

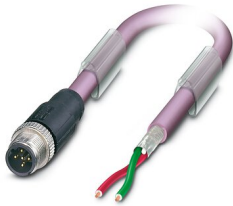
# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

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, Plug straight M12, coding: B, on free cable end, cable length: 15 m

## Commercial Data

Item number	1507272
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	B06
Product Key	BF1CKC
Catalog Page	Page 429 (C-2-2019)
GTIN	4017918900113
Weight per Piece (including packing)	884 g
Weight per Piece (excluding packing)	884 g
Customs tariff number	85444290
Country of origin	PL

# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Technical Data

### Notes

General	Further products with variable cable lengths can be found in the accessories section
---------	--

### Product properties

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

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Interfaces

Bus system	PROFIBUS
Signal type/category	PROFIBUS, 12 Mbps (max. 100 m)

### LED signaling

Status display	No
Status display present	No

### Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
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

### Mechanical properties

#### Mechanical data

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

### Material specifications

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

# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Connection data

### Pin assignment

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

## Connector

### Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Coding	B

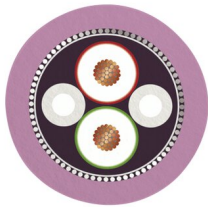
### Connection 2

Head design	free cable end
-------------	----------------

## Cable / line

Cable length	15 m
--------------	------

### PROFIBUS [910]

Dimensional drawing	
Cable weight	90 kg/km
UL AWM Style	21198 (80°C/300 V)
Number of positions	2
Shielded	yes
Cable type	PROFIBUS [910]
Conductor structure	1x2xAWG24/19
Conductor structure signal line	19x 0.13 mm
AWG signal line	24
Conductor cross section	2x 0.25 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	2.55 mm ±0.07 mm
External cable diameter	7.8 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	red lilac RAL 4001
Conductor material	Tin-plated Cu litz wires
Material wire insulation	Foam-Skin PP
Single wire, color	Red, green

# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

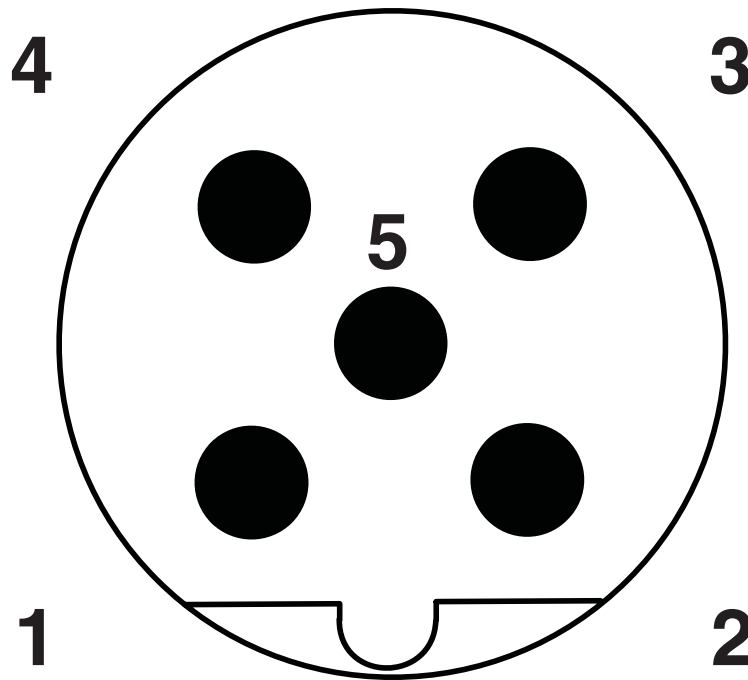
Overall twist	2 cores with 2 fillers to the core
Optical shield covering	85 %
Max. conductor resistance	≤ 78.6 Ω/km
Insulation resistance	≥ 5 GΩ*km
Wave impedance	150 Ω ±10 % (3 MHz ... 20 MHz)
Cable capacity	nom. 30 pF/m
Nominal voltage, cable	300 V
Test voltage Core/Core	1500 V (50 Hz, 1 min.)
Test voltage Core/Shield	1500 V (50 Hz, 1 min.)
Smallest bending radius, fixed installation	40 mm
Smallest bending radius, movable installation	65 mm
Max. bending cycles	4000000 5000000
Shield attenuation	≤ 0.049 dB/m (at 16 MHz)
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
Other resistance	Low adhesion
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)

## Ambient conditions

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

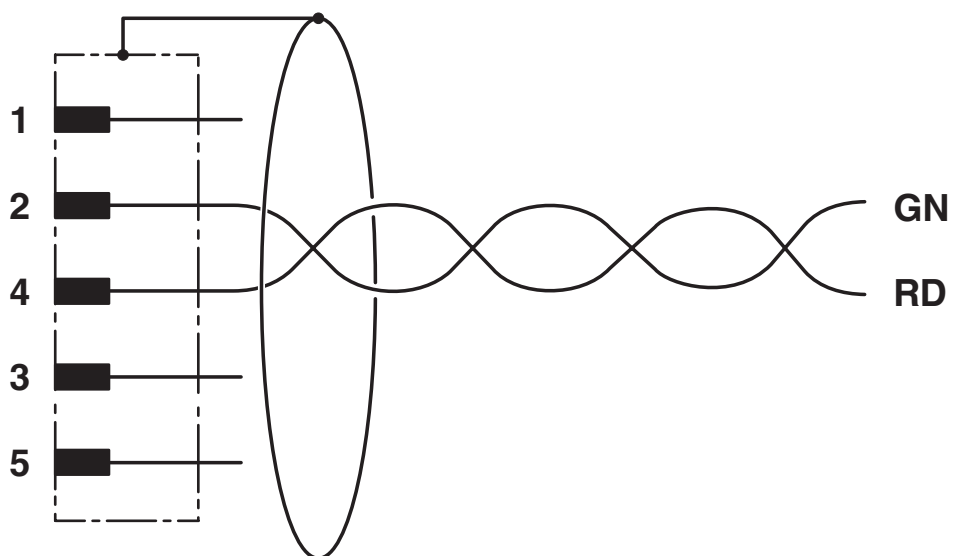
## Drawings

Schematic diagram



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

Circuit diagram

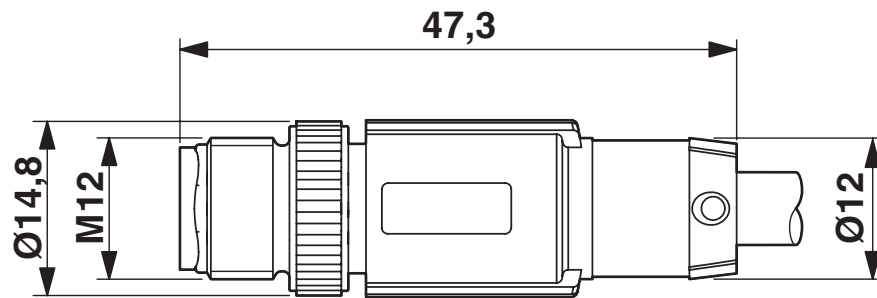


# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

Dimensional drawing



Plug, M12 x 1, straight, shielded

# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Approvals



**EAC**

Approval ID: RU C-DE.BL08.B.00286



**UL Listed**

Approval ID: FILE E 221474

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	300 V	4 A	-	-



**cUL Listed**

Approval ID: FILE E 221474

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	300 V	4 A	-	-



**EAC**

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

**cULus Listed**

# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Classifications

### ECLASS

ECLASS-9.0	27060308
ECLASS-10.0.1	27060308
ECLASS-11.0	27060307

### ETIM

ETIM 8.0	EC001855
----------	----------

### UNSPSC

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



# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

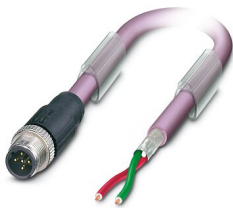
<https://www.phoenixcontact.com/us/products/1507272>

## Accessories

### Bus system cable

Bus system cable - SAC-2P-M12MSB/910/... - 1538047

<https://www.phoenixcontact.com/us/products/1538047>



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, red lilac RAL 4001, shielded, Plug straight M12, coding: B, on free cable end, cable length: Free input (0.2 ... 40.0 m)

### Bus system cable

Bus system cable - SAC-2P-M12MSB-M12FSB/910/... - 1538089

<https://www.phoenixcontact.com/us/products/1538089>



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, red lilac RAL 4001, shielded, Plug straight M12, coding: B, on Socket straight M12, coding: B, cable length: Free input (0.2 ... 40.0 m)

# Bus system cable - SAC-2P-M12MSB/15,0-910

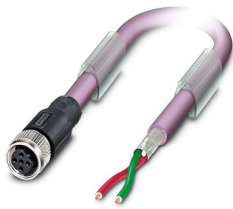
1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Bus system cable

Bus system cable - SAC-2P-M12FSB/910/... - 1538063

<https://www.phoenixcontact.com/us/products/1538063>



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, red lilac RAL 4001, shielded, free cable end, on Socket straight M12, coding: B, cable length: Free input (0.2 ... 40.0 m)

---

## Torque screwdriver

Torque screwdriver - TSD 04 SAC - 1208429

<https://www.phoenixcontact.com/us/products/1208429>



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Torque screwdriver

Torque screwdriver - TSD-M 1,2NM - 1212224

<https://www.phoenixcontact.com/us/products/1212224>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

---

## Adapter insert

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600

<https://www.phoenixcontact.com/us/products/1212600>



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Tool

Tool - SAC BIT M12-D15 - 1208432

<https://www.phoenixcontact.com/us/products/1208432>



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

---

## Sealing cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

<https://www.phoenixcontact.com/us/products/1430873>



M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs

# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Locking clip

Locking clip - SAC-M12-EXCLIP-M - 1558988

<https://www.phoenixcontact.com/us/products/1558988>



Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

---

## Cable-cutting tool

Cable-cutting tool - CUTFOX 12 - 1212128

<https://www.phoenixcontact.com/us/products/1212128>



**Cable cutter**, for copper and aluminum up to 12 mm diameter (up to 35 mm<sup>2</sup>)

# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Diagonal cutter

Diagonal cutter - CUTFOX-S VDE - 1212207

<https://www.phoenixcontact.com/us/products/1212207>



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

---

## Stripping tool

Stripping tool - VS-CABLE-STRIP-VARIO - 1657407

<https://www.phoenixcontact.com/us/products/1657407>



Stripping tool, for the multi-level stripping of shielded cables

# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Diagonal cutter

Diagonal cutter - MICROFOX-SP-1 - 1212487

<https://www.phoenixcontact.com/us/products/1212487>



Electronic diagonal cutter, tapered head, without chamfer, with opening spring, non-reflective phosphate-treated surface, punched version

---

## Stripping tool

Stripping tool - WIREFOX 4 - 1212156

<https://www.phoenixcontact.com/us/products/1212156>



Stripping tool, for cables and conductors (especially for rubber and silicone insulations) from 0.1 - 4 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade



# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Stripping tool

Stripping tool - WIREFOX-E 4 - 1212704

<https://www.phoenixcontact.com/us/products/1212704>



Stripping tool, for cables and conductors (especially for rubber and silicone insulations) from 0.1 - 4 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

---

## Stripping tool

Stripping tool - WIREFOX 10 - 1212150

<https://www.phoenixcontact.com/us/products/1212150>



Stripping tool, for cables and conductors from 0.02 - 10 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Protective hose adapter

Protective hose adapter - WP-CTA POM 13,0 BK - 1422884

<https://www.phoenixcontact.com/us/products/1422884>



Protective hose adapter, for corrugated hoses with a nominal size of 13 (10 x 13), corrugated in parallel

---

## Protective hose

Protective hose - WP-PA HF 13,0 BK - 3240681

<https://www.phoenixcontact.com/us/products/3240681>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m

# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Protective hose

Protective hose - WP-PA HF-HB 13,0 BK - 3240839

<https://www.phoenixcontact.com/us/products/3240839>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

---

## Data connector

Data connector - SACC-M12FSB-2PL SH PB - 1424680

<https://www.phoenixcontact.com/us/products/1424680>



Data connector, PROFIBUS DP (12 Mbps), 2-position, shielded, Socket straight M12, B - inverse, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Data connector

Data connector - SACC-M12MSB-2PL SH PB - 1424678

<https://www.phoenixcontact.com/us/products/1424678>



Data connector, PROFIBUS DP (12 Mbps), 2-position, shielded, Plug straight M12, B - inverse, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

---

## Data connector

Data connector - SACC-M12FRB-2PL SH PB - 1424681

<https://www.phoenixcontact.com/us/products/1424681>



Data connector, PROFIBUS DP (12 Mbps), 2-position, shielded, Socket angled M12, B - inverse, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Data connector

Data connector - SACC-M12MRB-2PL SH PB - 1424679

<https://www.phoenixcontact.com/us/products/1424679>



Data connector, PROFIBUS DP (12 Mbps), 2-position, shielded, Plug angled M12, B - inverse, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

---

## Data connector

Data connector - SACC-M12FSB-2QO SH PB - 1413932

<https://www.phoenixcontact.com/us/products/1413932>



Data connector, PROFIBUS DP (12 Mbps), 2-position, halogen-free, shielded, Socket straight M12 SPEEDCON, B - inverse, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm

# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Data connector

Data connector - SACC-M12MSB-2QO SH PB - 1413931

<https://www.phoenixcontact.com/us/products/1413931>



Data connector, PROFIBUS DP (12 Mbps), 2-position, halogen-free, shielded, Plug straight M12 SPEEDCON, B - inverse, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm

---

## Data connector

Data connector - SACC-M12FSB-5CON-PG9 SH AU - 1507777

<https://www.phoenixcontact.com/us/products/1507777>



Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Socket straight M12, B - inverse, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6.5 mm ... 8.5 mm

# Bus system cable - SAC-2P-M12MSB/15,0-910

1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Data connector

Data connector - SACC-M12MSB-5CON-PG9 SH AU - 1507764

<https://www.phoenixcontact.com/us/products/1507764>



Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Plug straight M12, B - inverse, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6.5 mm ... 8.5 mm

---

## Data connector

Data connector - SACC-M12FRB-5CON-PG 9-SH - 1430420

<https://www.phoenixcontact.com/us/products/1430420>



Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Socket angled M12, B - inverse, Screw connection, knurl material: Nickel-plated brass, cable gland Pg9, external cable diameter 6 mm ... 8 mm

# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

## Data connector

Data connector - SACC-M12MRB-5CON-PG 9-SH - 1430417

<https://www.phoenixcontact.com/us/products/1430417>



Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Plug angled M12, B - inverse, Screw connection, knurl material: Nickel-plated brass, cable gland Pg9, external cable diameter 6 mm ... 8 mm

---

## T distributor

T distributor - SAC-5PT-FB/2XMB PBDP SH - 1424711

<https://www.phoenixcontact.com/us/products/1424711>



T distributor, PROFIBUS DP (12 Mbps), 5-position, shielded, Socket straight M12, coding: B - inverse, on Plug straight M12, coding: B - inverse and Plug straight M12, coding: B - inverse



# Bus system cable - SAC-2P-M12MSB/15,0-910



1507272

<https://www.phoenixcontact.com/us/products/1507272>

## T distributor

T distributor - SAC-5PT-FB/MB-MBF PBDP SH - 1424713

<https://www.phoenixcontact.com/us/products/1424713>



T distributor, PROFIBUS DP (12 Mbps), 5-position, shielded, Socket straight M12, coding: B - inverse, on Plug straight M12, coding: B - inverse and Plug straight M12, coding: B, Fixed M12 thread on plug input

---

## Termination resistor

Termination resistor - SAC-5P-M12MS PB TR - 1507803

<https://www.phoenixcontact.com/us/products/1507803>



Terminating resistor PROFIBUS M12

---

Phoenix Contact 2022 © - 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)