

# SAC-5P- 2,0-900/M12FSB - Bus system cable



1507117

<https://www.phoenixcontact.com/us/products/1507117>

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, INTERBUS (16 Mbps), 5-position, PUR halogen-free, may green RAL 6017, shielded, free cable end, on Socket straight M12, coding: B, cable length: 2 m

## Commercial data

Item number	1507117
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	AF1CKB
GTIN	4017918899974
Weight per piece (including packing)	163.3 g
Weight per piece (excluding packing)	164.8 g
Customs tariff number	85444290
Country of origin	PL

# SAC-5P- 2,0-900/M12FSB - Bus system cable



1507117

<https://www.phoenixcontact.com/us/products/1507117>

## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Interfaces

Bus system	INTERBUS
Signal type/category	INTERBUS, 16 Mbps

### Signaling

Status display	no
Status display present	no

### Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	48 V AC
	60 V DC
Nominal current $I_N$	4 A
Transmission medium	Copper
Transmission speed	16 Mbps

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$
-----------------------------	------------

### 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

### Connection data

# SAC-5P- 2,0-900/M12FSB - Bus system cable



1507117

<https://www.phoenixcontact.com/us/products/1507117>

## Connection assignment

Contact   Color (signal designation)   Contact (optional)	
	1 (Socket)   YE (DQ)
	2 (Socket)   GN (DQ)
	3 (Socket)   GY (DI)
	4 (Socket)   PK (DI)
	5 (Socket)   BN (GND)

## Connector

### Connection 1

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

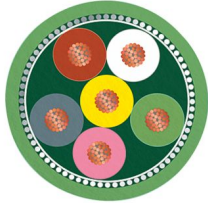
### Connection 2

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

## Cable/line

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

## INTERBUS [900]

Dimensional drawing	
Cable weight	70 kg/km
Number of positions	6
Shielded	yes
Cable type	INTERBUS [900]
Conductor structure	3 x 2 x 0.22 mm <sup>2</sup>
Signal speed	0.66 c
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross-section	3x 2x 0.22 mm <sup>2</sup>
External cable diameter	8.00 mm
Outer sheath, material	PUR
External sheath, color	may green RAL 6017
Conductor material	Bare Cu litz wires
Material wire insulation	PE
Single wire, color	green-yellow, white-brown, gray-pink
Twisted pairs	2 cores to the pair
Overall twist	3 pairs to the core
Insulation resistance	≥ 5 GΩ*km

# SAC-5P- 2,0-900/M12FSB - Bus system cable



1507117

<https://www.phoenixcontact.com/us/products/1507117>

Coupling resistance	< 250.00 mΩ/m (at 30 MHz)
Loop resistance	≤ 159.80 Ω/km
Wave impedance	120 Ω ±20 % (at 64 kHz)
	100 Ω ±15 % (with 1 MHz)
Cable capacity	≤ 60 nF/km (At 800 Hz)
Nominal voltage, cable	250 V (Peak value, not for high-power applications)
Test voltage Core/Core	1500 V <sub>rms</sub>
Test voltage Core/Shield	1000.00 V <sub>rms</sub>
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	15 x D
Smallest bending radius, fixed installation	60 mm
Smallest bending radius, movable installation	120 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 120 mm, Traversing path: 10 m, Traversing rate: 1.6 m/s, Acceleration: 3.2 m/s <sup>2</sup>
Near end crosstalk attenuation (NEXT)	≥ 61 dB (at 772 kHz)
	≥ 59 dB (with 1 MHz)
	≥ 55 dB (at 2 MHz)
	≥ 50 dB (at 4 MHz)
	≥ 46 dB (at 8 MHz)
	≥ 44 dB (at 10 MHz)
	≥ 41 dB (at 16 MHz)
	≥ 40 dB (at 20 MHz)
Shield attenuation	≤ 15 dB/km (at 256 kHz)
	≤ 24 dB/km (at 772 kHz)
	≤ 27 dB/km (with 1 MHz)
	≤ 52 dB/km (at 4 MHz)
	≤ 84 dB/km (at 10 MHz)
	≤ 112 dB/km (at 16 MHz)
	≤ 119 dB/km (at 20 MHz)
Flame resistance	according to VDE 0472, Part 4, test type B
	according to IEC 60332-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 70 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

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

# SAC-5P- 2,0-900/M12FSB - Bus system cable

1507117

<https://www.phoenixcontact.com/us/products/1507117>

## Drawings

Dimensional drawing



M12 x 1 socket, straight, shielded

Schematic diagram



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

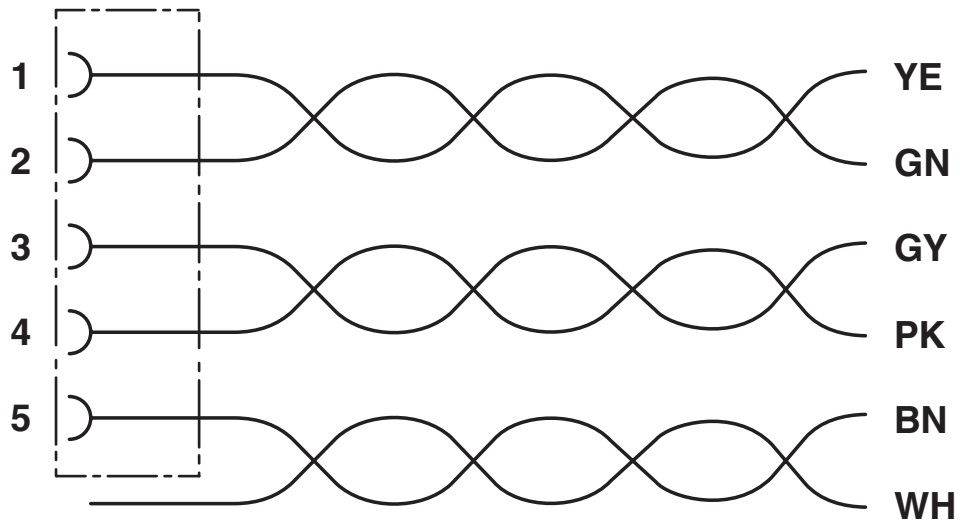
# SAC-5P- 2,0-900/M12FSB - Bus system cable



1507117

<https://www.phoenixcontact.com/us/products/1507117>

Circuit diagram



Contact assignment of the M12 socket

# SAC-5P- 2,0-900/M12FSB - Bus system cable



1507117

<https://www.phoenixcontact.com/us/products/1507117>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1507117>



**EAC-RoHS**

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

# SAC-5P- 2,0-900/M12FSB - Bus system cable



1507117

<https://www.phoenixcontact.com/us/products/1507117>

## Classifications

### ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

### UNSPSC

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

# SAC-5P- 2,0-900/M12FSB - Bus system cable



1507117

<https://www.phoenixcontact.com/us/products/1507117>

## 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	0.897 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)