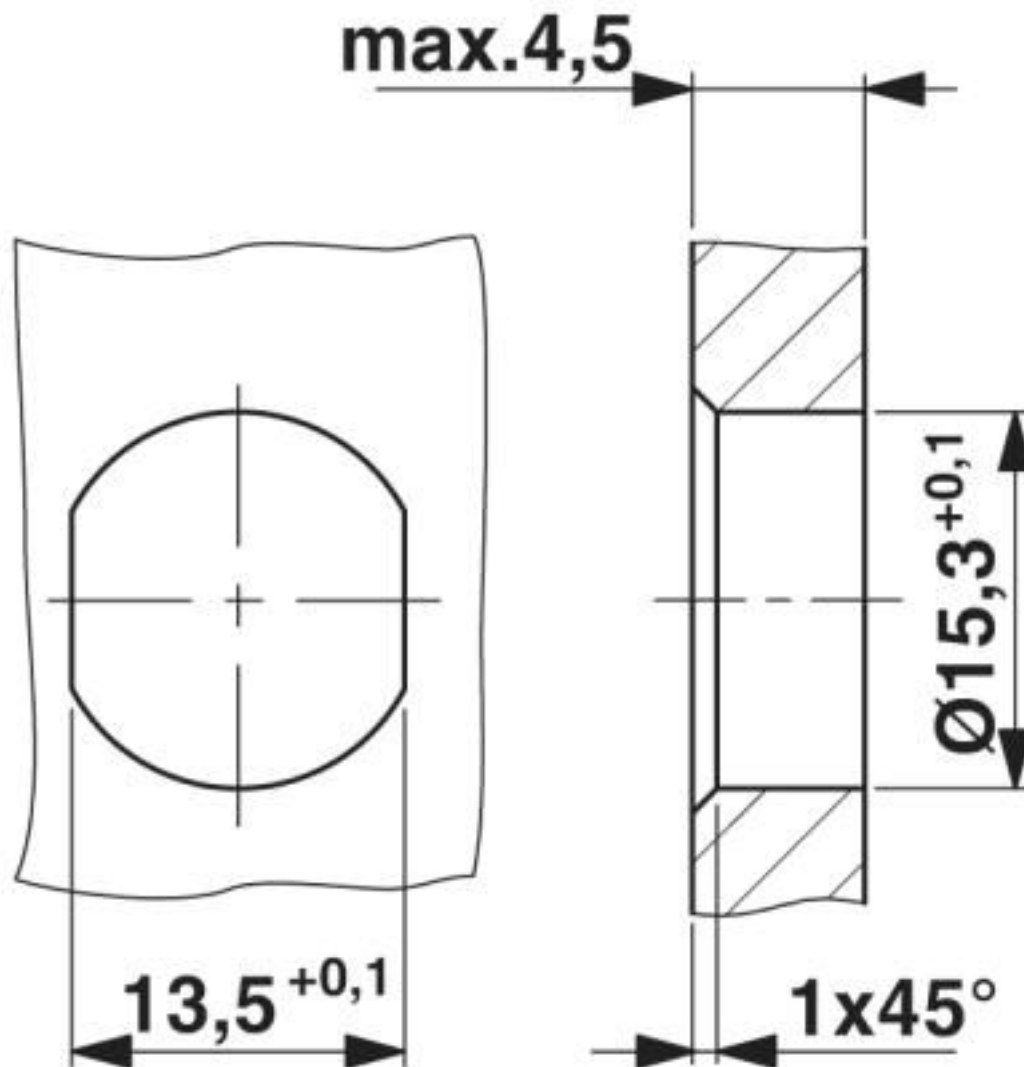
Environmental Product Compliance

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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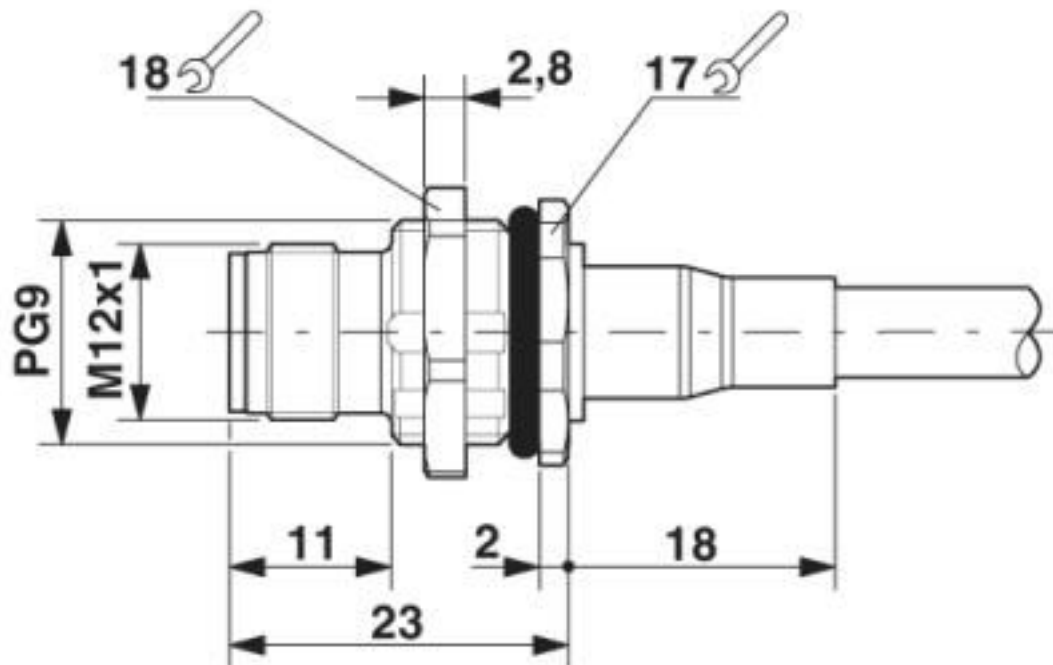
Dimensional drawing



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

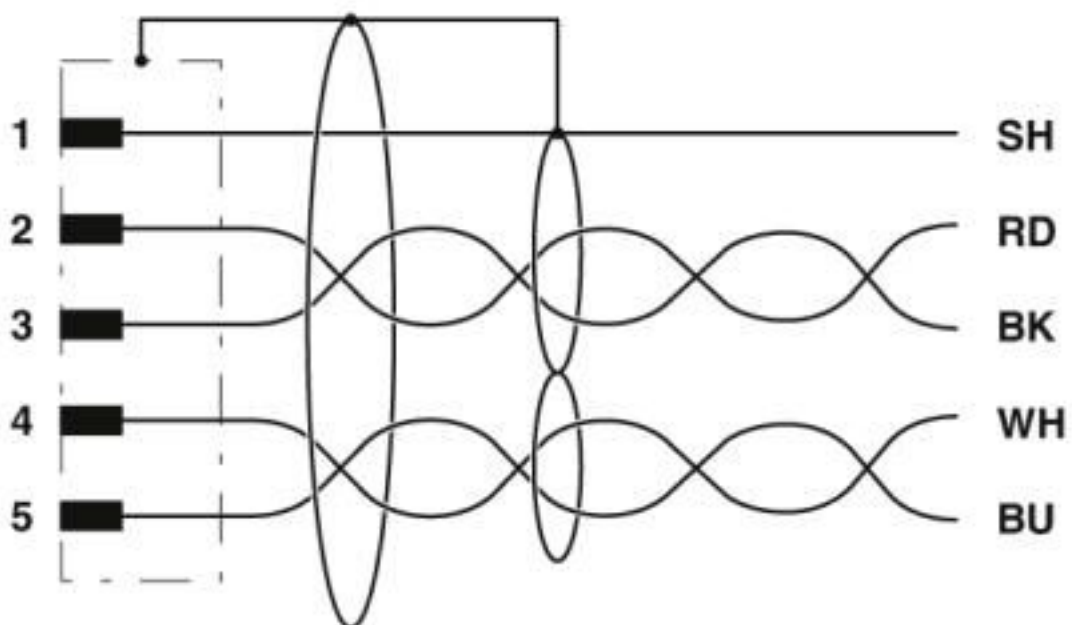
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Dimensional drawing



M12 panel feed-through

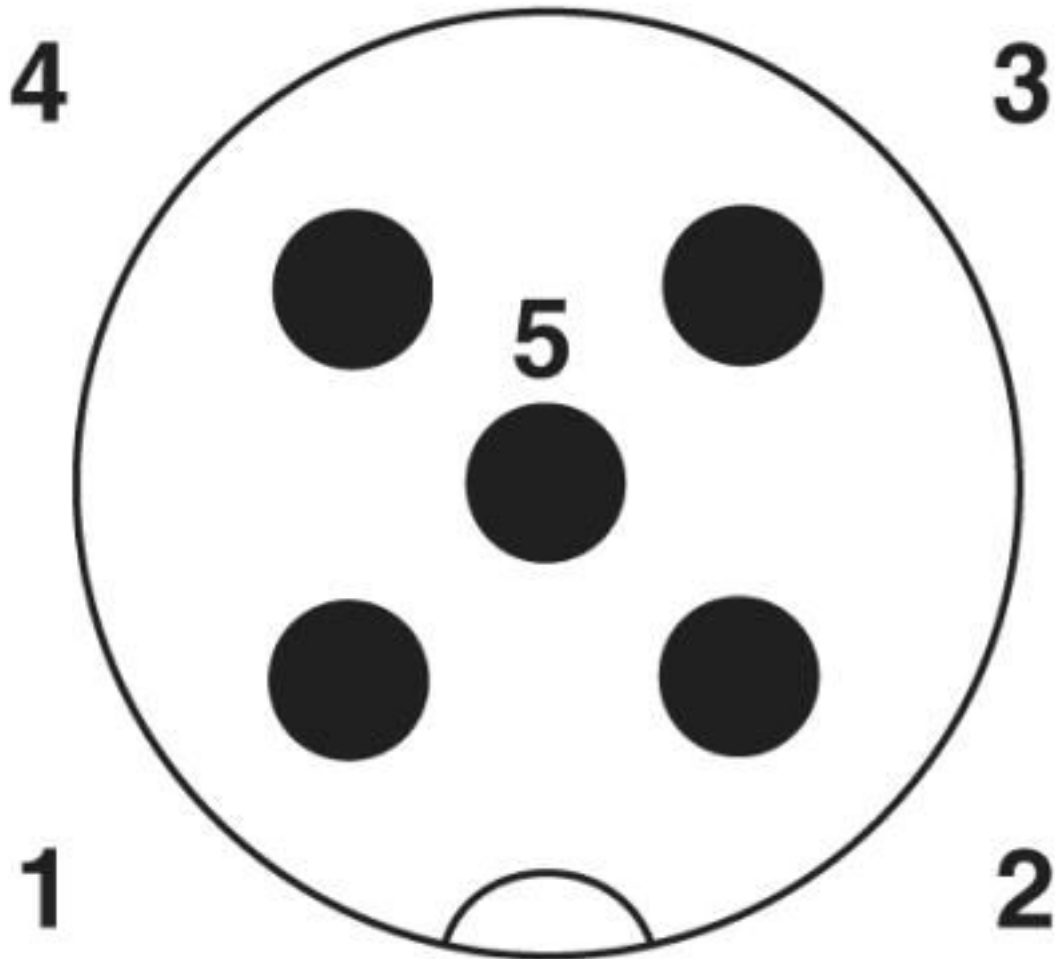
Circuit diagram



Contact assignment of the M12 plug

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Schematic diagram



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

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Cable cross section



CANopen[®]/DeviceNet[™], PUR, violet [920]

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

UL Recognized / EAC

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 118976
Nominal voltage UN	60 V		
Nominal current IN	4 A		
mm²/AWG/kcmil	22		

EAC		B.01687
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Accessories

Accessories

EMC nut

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



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