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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 0.5 m bus cable,  $2 \times 0.2 \text{ mm}^2$ ,  $2 \times 0.32 \text{ mm}^2$ 









## Key commercial data

Packing unit	11
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

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Insulation resistance	100 ΜΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Signal type/category	DeviceNet™
Surge voltage category	II
Pollution degree	3



## Technical data

#### Material

Inflammability class 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	NBR

## Cable

Cable type	CAN Bus/DeviceNet
Cable type (abbreviation)	920
Conductor cross section	2x 0.25 mm² (signal line)
	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 (signal line)
	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	Aluminum-lined polyester foil
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
Smallest bending radius, fixed installation	67 mm
Smallest bending radius, movable installation	67 mm
Number of bending cycles	2000000
Bending radius	67 mm
Traversing path	4.5 m
Traversing rate	3 m/s
Acceleration	3 m/s²
Outer sheath, material	PUR
Material conductor insulation	Foamed PE (signal line)



## Technical data

#### Cable

	PE (Power supply)
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 5 GΩ*km (signal line)
	$\geq$ 5 G $\Omega$ *km (Power supply)
Working capacitance	nom. 40 nF (signal line)
Wave impedance	120 $\Omega$ ± 12 $\Omega$ (with 1 MHz)
Nominal voltage, cable	max. 300 V
Test voltage, cable	2000 V (50 Hz, 1 min.)
Flame resistance	UL 1581, Sec. 1060 (FT-1)
	IEC 60332-1
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-20 °C 70 °C (cable, flexible installation)

## 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	27449001

### **ETIM**

ETIM 3.0	EC002061
ETIM 4.0	EC002061
ETIM 5.0	EC002061

### **UNSPSC**

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

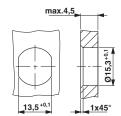


Approvals		
Approvals		
Approvals		
UL Recognized / GOST / GOST		
Ex Approvals		
Approvals submitted		
Approval details		
UL Recognized <b>SN</b>		
mm²/AWG/kcmil	26-20	
Nominal current IN	4 A	
Nominal voltage UN 60 V		
GOST C		
GOST		

Drawings



#### Dimensioned drawing



#### Schematic diagram



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

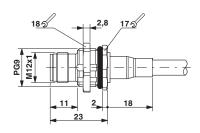
Housing cutout for Pg9 fastening thread, mounting panel with feedthrough hole (alternatively with surface as protection against rotation)

Cable cross section



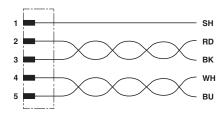
CAN Bus/DeviceNet [920]

#### Dimensioned drawing



M12 panel feed-through

## Circuit diagram



Contact assignment of the M12 plug

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