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Bus system flush-type socket, PROFINET, 4-pos., M12, shielded, D-coded, SPEEDCON, rear/screw mounting with Pg9 thread, with 2.0 m bus cable, $2 \times 2 \times 0.34$ 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
- For high transmission safety: shield connection to the housing with optional EMC nut



Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 458528
GTIN	4046356458528

Technical data

Dimensions

Length of cable	2 m
Ambient conditions	

Ambient conditions

Ambient temperature (operation)	-20 °C 60 °C (cable, fixed installation)
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	4 A



Technical data

General

Rated voltage	250 V
Rated surge voltage	2.5 kV
Number of positions	4
Coding	D - data
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
	EtherCAT [®] CAT5 (IEC 11801), 100 Mbps
Overvoltage category	П
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	Nickel-plated brass
Sealing material	FKM

Standards and Regulations

Flammability rating according to UL 94	V0
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Cable

Cable type	PROFINET PVC stranded CAT5
Cable type (abbreviation)	93B
UL AWM style	21694
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
Cable structure	1x4xAWG22/7; SF/TQ
Conductor cross section	4x 0.34 mm²
AWG signal line	22
Conductor structure signal line	7x 0.25 mm
Core diameter including insulation	1.55 mm
Wire colors	White, yellow, blue, orange
Overall twist	Star quad
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	85 %
External sheath, color	green RAL 6018
Outer sheath thickness	approx. 0.9 mm
External cable diameter D	6.5 mm ±0.2 mm
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D



Technical data

Cable

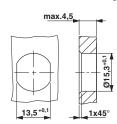
Cable weight	67 kg/km
Outer sheath, material	PVC
Material, inner sheath	PVC
Material conductor insulation	PE PE
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 500 MΩ*km
Loop resistance	\leq 120 Ω (per km)
Wave impedance	100 Ω ±15 Ω (at 100 MHz)
Signal speed	0.66 c
Signal runtime	5.3 ns/m
Coupling resistance	\leq 20.00 m Ω /m (At 10 MHz)
Nominal voltage, cable	600 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000 V (50 Hz, 1 min.)
Flame resistance	According to UL 1685 (CSA FT 4)
Resistance to oil	Resistant to oil to a limited extent
Other resistance	UV resistant According to UL 1581, Section 1200
Ambient temperature (operation)	-40 °C 70 °C (cable, fixed installation)
	-40 °C 70 °C (cable, flexible installation)
Ambient temperature (installation)	-20 °C 60 °C
Ambient temperature (storage/transport)	-50 °C 70 °C

Environmental Product Compliance

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

Drawings

Dimensional drawing



Schematic diagram



Pin assignment M12 socket, 4-pos., D-coded, female side

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

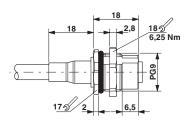


Cable cross section



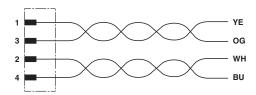
PROFINET PVC stranded CAT5 [93B]

Dimensional drawing



M12 panel feed-through

Circuit diagram



Contact assignment of the M12 socket

Approvals

Approvals

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UL Recognized / EAC

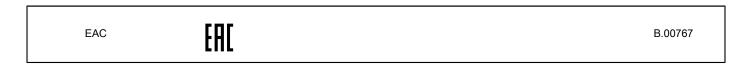
Ex Approvals

Approval details

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.h	tm FILE E 118976
mm²/AWG/kcmil	26-20	
Nominal current IN	4 A	
Nominal voltage UN	250 V	



Approvals



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