

Bus system cable - SAC-5P-MS/ 5,0-920/FS SCO



1518290

<https://www.phoenixcontact.com/pc/products/1518290>

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, PUR halogen-free, red lilac RAL 4001, shielded, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 5 m

Bus system cable - SAC-5P-MS/ 5,0-920/FS SCO



1518290

<https://www.phoenixcontact.com/pc/products/1518290>

Commercial Data

Item number	1518290
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1CKD
Catalog Page	Page 433 (C-2-2017)
GTIN	4017918968410
Weight per Piece (including packing)	319 g
Weight per Piece (excluding packing)	319 g
Customs tariff number	85444290
Country of origin	PL

Technical Data

Product properties

Product type	Data cable preassembled
Number of positions	5
Application	Standard
No. of cable outlets	1
Shielded	yes
Coding	A - standard

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Interfaces

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

LED signaling

Status display	No
Status display present	No

Electrical properties

Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
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	HB
Sealing material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Cable gland material	Zinc die-cast, nickel-plated

Connection data

Pin assignment

Bus system cable - SAC-5P-MS/ 5,0-920/FS SCO



1518290

<https://www.phoenixcontact.com/pc/products/1518290>

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

Connector

Header 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A

Header 2

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A

Cable / line

Cable length	5 m
Cable weight	90 kg/km
UL AWM Style	21198 (80°C/300 V)
Number of positions	4
Shielded	yes
Cable type	CANopen [®] /DeviceNet [™] , PUR, violet [920]
Conductor structure signal line	19x 0.13 mm
AWG signal line	24
Conductor cross section	2x 0.25 mm ² (Data cable)
	2x 0.34 mm ² (Power supply)
	1x 0.34 mm ² (Drain wire)
Wire diameter incl. insulation	1.95 mm ±0.05 mm (Data cable)
	1.4 mm ±0.05 mm (Power supply)
External cable diameter	6.7 mm ±0.3 mm
Outer sheath, material	PUR
External sheath, color	red lilac RAL 4001
Conductor material	Tin-plated Cu litz wires
Material wire insulation	Foamed PE (Data cable)
	PE (Power supply)
Single wire, color	red-black, blue-white
Twisted pairs	2 cores to the pair
Type of pair shielding	Plastic-coated aluminum foil, aluminum side outside

Bus system cable - SAC-5P-MS/ 5,0-920/FS SCO



1518290

<https://www.phoenixcontact.com/pc/products/1518290>

Overall twist	2 pairs around a drain wire in the center to the core
Optical shield covering	80 %
Insulation resistance	≥ 5 GΩ*km (Data cable)
	≥ 5 GΩ*km (Power supply)
Loop resistance	≤ 181.80 Ω/km (Data cable)
	≤ 114.80 Ω/km (Power supply)
Wave impedance	120 Ω ±10 % (with 1 MHz)
Cable capacity	nom. 40 nF/km (Data cable)
Nominal voltage, cable	≤ 300 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.)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Max. bending cycles	5000000
Shield attenuation	≤ 22.9 dB/km (with 1 MHz)
	≤ 16.4 dB/km (At 500 kHz)
	≤ 9.5 dB/km (At 125 kHz)
Halogen-free	in accordance with DIN VDE 0472 part 815
	according to IEC 60754-1
Flame resistance	IEC 60332-1-2
	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Other resistance	Low adhesion
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 70 °C (Cable, flexible installation)
	-20 °C ... 60 °C (for installation)
	-20 °C ... 60 °C (cable, drag chain applications)

Cable structure

Cable type	CANopen [®] /DeviceNet [™] , PUR, violet
Signal type/category	CANopen [®]
	DeviceNet [™]
Outer sheath, material	PUR
External sheath, color	red lilac RAL 4001

Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

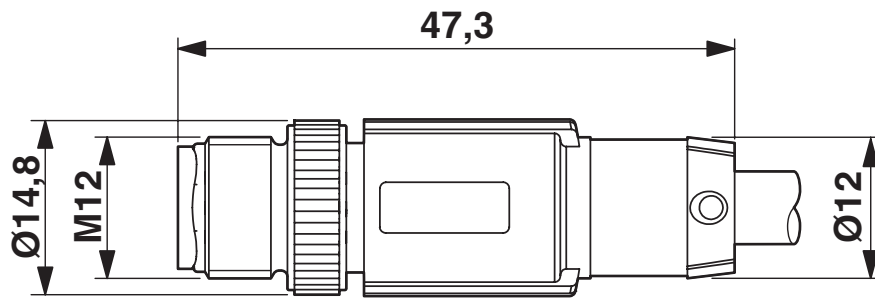
Bus system cable - SAC-5P-MS/ 5,0-920/FS SCO

1518290

<https://www.phoenixcontact.com/pc/products/1518290>

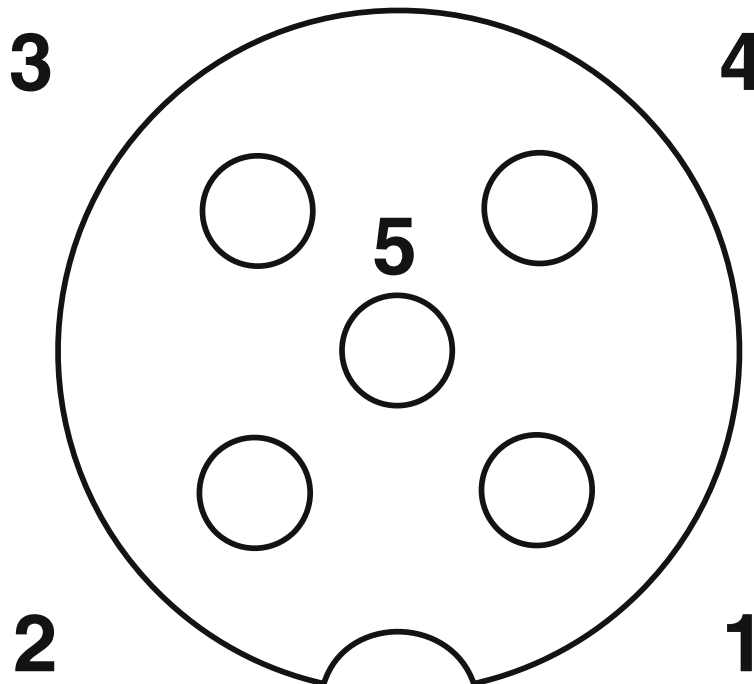
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Schematic diagram



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

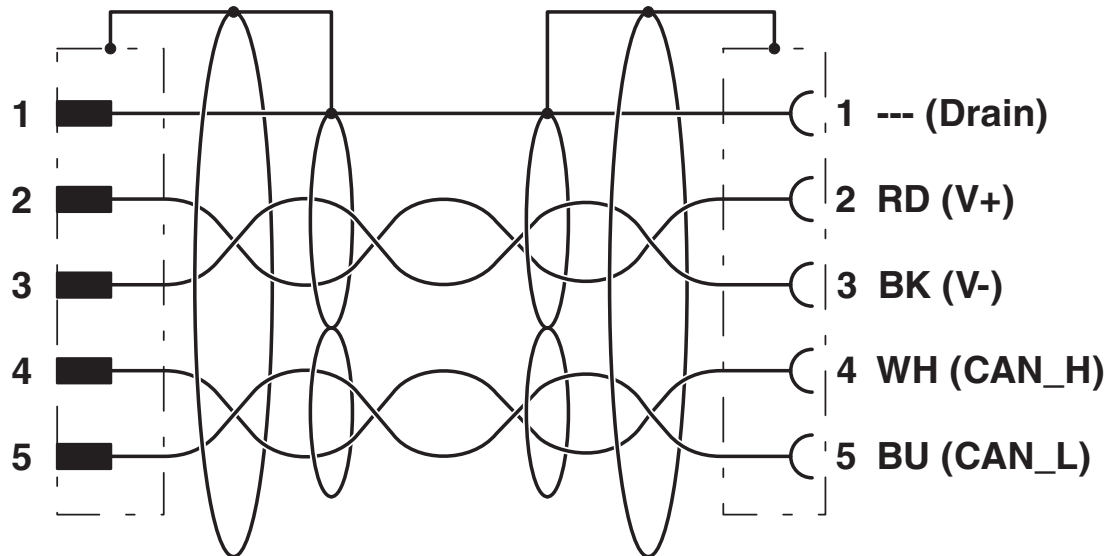
Bus system cable - SAC-5P-MS/ 5,0-920/FS SCO



1518290

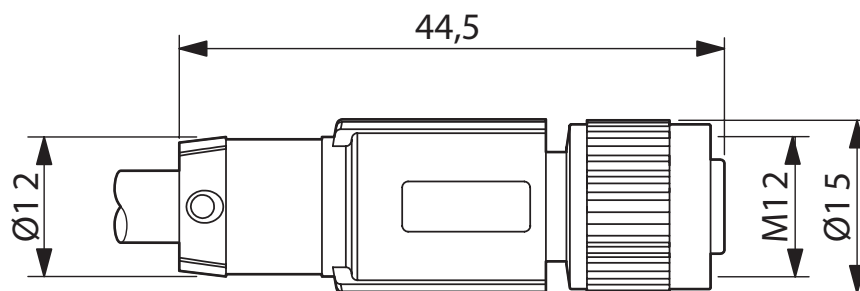
<https://www.phoenixcontact.com/pc/products/1518290>

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

Dimensional drawing



M12 x 1 socket, straight, shielded

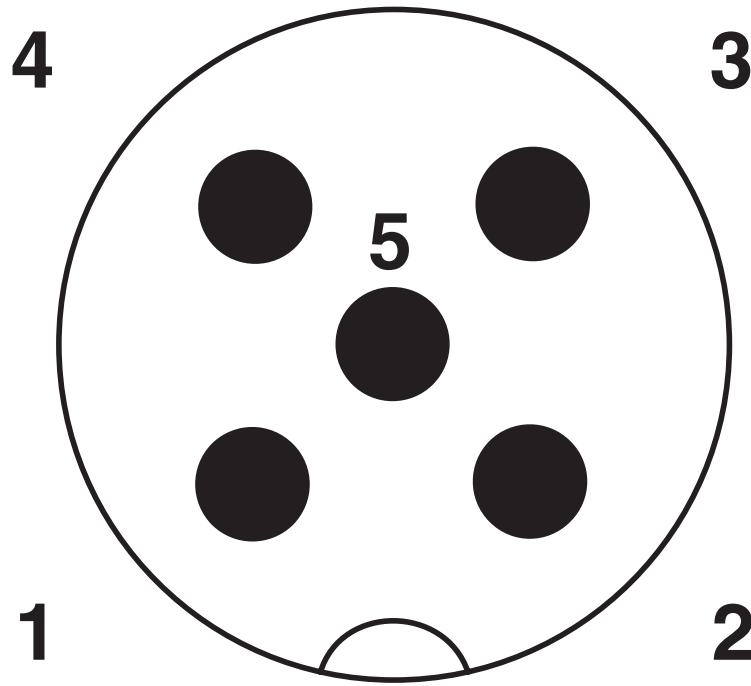
Bus system cable - SAC-5P-MS/ 5,0-920/FS SCO

1518290

<https://www.phoenixcontact.com/pc/products/1518290>



Schematic diagram



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

Bus system cable - SAC-5P-MS/ 5,0-920/FS SCO





1518290

<https://www.phoenixcontact.com/pc/products/1518290>

Approvals

 UL Listed Approval ID: FILE E 221474				
	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	125 V	4 A	-	-

 cUL Listed Approval ID: FILE E 221474				
	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	125 V	4 A	-	-

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

cULus Listed				
---------------------	--	--	--	--

Bus system cable - SAC-5P-MS/ 5,0-920/FS SCO



1518290

<https://www.phoenixcontact.com/pc/products/1518290>

Classifications

ECLASS

ECLASS-9.0	27060308
ECLASS-10.0.1	27060308
ECLASS-11.0	27060307

ETIM

ETIM 8.0	EC001855
----------	----------

UNSPSC

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

Bus system cable - SAC-5P-MS/ 5,0-920/FS SCO



1518290

<https://www.phoenixcontact.com/pc/products/1518290>

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e No hazardous substances above threshold values
------------	---

Phoenix Contact 2022 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com