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Bus system flush-type socket, DeviceNet/CANopen, 5-pos., M12, shielded, A-coded, Speedcon, rear/screw mounting with Pg9 thread, with 0.5 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
- For high transmission safety: shield connection to the housing with optional EMC nut



Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 457651
GTIN	4046356457651

Technical data

Dimensions

Length of cable	0.5 m
Ambient conditions	

Ambient conditions

Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
Degree of protection	IP65/IP67

General

	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 a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.
Rated current at 40°C	2 A



Technical data

General

Rated voltage	60 V
Rated surge voltage	1.5 kV
Number of positions	5
Insulation resistance	\geq 100 M Ω
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Signal type/category	DeviceNet™
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
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	FKM

Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Flammability rating according to UL 94	V0

Cable

Cable type	CAN Bus/DeviceNet
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 mm² (Data cable)
	2x 0.34 mm² (Power supply)
	1x 0.34 mm² (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)



Technical data

Cable

Wire colors Red-black, blue-white Twisted pairs 2 cores to the pair 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 Optical shield covering 80 % External sheath, color External cable diameter D Minimum bending radius, fixed installation No P Minimum bending radius, flouible installation 10 x D	
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Minimum bending radius, fixed installation 5 x D	
Minimum handing radius flevible installation	
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 $\geq 5 \text{ G}\Omega^*\text{km}$ (Data cable)	
$\geq 5 \ G\Omega^*$ km (Power supply)	
Loop resistance ≤ 181.80 Ω/km (Data cable)	
≤ 114.80 Ω/km (Power supply)	
Cable capacity nom. 40 nF/km (Data cable)	
Wave impedance 120 Ω ±10 % (with 1 MHz)	
Attenuation ≤ 22.9 dB/km (with 1 MHz)	
≤ 16.4 dB/km (At 500 kHz)	
≤ 9.5 dB/km (At 125 kHz)	
Nominal voltage, cable ≤ 300 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	



Technical data

Cable

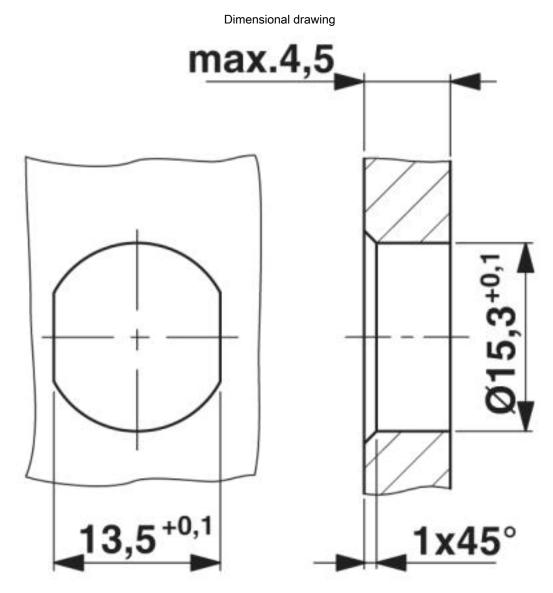
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-20 °C 80 °C (cable, flexible installation)
Ambient temperature (storage/transport)	-40 °C 80 °C

Environmental Product Compliance

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

Drawings

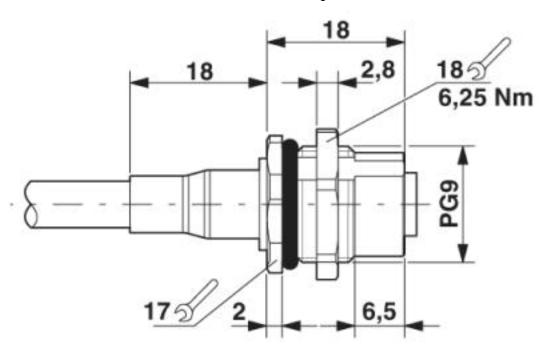




Housing cutout for Pg9 fastening thread, mounting panel with feed-through hole (alternatively with surface as protection against rotation)

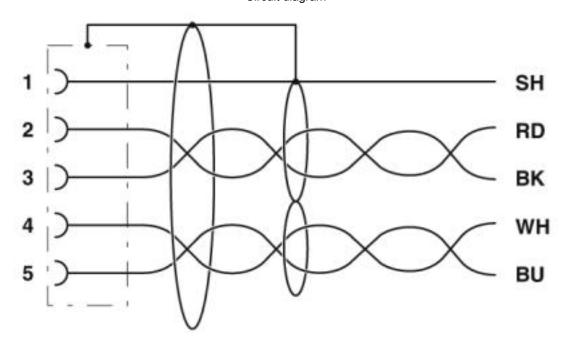


Dimensional drawing



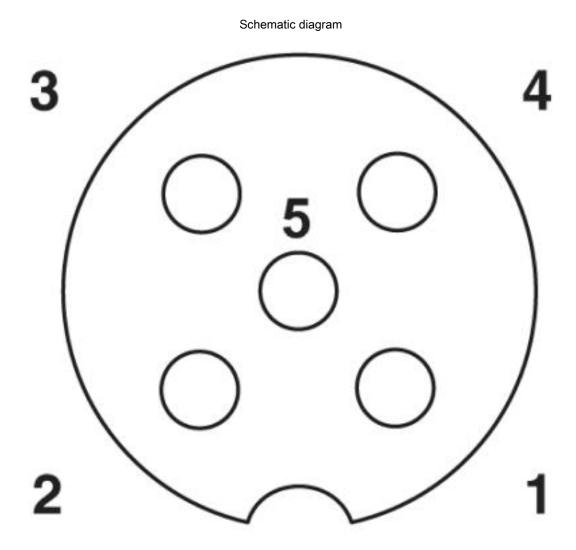
M12 panel feed-through

Circuit diagram



Contact assignment of the M12 socket





Pin assignment M12 socket, 5-pos., A-coded, socket side view



Cable cross section



CAN Bus/DeviceNet [920]

Approvals

Approvals

Approvals

UL Recognized / EAC

Ex Approvals

Approval details



Approvals

UL Recognized	74	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 EH

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