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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, $2 \times 0.2 \text{ mm}^2$; $2 \times 0.32 \text{ mm}^2$

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
- For high transmission safety: shield connection to the housing with optional EMC nut



Key Commercial Data

Packing unit	1 STK
Custom tariff number	85444290
Country of origin	Germany

Technical data

Dimensions

Length of cable	0.5 m
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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



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	2 A
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 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 mm² (Power supply)
	1x 0.34 mm² (Drain wire)



Technical data

Cable

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
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	$\geq 5~G\Omega^*$ km (Data cable)
	$\geq 5 \text{ G}\Omega^*\text{km}$ (Power supply)
Conductor resistance	≤ 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	≤ 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)



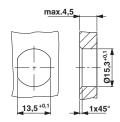
Technical data

Cable

	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

Drawings

Dimensional drawing



Schematic diagram



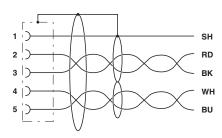
Pin assignment M12 socket, 5-pos., A-coded, socket side view

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

Cable cross section



Circuit diagram

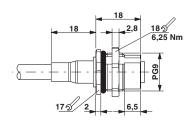


CAN Bus/DeviceNet [920]

Contact assignment of the M12 socket



Dimensional drawing



M12 panel feed-through

Classifications

eCl@ss

eCl@ss 4.0	27250313
eCl@ss 4.1	27250313
eCl@ss 5.0	27143423
eCl@ss 5.1	27143423
eCl@ss 6.0	27143423
eCl@ss 7.0	27449001
eCl@ss 8.0	27440103
eCl@ss 9.0	27440102

ETIM

ETIM 3.0	EC002061
ETIM 4.0	EC000830
ETIM 5.0	EC002061

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	39121413

Approvals

Approvals



Αı	or	ro	va	ls

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				
mm²/AWG/kcmil	26-20			
Nominal current IN	4 A			
Nominal voltage UN	60 V			

EAC B.00767

Accessories

Accessories

EMC nut

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



EMC nut Pg9 is required for shield contacting on coated housing surfaces.

Plug for cable screw gland

Screw plug - SACC-M16-SEALING PLUG SET - 1453368



M16 screw plug for unused M12 housing cutouts



Accessories

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