

## Bus system cable - SAC-5P-M12MS/7,0-92X/M12FSSHOD - 1422355

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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: 7 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 300184
GTIN	4055626300184

### Technical data

#### Dimensions

Length of cable	7 m
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#### Ambient conditions

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

#### General

Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	5
Insulation resistance	≥ 100 MΩ

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## Technical data

### General

Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Signal type/category	CANopen <sup>®</sup>
	DeviceNet <sup>™</sup>
Status display	No
Protective circuit/component	unwired
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100

### Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material of grip body	PP
Material, knurls	Stainless steel
Sealing material	FPM

### 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 <sup>™</sup> , black
Cable type (abbreviation)	92X
Cable abbreviation	LI2XCHX02XS
UL AWM style	21281 (80°C/300 V)
Cable structure	2xAWG24/19+2xAWG22/19
Conductor cross section	2x 0.25 mm <sup>2</sup> (Signal)
	2x 0.34 mm <sup>2</sup> (Power)
	1x 0.38 mm <sup>2</sup> (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

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## Technical data

### Cable

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
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

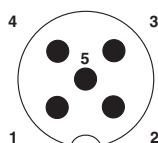
### Environmental Product Compliance

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

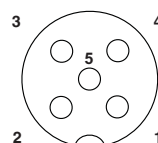
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Schematic diagram



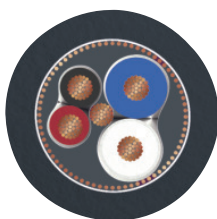
Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



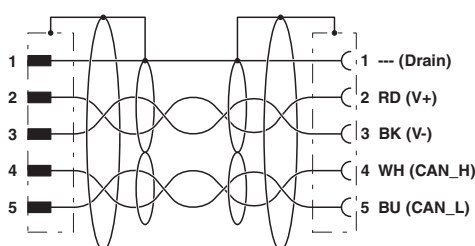
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section



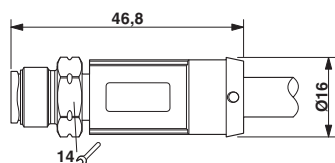
CAN bus/DeviceNet™, black [92X]

Circuit diagram



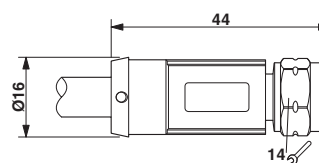
Contact assignment of the M12 connector and the M12 socket

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

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