

SAC-5P-MR/ 2,0-923/FS CAN SCO - Bus system cable



1419060

<https://www.phoenixcontact.com/gb/products/1419060>

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, silver-grey RAL 7001, shielded, Plug angled M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 2 m, Connector unshielded

Commercial data

Item number	1419060
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF1CDD
Product key	BF1CDD
Catalog page	Page 431 (C-2-2019)
GTIN	4046356543217
Weight per piece (including packing)	152.6 g
Weight per piece (excluding packing)	148.5 g
Customs tariff number	85444290
Country of origin	PL

SAC-5P-MR/ 2,0-923/FS CAN SCO - Bus system cable



1419060

<https://www.phoenixcontact.com/gb/products/1419060>

Technical data

Product properties

Product type	Data cable preassembled
Application	Standard
Sensor type	CANopen®
Number of positions	5
No. of cable outlets	1
Coding	A

Insulation characteristics

Overvoltage category	II
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	HB
Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Connection data

Pin assignment

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)

SAC-5P-MR/ 2,0-923/FS CAN SCO - Bus system cable



1419060

<https://www.phoenixcontact.com/gb/products/1419060>

5 (Plug) | BU (CAN_L) | 5 (Socket)

Connector

Connection 1

Type	Plug angled M12 SPEEDCON
Number of positions	5
Locking type	SPEEDCON
Coding type	A (Standard)
Ambient temperature (operation)	-25 °C ... 90 °C

Connection 2

Type	Socket straight M12 SPEEDCON
Number of positions	5
Locking type	SPEEDCON
Coding type	A (Standard)
Ambient temperature (operation)	-25 °C ... 90 °C

Cable/line

Cable length	2 m
--------------	-----

CANopen®/DeviceNet™, PUR, gray [923]

Dimensional drawing	
Cable weight	90 kg/km
UL AWM Style	21198 (80°C/300 V)
Number of positions	4
Shielded	yes
Cable type	CANopen®/DeviceNet™, PUR, gray [923]
Conductor structure	2xAWG24/19+2xAWG22/19
Conductor structure signal line	19x 0.13 mm
AWG signal line	24
Conductor cross section	2x 0.25 mm² (Data cable) 2x 0.34 mm² (Power supply) 1x 0.34 mm² (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	6.70 mm ±0.3 mm
Outer sheath, material	PUR

SAC-5P-MR/ 2,0-923/FS CAN SCO - Bus system cable



1419060

<https://www.phoenixcontact.com/gb/products/1419060>

External sheath, color	silver-grey RAL 7001
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
Overall twist	2 pairs around a drain wire in the center to the core
Optical shield covering	80 %
Insulation resistance	$\geq 5 \text{ G}\Omega\cdot\text{km}$ (Data cable)
	$\geq 5 \text{ G}\Omega\cdot\text{km}$ (Power supply)
Loop resistance	$\leq 181.80 \text{ }\Omega/\text{km}$ (Data cable)
	$\leq 114.80 \text{ }\Omega/\text{km}$ (Power supply)
Wave impedance	$120 \text{ }\Omega \pm 10 \text{ }\%$ (with 1 MHz)
Cable capacity	nom. 40 nF/km (Data cable)
Nominal voltage, cable	$\leq 300 \text{ V}$ (Peak value, not for high-power applications)
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	34 mm
Smallest bending radius, movable installation	67 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 70 mm, Bending radius: 10 x D, Traversing path: 4.5 m, Traversing rate: 3 m/s, Acceleration: 3 m/s ² , Ambient temperature: $\leq 70 \text{ }^{\circ}\text{C}$
Shield attenuation	$\leq 22.9 \text{ dB/km}$ (with 1 MHz)
	$\leq 16.4 \text{ dB/km}$ (At 500 kHz)
	$\leq 9.5 \text{ dB/km}$ (At 125 kHz)
Halogen-free	in accordance with DIN VDE 0472 part 815
	according to IEC 60754-1
Flame resistance	UL 1581, Sec. 1060 (FT-1)
	IEC 60332-1
Other resistance	Low adhesion
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (Cable, flexible installation)
	$\leq 70 \text{ }^{\circ}\text{C}$ (cable, drag chain applications)

Environmental and real-life conditions

Ambient conditions

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

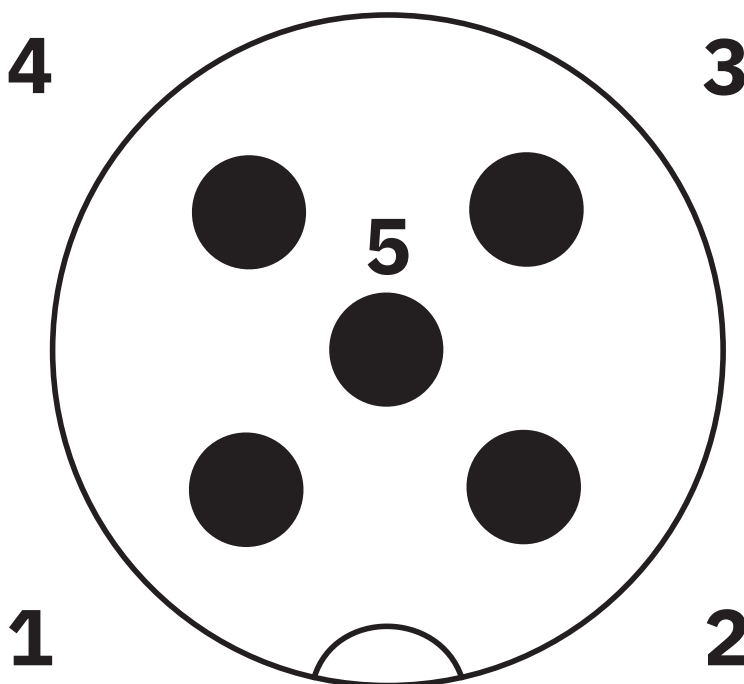
SAC-5P-MR/ 2,0-923/FS CAN SCO - Bus system cable

1419060

<https://www.phoenixcontact.com/gb/products/1419060>

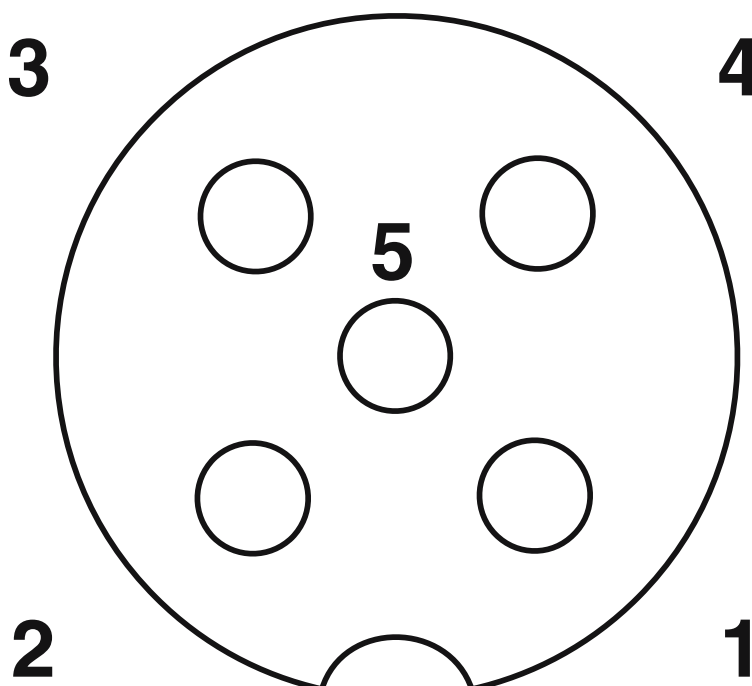
Drawings

Schematic diagram



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

Schematic diagram



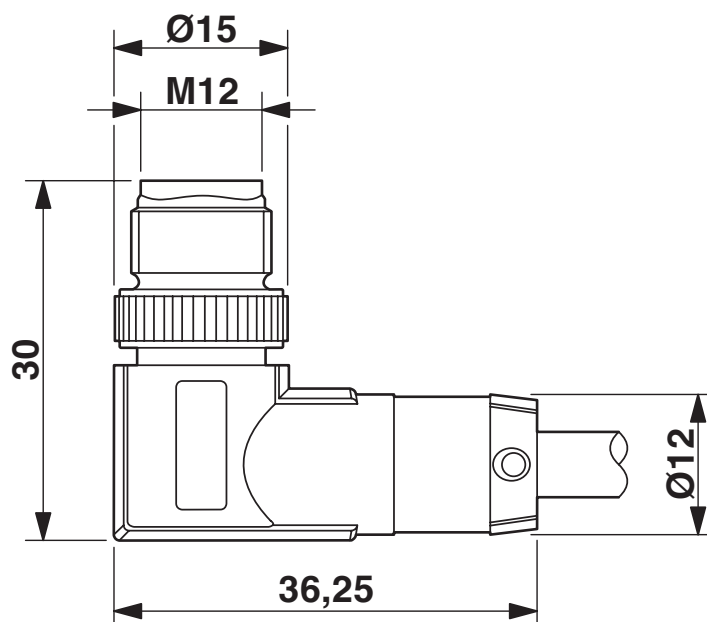
Pin assignment M12 socket, 5-pos., A-coded, socket side view

SAC-5P-MR/ 2,0-923/FS CAN SCO - Bus system cable

1419060

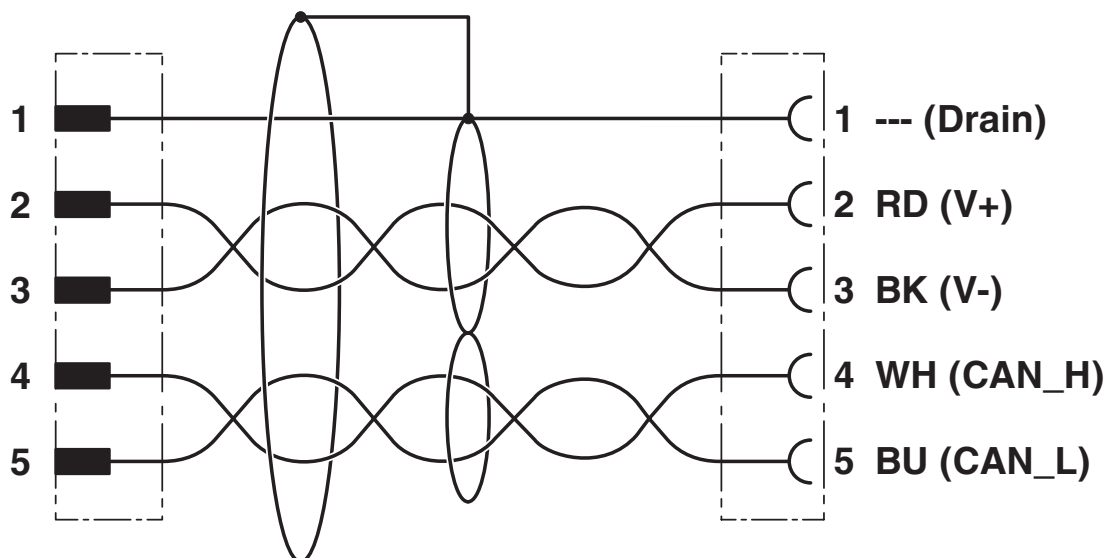
<https://www.phoenixcontact.com/gb/products/1419060>

Dimensional drawing



M12 x 1 male plug, angled

Circuit diagram

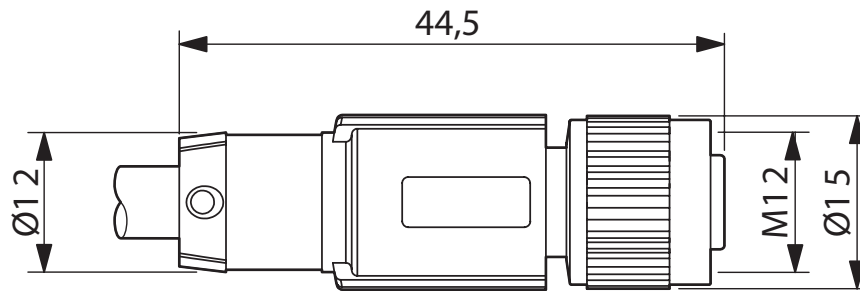


SAC-5P-MR/ 2,0-923/FS CAN SCO - Bus system cable

1419060

<https://www.phoenixcontact.com/gb/products/1419060>

Dimensional drawing



M12 x 1 socket, straight

SAC-5P-MR/ 2,0-923/FS CAN SCO - Bus system cable



1419060
<https://www.phoenixcontact.com/gb/products/1419060>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1419060>

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

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

SAC-5P-MR/ 2,0-923/FS CAN SCO - Bus system cable



1419060

<https://www.phoenixcontact.com/gb/products/1419060>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

SAC-5P-MR/ 2,0-923/FS CAN SCO - Bus system cable



1419060
<https://www.phoenixcontact.com/gb/products/1419060>

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%
EF3.0 Climate Change	
CO2e kg	1.454 kg CO2e

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

PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk