

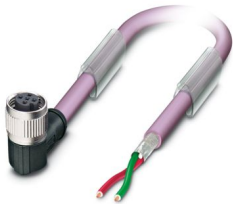
# SAC-2P-FRB/ 2,0-910 SCO - Bus system cable



1403628

<https://www.phoenixcontact.com/us/products/1403628>

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, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, red lilac RAL 4001, shielded, free cable end, on Socket angled M12 SPEEDCON, coding: B, cable length: 2 m

## Commercial data

Item number	1403628
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	AF1CKC
GTIN	4046356663496
Weight per piece (including packing)	144.5 g
Weight per piece (excluding packing)	144.5 g
Customs tariff number	85444290
Country of origin	PL

## Technical data

### Product properties

Product type	Data cable preassembled
Application	Standard
Sensor type	PROFIBUS
Number of positions	2
No. of cable outlets	1
Shielded	yes
Coding	B

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Interfaces

Bus system	PROFIBUS
Signal type/category	PROFIBUS, 12 Mbps

### 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
Transmission speed	12 Mbps
Transmission characteristics (category)	CAT5

### Mechanical properties

#### Mechanical data

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

### Material specifications

Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated

# SAC-2P-FRB/ 2,0-910 SCO - Bus system cable



1403628

<https://www.phoenixcontact.com/us/products/1403628>

## Connector

### Connection 1

Type	free cable end
------	----------------


### Connection 2

Type	free cable end
------	----------------

## Cable/line

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

### PROFIBUS [910]

Dimensional drawing	
UL AWM Style	21198 (80°C/300 V)
Number of positions	2
Shielded	yes
Cable type	PROFIBUS [910]
Conductor structure	1x2xAWG24/19
AWG signal line	24
Conductor cross-section	2x 0.25 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	2.55 mm ±0.05 mm
External cable diameter	7.70 mm ±0.02 mm
Outer sheath, material	PUR
External sheath, color	red lilac RAL 4001
Conductor material	Tin-plated Cu litz wires
Single wire, color	red, green
Overall twist	2 cores with 2 fillers to the core
Optical shield covering	80 %
Insulation resistance	≥ 5 GΩ*km
Wave impedance	150 Ω ±10 % (3 MHz ... 20 MHz)
Nominal voltage, cable	≤ 125 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	4 x D
Minimum bending radius, flexible installation	8 x D
Dynamic load capacity (bending)	Max. bending cycles: 4000000, Bending radius: 65 mm, Bending radius: 15 x D, Traversing path: 4.5 m, Traversing rate: 3 m/s, Acceleration: 3 m/s <sup>2</sup>

# SAC-2P-FRB/ 2,0-910 SCO - Bus system cable



1403628

<https://www.phoenixcontact.com/us/products/1403628>

Shield attenuation	≤ 4.9 dB (at 16 MHz)
	≤ 4.9 dB (at 4 MHz)
	≤ 0.5 dB (at 38.4 kHz)
	≤ 0.3 dB (at 9.6 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
Resistance to oil	in accordance with DIN EN 60811-404
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)

1403628

<https://www.phoenixcontact.com/us/products/1403628>

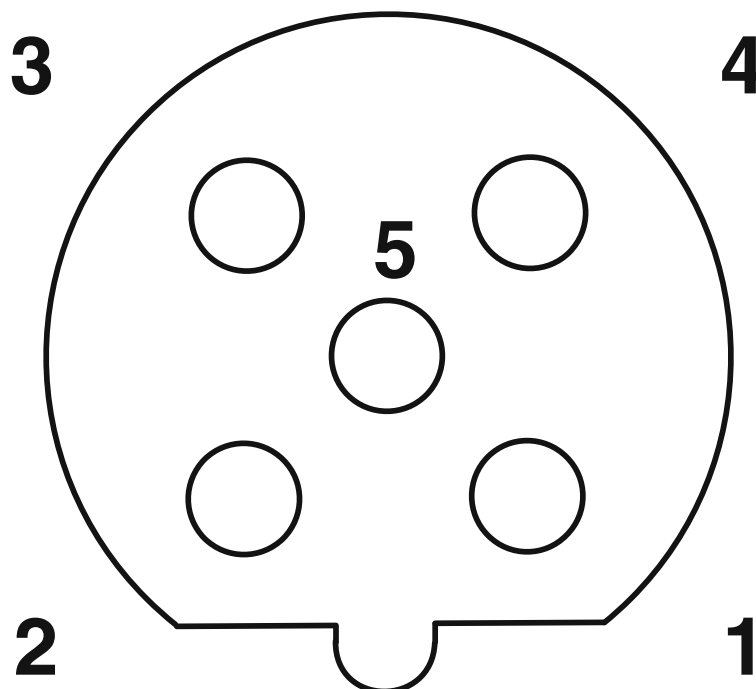
## Drawings

Dimensional drawing



Socket M12-SPEEDCON, angled, shielded

Schematic diagram



Pin assignment M12 socket, 5-pos., B-coded, female side

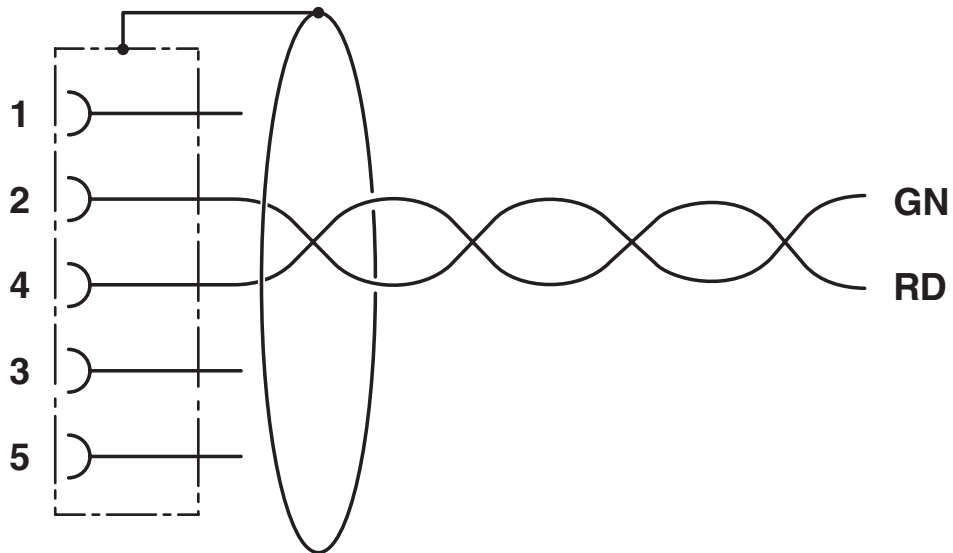
# SAC-2P-FRB/ 2,0-910 SCO - Bus system cable



1403628

<https://www.phoenixcontact.com/us/products/1403628>

Circuit diagram



Contact assignment of the M12 socket

# SAC-2P-FRB/ 2,0-910 SCO - Bus system cable



1403628

<https://www.phoenixcontact.com/us/products/1403628>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1403628>



**EAC-RoHS**

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

# SAC-2P-FRB/ 2,0-910 SCO - Bus system cable



1403628

<https://www.phoenixcontact.com/us/products/1403628>

## Classifications

### ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

### ETIM

ETIM 10.0	EC001855
-----------	----------

### UNSPSC

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

# SAC-2P-FRB/ 2,0-910 SCO - Bus system cable



1403628

<https://www.phoenixcontact.com/us/products/1403628>

## 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	1.929 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](mailto:info@phoenixcon.com)