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Bus system flat-type plug - SACCEC-M12FS-5CON-M16/ 1,0-920 - 1525681


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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 x 0.2 mm²; 2 x 0.32 mm²

CANopen *DeviceNet* **DeviceNet**

Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 022422

Technical data

Dimensions

Length of cable	1 m
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Ambient conditions

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
Rated surge voltage	1.5 kV
Number of positions	5
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Overvoltage category	II
Degree of pollution	3

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Technical data

General

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

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	NBR

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)
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 %

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Technical data

Cable

External sheath, color	violet RAL 4001
External cable diameter D	6.7 mm \pm 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
Outer sheath, material	PUR
Material conductor insulation	Foamed PE (Data cable)
	PE (Power supply)
Conductor material	Tin-plated Cu litz wires
Insulation resistance	$\geq 5 \text{ G}\Omega\cdot\text{km}$ (Data cable)
	$\geq 5 \text{ G}\Omega\cdot\text{km}$ (Power supply)
Conductor resistance	$\leq 90.9 \text{ }\Omega/\text{km}$ (Data cable)
	$\leq 57.4 \text{ }\Omega/\text{km}$ (Power supply)
Cable capacity	nom. 40 pF/m (Data cable)
Wave impedance	120 $\Omega \pm 10 \%$ (with 1 MHz)
Wave attenuation	$\geq 0.0229 \text{ dB/m}$ (with 1 MHz)
Nominal voltage, cable	$\leq 300 \text{ V}$ (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
	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)
	$\leq 70 \text{ °C}$ (cable, drag chain applications)
Ambient temperature (storage/transport)	-40 °C ... 80 °C

Classifications

eCl@ss

eCl@ss 4.0	27140815
eCl@ss 4.1	27140815
eCl@ss 5.0	27143423

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Classifications

eCl@ss

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
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

EAC

Ex Approvals

Approvals submitted

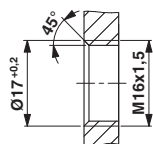
Approval details

EAC

Drawings

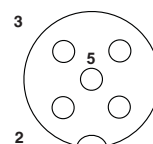
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Dimensional drawing



Housing cutout for M16 fastening thread, mounting panel with thread

Schematic diagram



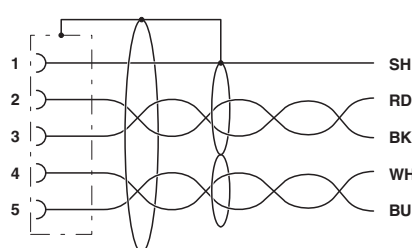
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section



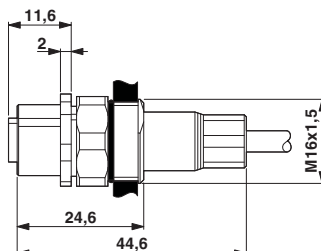
CAN Bus/DeviceNet [920]

Circuit diagram



Contact assignment of the M12 socket

Dimensional drawing



M12 flush-type connector

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