

SAC-5PY-F/2X 1,0-920-MS-FS - Bus system cable



1436039

<https://www.phoenixcontact.com/us/products/1436039>

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, Socket straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A and Plug straight M12 SPEEDCON, coding: A, cable length: 1 m, all connectors unshielded, Shield connected to pin 1

Commercial data

Item number	1436039
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF10
Product key	AF1GAD
GTIN	4046356432283
Weight per piece (including packing)	170.4 g
Weight per piece (excluding packing)	153.24 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

Product type	Data cable preassembled
Application	Standard
Number of positions	5
No. of cable outlets	1
Shielded	no
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

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
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

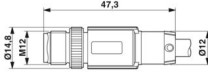
Dimensions

SAC-5PY-F/2X 1,0-920-MS-FS - Bus system cable



1436039

<https://www.phoenixcontact.com/us/products/1436039>

Dimensional drawing	
Center distance	21 mm

Connection data

Connection assignment

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

Connector

Connection 1

Type	Socket straight 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

Connection 3

Type	Plug 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	1 m
--------------	-----


CANopen®/DeviceNet™, PUR, violet [920]

SAC-5PY-F/2X 1,0-920-MS-FS - Bus system cable



1436039

<https://www.phoenixcontact.com/us/products/1436039>

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, 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)

SAC-5PY-F/2X 1,0-920-MS-FS - Bus system cable



1436039

<https://www.phoenixcontact.com/us/products/1436039>

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

Standards and regulations

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

SAC-5PY-F/2X 1,0-920-MS-FS - Bus system cable



1436039

<https://www.phoenixcontact.com/us/products/1436039>

Drawings

Dimensional drawing



M12 SPEEDCON plug, straight

Dimensional drawing



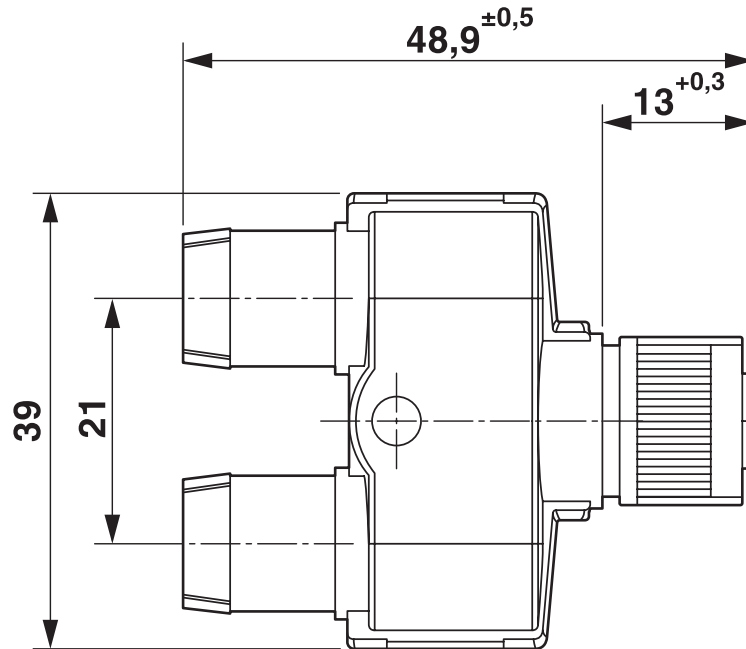
M12-SPEEDCON socket, straight

SAC-5PY-F/2X 1,0-920-MS-FS - Bus system cable

1436039

<https://www.phoenixcontact.com/us/products/1436039>

Dimensional drawing



M12-SPEEDCON socket, Y distributor

Schematic diagram

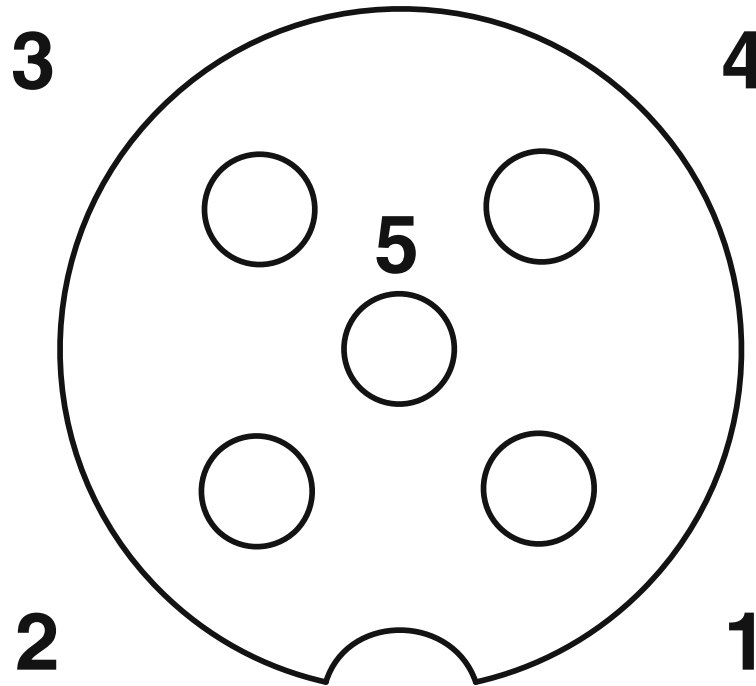


Pin assignment M12 male connector, 5-pos., A-coded, male side

1436039

<https://www.phoenixcontact.com/us/products/1436039>

Schematic diagram



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

Circuit diagram



Contact assignment of the M12 socket and the M12 plug

SAC-5PY-F/2X 1,0-920-MS-FS - Bus system cable



1436039

<https://www.phoenixcontact.com/us/products/1436039>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1436039>

 UL Listed Approval ID: FILE E 221474				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	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
keine				
	125 V	4 A	-	-

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

SAC-5PY-F/2X 1,0-920-MS-FS - Bus system cable



1436039

<https://www.phoenixcontact.com/us/products/1436039>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

UNSPSC

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

SAC-5PY-F/2X 1,0-920-MS-FS - Bus system cable



1436039

<https://www.phoenixcontact.com/us/products/1436039>

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	1.202 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