

SAC-5P-M12MS/ 5,0-92X SH OD - Bus system cable



1410472

<https://www.phoenixcontact.com/us/products/1410472>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Bus system cable, CANopen®, DeviceNet™, 5-position, FRNC halogen-free, black, shielded, Plug straight M12, coding: A, on free cable end, cable length: 5 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	1410472
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	BF1CKD
Catalog page	Page 187 (NTK-2014)
GTIN	4046356899383
Weight per piece (including packing)	354.4 g
Weight per piece (excluding packing)	346.2 g
Customs tariff number	85444290
Country of origin	PL

SAC-5P-M12MS/ 5,0-92X SH OD - Bus system cable



1410472

<https://www.phoenixcontact.com/us/products/1410472>

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

Data management status

Article revision	04
------------------	----

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

Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	48 V AC
	60 V DC
Nominal current I _N	4 A
Transmission medium	Copper

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
-----------------------------	-------

Material specifications

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

Connection data

Pin assignment		
Contact Color (signal designation) Contact (optional)	1 (Plug) SR (shield)	
	2 (Plug) RD (V+)	
	3 (Plug) BK (V-)	
	4 (Plug) WH (CAN_H)	
	5 (Plug) BU (CAN_L)	

Connector


Connection 1		
Type	Plug straight M12	
Number of positions	5	
Coding type	A (Standard)	

Connection 2		
Type	free cable end	

Cable/line

Cable length	5 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 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)	

SAC-5P-M12MS/ 5,0-92X SH OD - Bus system cable



1410472

<https://www.phoenixcontact.com/us/products/1410472>

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
	IP67
	IP68
	IP69K
Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)
	-40 °C ... 85 °C (On sudden changes in temperature (according to IEC 60512-11-4))

Standards and regulations

SAC-5P-M12MS/ 5,0-92X SH OD - Bus system cable



1410472

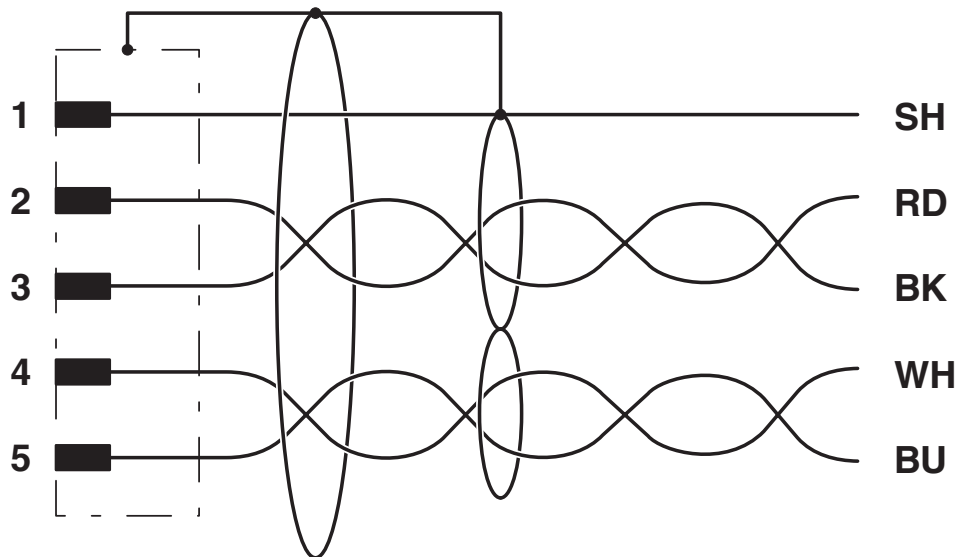
<https://www.phoenixcontact.com/us/products/1410472>

M12

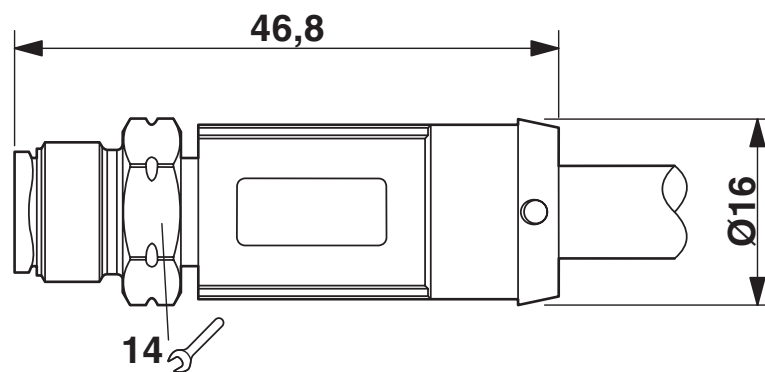
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

Drawings

Circuit diagram



Dimensional drawing

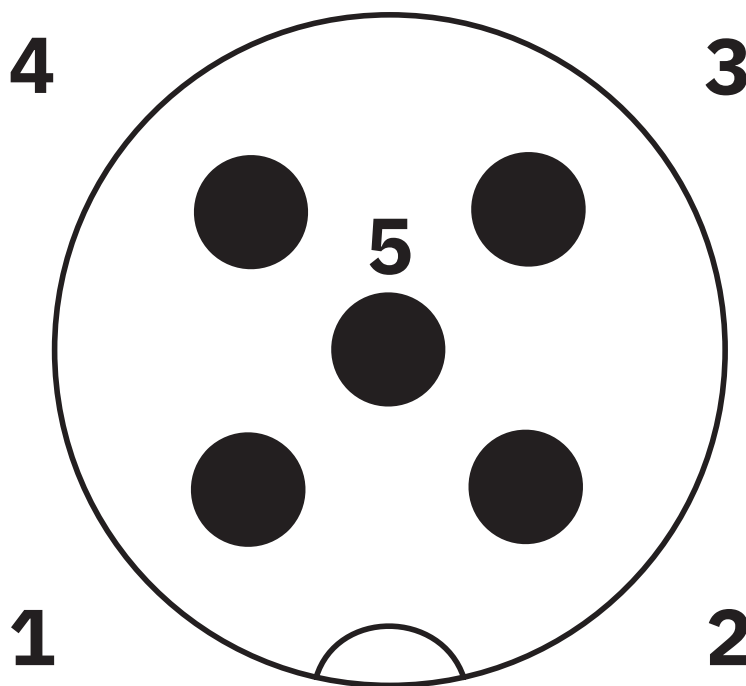


Plug, M12 x 1, straight, shielded

1410472

<https://www.phoenixcontact.com/us/products/1410472>

Schematic diagram



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


SAC-5P-M12MS/ 5,0-92X SH OD - Bus system cable



1410472

<https://www.phoenixcontact.com/us/products/1410472>

Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1410472>



EAC-RoHS

Approval ID: RU D-DE.HB35.B.00387

SAC-5P-M12MS/ 5,0-92X SH OD - Bus system cable



1410472

<https://www.phoenixcontact.com/us/products/1410472>

Classifications

ECLASS

ECLASS-11.0	27060307
ECLASS-12.0	27060307
ECLASS-13.0	27060307

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

1410472
<https://www.phoenixcontact.com/us/products/1410472>

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%

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com