

Bus system cable - SAC-5P-M12MS/20-92X/M12FSSHOD - 1413938

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Bus system cable, CANopen®, DeviceNet™, 5-position, FRNC halogen-free, black, shielded, Plug straight M12, A-coded, on Socket straight M12, A-coded, cable length: 20 m, for outdoor applications, with high-grade steel knurl

Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Corrosion protection for all exposed metal parts, thanks to the use of stainless steel type 1.4404
- ✓ Robust throughout: resistant to oil, UV, and ozone, withstands temperatures from -40°C to +105°C
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 055626 012414
GTIN	4055626012414

Technical data

Dimensions

Length of cable	20 m
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Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C (On sudden changes in temperature (according to IEC 60512-11-4))
	-40 °C ... 105 °C (Plug / socket)
	-40 °C ... 85 °C (On sudden changes in temperature (according to IEC 60512-11-4))

General data

Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC

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Technical data

General data

Number of positions	5
Signal type/category	CANopen®
	DeviceNet™
Standards/regulations	M12 connector IEC 61076-2-101
Degree of pollution	3
Contact material	CuSn
Contact carrier material	PP
Contact surface material	Ni/Au

Characteristics head 2

Color	black
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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™, black
Cable type (abbreviation)	92X
UL AWM style	21281 (80°C/300 V)
Signal type/category	CANopen®
	DeviceNet™
Cable structure	2xAWG24/19+2xAWG22/19
Conductor cross section	2x 0.25 mm² (Signal)
	2x 0.34 mm² (Power)
	1x 0.38 mm² (Drain wire)
AWG signal line	24
AWG power supply	22
Conductor structure signal line	19x 0.13 mm
Conductor structure, voltage supply	19x 0.16 mm
Core diameter including insulation	1.9 mm (Signal)
	1.4 mm (Power)
Thickness, insulation	0.6 mm (Signal)
	0.3 mm (Power)
Wire colors	Red-black, blue-white
Twisted pairs	2 cores to the pair
Type of pair shielding	Aluminum-lined foil
Overall twist	2 pairs around a drain wire in the center to the core
Shielding	Tinned copper braided shield
Optical shield covering	70 %
External sheath, color	black

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Technical data

Cable

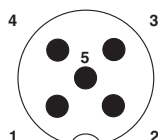
Outer sheath thickness	1.15 mm
External cable diameter D	6.9 mm ±0,3 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Cable weight	70 kg/km
Outer sheath, material	FRNC
Material conductor insulation	PE
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 200 MΩ*km (at 20 °C)
Conductor resistance	90 Ω/km (Signal)
	55 Ω/km (Power)
Working capacitance	39.8 nF (at 1 kHz, core/core)
Wave impedance	120 Ω ±12 Ω (f = 1 MHz)
Signal runtime	4.46 ns/m
Nominal voltage, cable	≤ 300 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 IEC 60332-3-25 (Cat. D)
Halogen-free	yes
Resistance to oil	yes
Other resistance	UV resistant
Ambient temperature (operation)	-40 °C ... 105 °C
Ambient temperature (installation)	-40 °C ... 105 °C
Ambient temperature (storage/transport)	-40 °C ... 105 °C

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

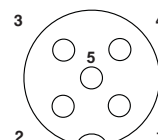
Drawings

Schematic diagram



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

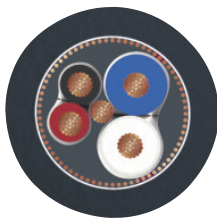
Schematic diagram



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

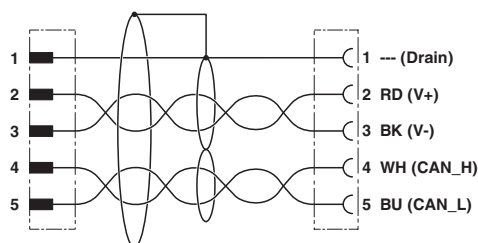
Bus system cable - SAC-5P-M12MS/20-92X/M12FSSHOD - 1413938

Cable cross section



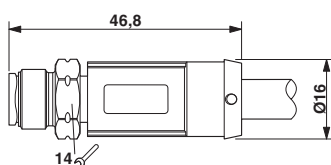
CAN bus/DeviceNet™, black [92X]

Circuit diagram



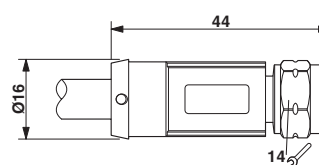
Contact assignment of the M12 connector and the M12 socket

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

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