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Bus system flush-type socket, DeviceNet/CANopen, 5-pos., M12, shielded, A-coded, front/screw mounting, with M16 thread, can be positioned, with 1 m bus cable, 2×0.2 mm²; 2×0.32 mm²

Key commercial data

CANOPER DeviceNet DeviceNet

Packing unit1 pcGTIN4 046356022422Weight per Piece (excluding packing)86.8 gCustom tariff number85444290Country of originGermanyNoteMade to Order (non-returnable)

Technical data

Dimensions

Length of cable	1 m
Ambient conditions	

Degree of protection IP67	Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	Degree of protection	IP67

General

Note	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
Rated voltage	60 V
Number of positions	5
Contact resistance	$\leq 3 \text{ m}\Omega$
Insulation resistance	\geq 100 MΩ



Technical data

General

Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Surge voltage category	I
Pollution degree	3
Test voltage	2500 V
Connection method	CAN Bus / DeviceNet
Insertion/withdrawal cycles	> 100
Torque	3 Nm 4 Nm (Installation-side)
Mounting type	Front mounting M16 x 1.5 With locking nut
Material	
Inflammability class according to UL 94	VO
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 66
Material, knurls	Nickel-plated brass
Sealing material	NBR
Cable	
Cable type	CAN Bus/DeviceNet
Cable type (abbreviation)	920
UL AWM style	21198 (80°C/300 V)
Conductor cross section	2x 0.25 mm² (signal line)
	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 (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



Technical data

Cable

Number of bending cycles	500000
Bending radius	70 mm
Traversing path	4.5 m
Traversing rate	3 m/s
Acceleration	3 m/s ²
Outer sheath, material	PUR
Material conductor insulation	Foamed PE (signal line)
	PE (Power supply)
Conductor material	Tin-plated Cu litz wires
Insulation resistance	\geq 5 GΩ*km (signal line)
	\geq 5 GΩ*km (Power supply)
Loop resistance	\leq 181.8 Ω (signal line)
	\leq 114.8 Ω (Power supply)
Working capacitance	nom. 40 nF (signal line)
Wave impedance	120 Ω ±12 Ω (f = 1 MHz)
Shield attenuation	≤ 0.229 dB/km (with 1 MHz)
	≤ 0.164 dB (At 500 kHz)
	≤ 0.095 dB (At 125 kHz)
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
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-20 °C 70 °C (cable, flexible installation)

Classifications

eCl@ss

eCl@ss 4.0	27140815
eCl@ss 4.1	27140815
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

ETIM

ETIM 2.0 EC001297	



Classifications

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	31251501

Approvals

Approvals

Approvals	
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EAC

Ex Approvals

Approvals submitted

Approval details

EAC

Drawings

Dimensioned drawing



Housing cutout for M16 fastening thread, mounting panel with thread

Schematic diagram



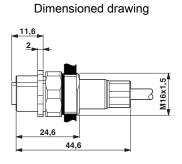
Pin assignment M12 socket, 5-pos., A-coded, socket side view

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Cable cross section

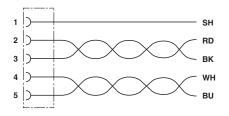




CAN Bus/DeviceNet [920]

M12 flush-type connector

Circuit diagram



Contact assignment of the M12 socket

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