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Bus system flush-type plug, PROFIBUS, 2-pos., M12, shielded, B-coded, SPEEDCON, rear/screw mounting with Pg9 thread, with 1.0 m bus cable, $2 \times 0.25 \text{ mm}^2$

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
GTIN	4 0 4 6 3 5 6 4 5 7 6 2 0
GTIN	4046356457620

Technical data

Dimensions

Length of cable	1 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	4 A



Technical data

General

Rated voltage	60 V
Rated surge voltage	1.5 kV
Number of positions	2
Insulation resistance	\geq 100 M Ω
Coding	B - inverse
Standards/regulations	M12 connector IEC 61076-2-101
Signal type/category	PROFIBUS
Status display	No
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	> 100

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	PROFIBUS	
Cable type (abbreviation)	910	
UL AWM style	21198 (80°C/300 V)	
Signal type/category	PROFIBUS	
Cable structure	1x2xAWG24/19	
Conductor cross section	2x 0.25 mm² (Signal line)	
AWG signal line	24	
Conductor structure signal line	19x 0.13 mm	
Core diameter including insulation	2.55 mm ±0.07 mm	
Wire colors	Red, green	
Overall twist	2 cores with 2 fillers to the core	
Shielding	Plastic-coated aluminum foil, tinned copper braided shield	
Optical shield covering	85 %	
External sheath, color	violet RAL 4001	
External cable diameter D	7.8 mm ±0.2 mm	



Technical data

Cable

Smallest bending radius, fixed installation	40 mm	
Smallest bending radius, movable installation	65 mm	
Number of bending cycles	4000000	
Bending radius	65 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, filler	PP	
Material conductor insulation	Foam-Skin PP	
Conductor material	Tin-plated Cu litz wires	
Insulation resistance	$\geq 5~G\Omega^*km$	
Conductor resistance	≤ 78.6 Ω/km	
Cable capacity	nom. 30 pF/m	
Wave impedance	150 Ω ±10 % (3 MHz 20 MHz)	
Wave attenuation	≤ 0.049 dB/m (at 16 MHz)	
Nominal voltage, cable	30 V	
Test voltage Core/Core	1500 V (50 Hz, 1 min.)	
Test voltage Core/Shield	1500 V (50 Hz, 1 min.)	
Flame resistance	UL 1581, Sec. 1060 (FT-1)	
	IEC 60332-1-2	
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)	
	-30 °C 80 °C (cable, flexible installation)	
	≤ 70 °C (cable, drag chain applications)	
Ambient temperature (storage/transport)	-40 °C 80 °C	

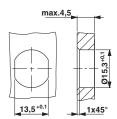
Environmental Product Compliance

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



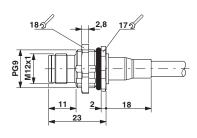
Pin assignment M12 male connector, 5-pos., B-coded, male side

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

Cable cross section



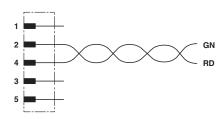
Dimensional drawing



PROFIBUS [910]

M12 panel feed-through

Circuit diagram



Contact assignment of the M12 plug

Approvals

Approvals

Approvals

UL Recognized / EAC

Ex Approvals



Approvals

Approval details

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 11897		FILE E 118976
mm²/AWG/kcmil		26-20	
Nominal current IN		4 A	
Nominal voltage UN		250 V	

EAC	B.00767
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