SAC-5P-M12MS/4-92X/M12FSSHOD - Bus system cable

1419193

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Bus system cable, CANopen®, DeviceNet™, 5-position, FRNC halogen-free, black, shielded, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 4 m, for outdoor applications, with high-grade steel knurl

Your advantages

• Easy and safe: 100 % electrically tested plug-in components

• Robust throughout: resistant to oil, UV, and ozone, withstands temperatures from -40°C … +105°C

• Reliable signal transmission – 360° shielding in environments with electromagnetic interference

Commercial data

Item number	1419193
Packing unit	1 pc
Minimum order quantity	25 pc
Note	Made to order (non-returnable)
Product key	AF1CKD
GTIN	4055626156989
Weight per piece (including packing)	304.8 g
Weight per piece (excluding packing)	278.28 g
Country of origin	PL

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Technical data

Product properties

Product type	Data cable preassembled
Application	External areas
Sensor type	CANopen®
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	A

Insulation characteristics

Degree of pollution	3

Interfaces

Bus system	CANopen®/DeviceNet™
Signal type/category	CANopen®
	DeviceNet™

Signaling

Status display	no
Status display present	no

Electrical properties

Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A
Transmission medium	Copper

Material specifications

Flammability rating according to UL 94	V0
Seal material	FPM
Material of grip body	PP
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material for screw connection	Stainless steel

Connector

Connection 1

Type	Plug straight M12
Number of positions	5
Coding type	A (Standard)

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Connection 2

Type	Socket straight M12
Number of positions	5
Coding type	A (Standard)

Cable/line

Cable length	4 m

CANopen®/DeviceNet™ outdoor installation, FRNC, black [92X]

Dimensional drawing	
Cable weight	70 kg/km
UL AWM Style	21281 (80°C/300 V)
Number of positions	4
Shielded	yes
Cable type	CANopen®/DeviceNet™ outdoor installation, FRNC, black [92X]
Conductor structure	2xAWG24/19+2xAWG22/19
Signal runtime	4.46 ns/m
Conductor structure signal line	19x 0.13 mm
AWG signal line	24
Conductor structure, voltage supply	19x 0.16 mm
AWG power supply	22
Conductor cross section	2x 0.25 mm² (Signal)
	2x 0.34 mm² (Power)
	1x 0.38 mm² (Drain wire)
Wire diameter incl. insulation	1.9 mm (Signal)
	1.4 mm (Power)
External cable diameter	6.90 mm ±0.3 mm
Outer sheath, material	FRNC
External sheath, color	black
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PE
Single wire, color	red-black, blue-white
Thickness, insulation	0.60 mm (Signal)
	0.30 mm (Power)
Thickness, outer sheath	1.15 mm
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
Optical shield covering	70 %
Max. conductor resistance	90 Ω/km (Signal)
	55 Ω/km (Power)
Insulation resistance	≥ 200 MΩ*km (at 20 °C)
Wave impedance	120 Ω ±12 Ω (f = 1 MHz)
Working capacitance	39.8 nF (at 1 kHz, core/core)
Nominal voltage, cable	≤ 300 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	35 mm
Smallest bending radius, movable installation	69 mm
Halogen-free	yes
Flame resistance	According to IEC 60332-3-25 (Cat. D)
Resistance to oil	yes
Other resistance	UV resistant
Ambient temperature (operation)	-40 °C ... 105 °C
Ambient temperature (installation)	-40 °C ... 105 °C

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP68

Standards and regulations

M12

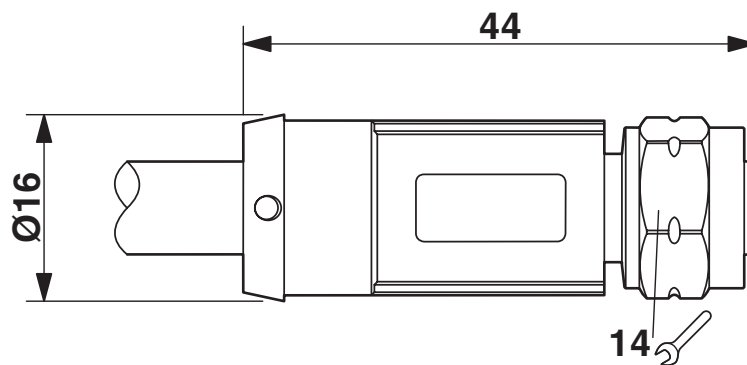|	
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

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Drawings

Dimensional drawing
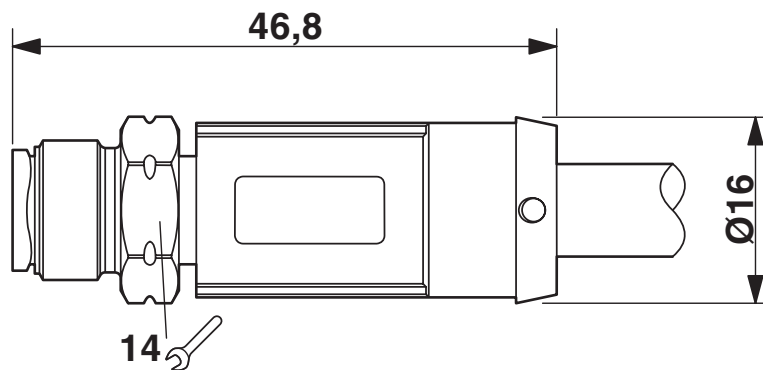
Plug, M12 x 1, straight, shielded

Dimensional drawing

M12 x 1 socket, straight

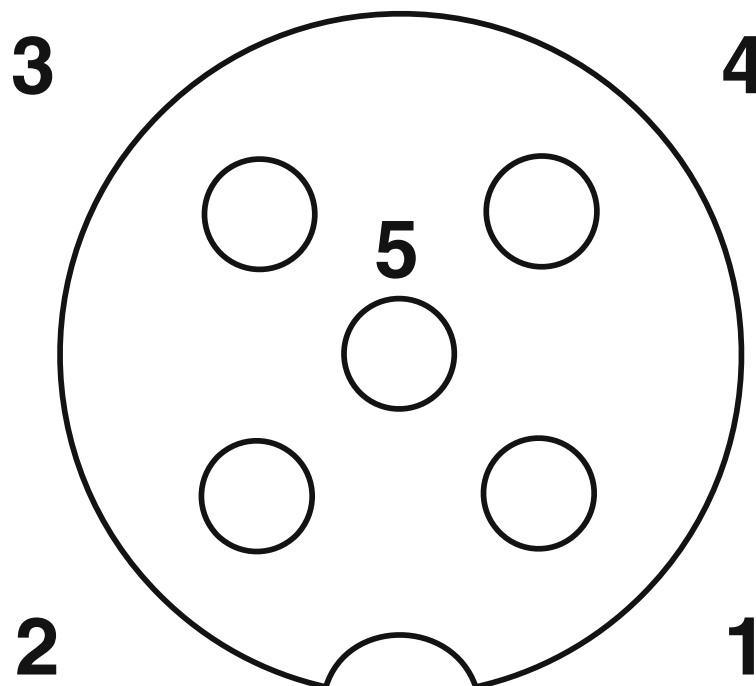Schematic diagram

4   3

5

1   2
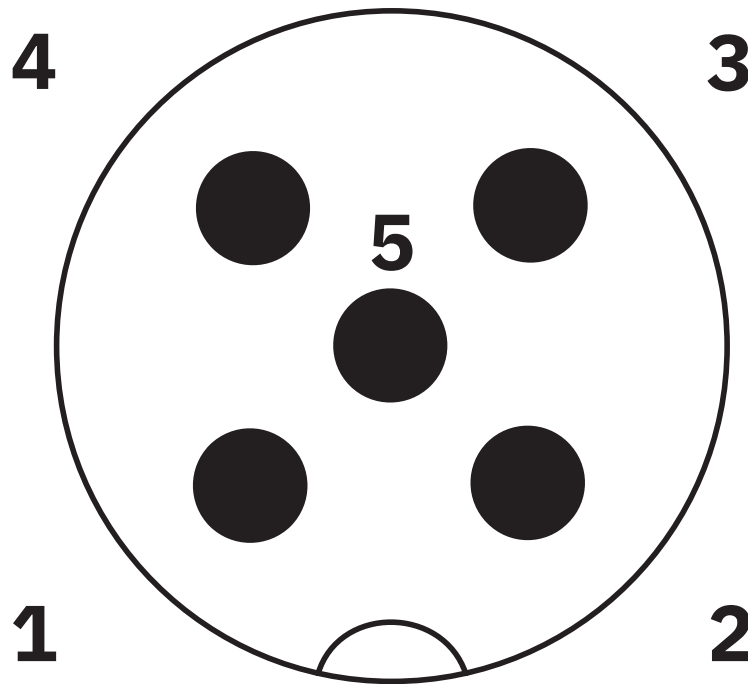
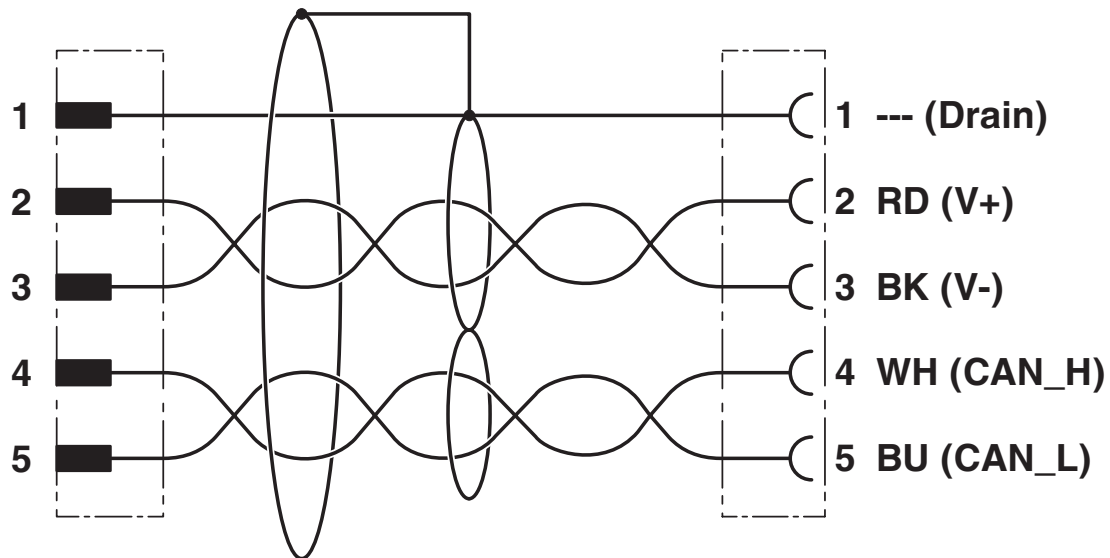Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram

3   4

5

2   1

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

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Circuit diagram

Contact assignment of the M12 connector and the M12 socket

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Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

ETIM 9.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%