

SAC-5P-M12MR/ 0,5-920/M12FR - Bus system cable



1543906

<https://www.phoenixcontact.com/us/products/1543906>

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, Plug angled M12, coding: A, on Socket angled M12, coding: A, cable length: 0.5 m

Commercial data

Item number	1543906
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	AF1CKD
GTIN	4046356103046
Weight per piece (including packing)	68.6 g
Weight per piece (excluding packing)	59.6 g
Customs tariff number	85444290
Country of origin	PL

1543906

<https://www.phoenixcontact.com/us/products/1543906>

Technical data

Product properties

Product type	Data cable preassembled
Application	Standard
Number of positions	5
Shielded	yes

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

Mechanical properties

Mechanical data

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

Material specifications

Flammability rating according to UL 94	HB
--	----

Connector

Connection 1

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

Connection 2

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


SAC-5P-M12MR/ 0,5-920/M12FR - Bus system cable



1543906

<https://www.phoenixcontact.com/us/products/1543906>

Cable/line

Cable length	0.5 m
CANopen®/DeviceNet™, PUR, violet [920]	
Dimensional drawing	
UL AWM Style	21198 (80°C/300 V)
Number of positions	4
Shielded	yes
Cable type	CANopen®/DeviceNet™, PUR, violet [920]
Conductor structure	2xAWG24/19+2xAWG22/19
AWG signal line	24
AWG power supply	22
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	6.70 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
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)
Wave impedance	120 Ω ±10 % (with 1 MHz)
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	2000.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 70 mm, Bending radius: 15 x D, Traversing path: 4.5 m, Traversing rate: 3 m/s,

SAC-5P-M12MR/ 0,5-920/M12FR - Bus system cable



1543906

<https://www.phoenixcontact.com/us/products/1543906>

	Acceleration: 3 m/s ² , Ambient temperature: -20 °C ... 60 °C
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	UL 1581, Section 1060 and UL 2556, Section 9.3 (FT1)
	UL 1581, Section 1100 and UL 2556, Section 9.1 (HFT/FT2)
	IEC 60332-1-2
	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Special properties	Flexible cable conduit capable
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)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67

Drawings

Dimensional drawing



M12 x 1 male plug, angled, shielded

Dimensional drawing



M12 x 1 socket, angled, shielded

1543906

<https://www.phoenixcontact.com/us/products/1543906>

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

1543906

<https://www.phoenixcontact.com/us/products/1543906>

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

SAC-5P-M12MR/ 0,5-920/M12FR - Bus system cable



1543906

<https://www.phoenixcontact.com/us/products/1543906>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

UNSPSC

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

SAC-5P-M12MR/ 0,5-920/M12FR - Bus system cable



1543906

<https://www.phoenixcontact.com/us/products/1543906>

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%
-------------------------------------	----------------------------

EF3.1 Climate Change

CO2e kg	0.975 kg CO2e
---------	---------------

Phoenix Contact 2026 © - 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