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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

Why buy this product

- 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 STK
GTIN	4 046356 457651
GTIN	4046356457651

Technical data

Dimensions

Length of cable	0.5 m
Ambient conditions	
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
Degree of protection	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 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Signal type/category	DeviceNet™
Overvoltage category	Ш
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 66
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 mm ² (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	Tinned copper braided shield
Optical shield covering	80 %
External sheath, color	violet RAL 4001
External cable diameter D	6.7 mm ±0,3 mm
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	5000000
Bending radius	70 mm
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 GΩ*km (Data cable)
	\geq 5 GΩ*km (Power supply)
Conductor resistance	\leq 90.9 Ω /km (Data cable)
	\leq 57.4 Ω /km (Power supply)
Cable capacity	nom. 40 pF/m (Data cable)
Wave impedance	120 Ω ±10 % (with 1 MHz)
Wave attenuation	≥ 0.0229 dB/m (with 1 MHz)
Nominal voltage, cable	\leq 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
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

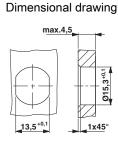


Technical data

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50	
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"	

Drawings

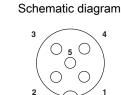


Housing cutout for Pg9 fastening thread, mounting panel with feedthrough hole (alternatively with surface as protection against rotation)

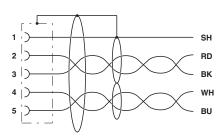
Cable cross section



CAN Bus/DeviceNet [920]



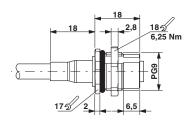
Pin assignment M12 socket, 5-pos., A-coded, socket side view



Circuit diagram

Contact assignment of the M12 socket

Dimensional drawing



M12 panel feed-through

Approvals

Approvals



Approvals

Approvals

UL Recognized / EAC

Ex Approvals

Γ

Γ

Approval details

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 118976
mm²/AWG/kcmil		26-20	
Nominal current IN		4 A	
Nominal voltage UN		60 V	

EAC	EAC	B.00767

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PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany Tel. +49 5235 300 Fax +49 5235 3 41200 http://www.phoenixcontact.com