

# SAC-2P-M12MSB/5-915/M12FSB VA - Bus system cable



1402381

<https://www.phoenixcontact.com/us/products/1402381>

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Bus system cable, PROFIBUS, 2-position, PUR/PVC, blue, shielded, Plug straight M12, coding: B, on Socket straight M12, coding: B, cable length: 5 m

## Commercial data

Item number	1402381
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	BF1CJC
GTIN	4046356610834
Weight per piece (including packing)	402.5 g
Weight per piece (excluding packing)	402 g
Country of origin	PL

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## Technical data

### Product properties

Product type	Data cable preassembled
Application	Bus system
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

### 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

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	≥ 100
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### 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	Stainless steel

### Connection data

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## Pin assignment

Contact   Color (signal designation)   Contact (optional)	2 (Plug)   GN (A cable)   2 (Socket)
	4 (Plug)   RD (B cable)   4 (Socket)

## Connector

### Connection 1

Type	Plug straight M12
Number of positions	2
Coding type	B (inverse)

### Connection 2

Type	Socket straight M12
Number of positions	2
Coding type	B

## Cable/line

Cable length	5 m
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## PROFIBUS [915]

Cable weight	74 kg/km
Number of positions	2
Shielded	yes
Cable type	PROFIBUS [915]
Conductor structure	1x2xAWG24/19
Conductor structure signal line	19x 0.14 mm
AWG signal line	24
Conductor cross section	2x 0.25 mm <sup>2</sup>
Wire diameter incl. insulation	2.56 mm
External cable diameter	8.00 mm ±0.4 mm
Outer sheath, material	PUR
External sheath, color	blue
Conductor material	Bare Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	red, green
Thickness, outer sheath	approx. 0.80 mm
Overall twist	2 wires, twisted
Optical shield covering	70 %
Insulation resistance	≥ 16 GΩ*km
Working capacitance	28 nF (at 1 kHz)
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	3600 V DC
Minimum bending radius, flexible installation	5 x D
Smallest bending radius, movable installation	40 mm
Max. bending cycles	3000000

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Bending radius	60 mm
Acceleration	4 m/s <sup>2</sup>
Tensile strength	≤ 100 N
Flame resistance	according to IEC 60332-1
Resistance to oil	Resistant to mineral oils and grease
Ambient temperature (operation)	-40 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
	IP69K
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

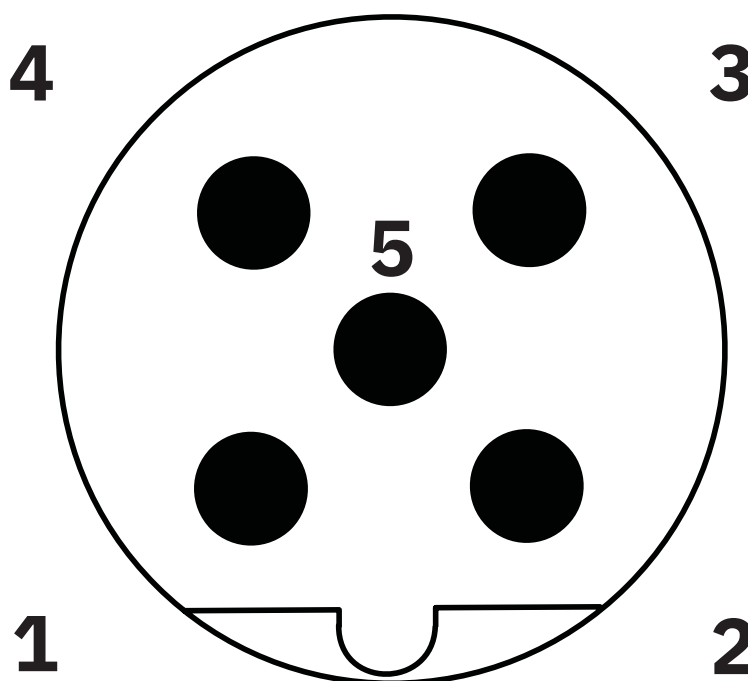
# SAC-2P-M12MSB/5-915/M12FSB VA - Bus system cable

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## Drawings

Schematic diagram



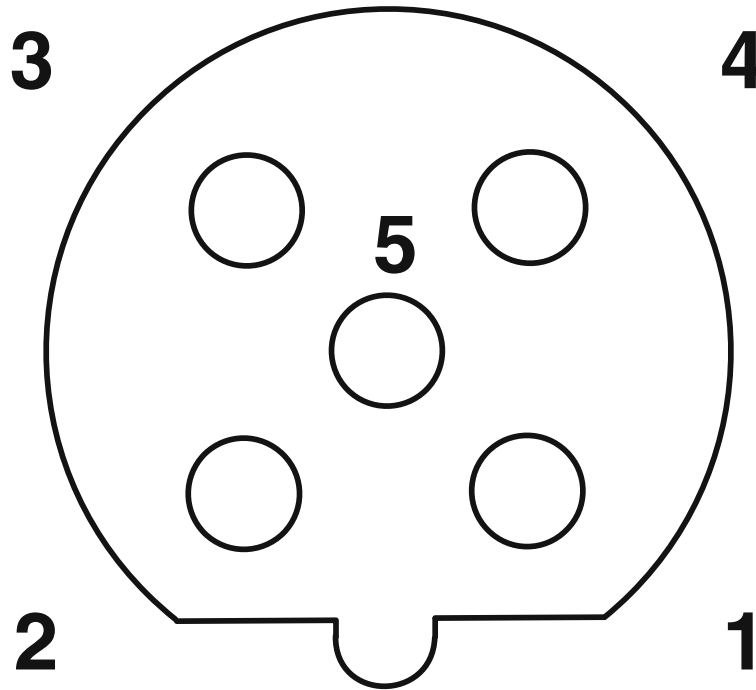
Pin assignment M12 male connector, 5-pos., B-coded, male side

# SAC-2P-M12MSB/5-915/M12FSB VA - Bus system cable

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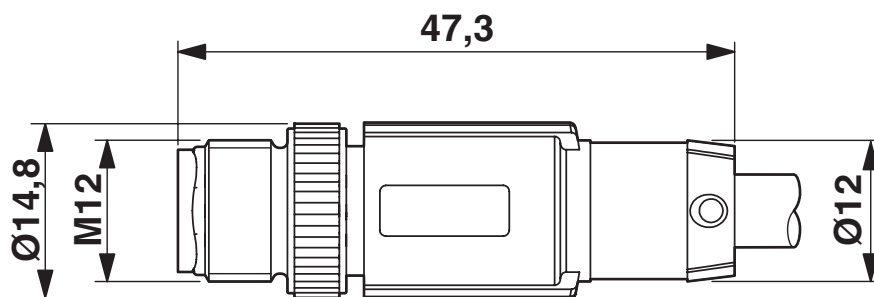
<https://www.phoenixcontact.com/us/products/1402381>

Schematic diagram



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

Dimensional drawing



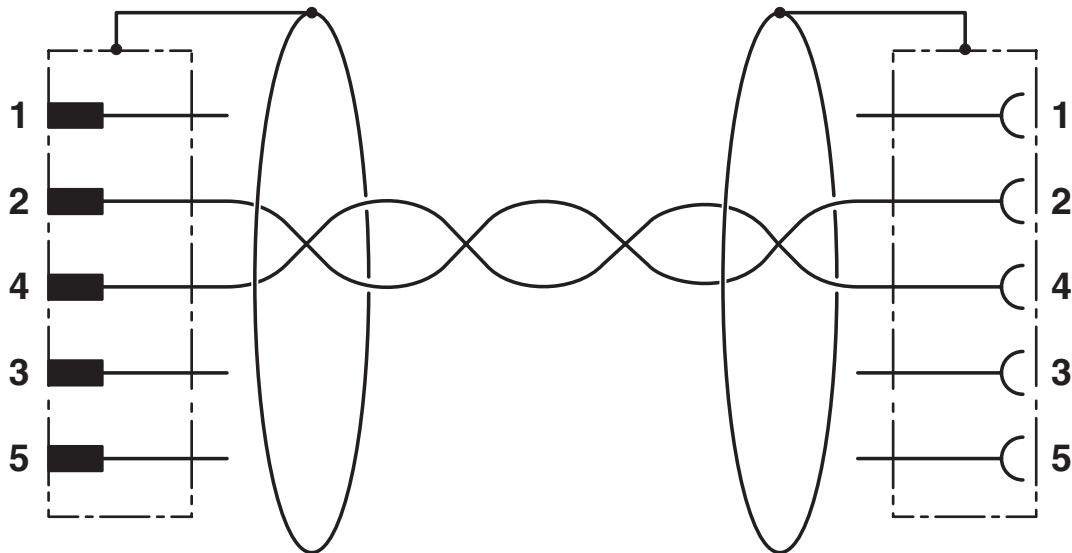
Plug, M12 x 1, straight, shielded

# SAC-2P-M12MSB/5-915/M12FSB VA - Bus system cable

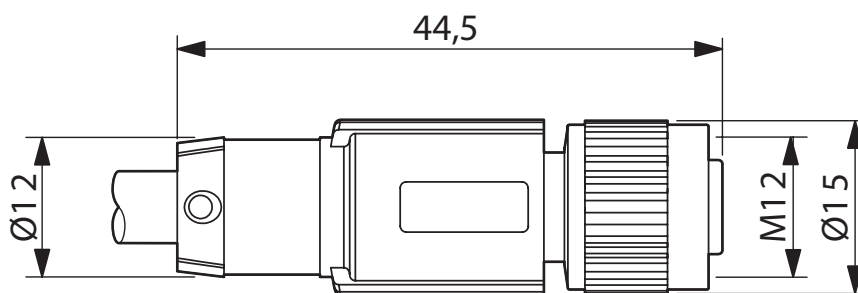
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Circuit diagram



Dimensional drawing



M12 x 1 socket, straight, shielded

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## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	EC001855
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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%
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