

## Bus system cable - SAC-2P-M12MSB/ 2,0-910/M12FSB - 1507379


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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, violet RAL 4001, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, cable length: 2 m



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 900199
GTIN	4017918900199

### Technical data

#### Dimensions

Length of cable	2 m
-----------------	-----

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
---------------------------------	----------------------------------

#### General

Note	Further products with variable cable lengths can be found in the accessories section
Rated current at 40°C	4 A
Rated voltage	48 V AC 60 V DC
Number of positions	2
Insulation resistance	≥ 100 MΩ
Coding	B - inverse
Signal type/category	PROFIBUS, 12 Mbps (max. 100 m)
Status display	No
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100

# Bus system cable - SAC-2P-M12MSB/ 2,0-910/M12FSB - 1507379

## Technical data

### General

Torque	0.4 Nm (M12 connector)
--------	------------------------

### Material

Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6 (plug), TPU GF (socket)
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

### Pin assignment

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

### Cable

Cable type	PROFIBUS
Cable type (abbreviation)	910
UL AWM style	21198 (80°C/300 V)
Cable structure	1x2xAWG24/19
Conductor cross section	2x 0.25 mm <sup>2</sup> (Signal line)
AWG signal line	24
Conductor structure signal line	19x 0.13 mm
Core diameter including insulation	2.55 mm ±0.07 mm
Wire colors	Red, green
Overall twist	2 cores with 2 fillers to the core
Shielding	Plastic-coated aluminum foil, tinned copper braided shield
Optical shield covering	85 %
External sheath, color	violet RAL 4001
External cable diameter D	7.8 mm ±0.2 mm
Smallest bending radius, fixed installation	40 mm
Smallest bending radius, movable installation	65 mm
Number of bending cycles	4000000
Bending radius	65 mm
Traversing path	4.5 m
Traversing rate	3 m/s
Acceleration	3 m/s <sup>2</sup>
Number of bending cycles	5000000
Bending radius	80 mm
Traversing path	4.5 m
Traversing rate	3 m/s
Acceleration	3 m/s <sup>2</sup>
Cable weight	90 kg/km

## Bus system cable - SAC-2P-M12MSB/ 2,0-910/M12FSB - 1507379

### Technical data

#### Cable

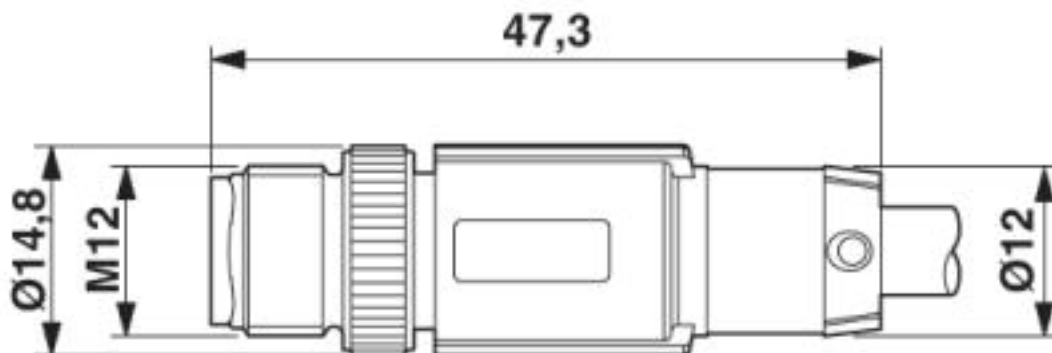
Outer sheath, material	PUR
Material, filler	PP
Material conductor insulation	Foam-Skin PP
Conductor material	Tin-plated Cu litz wires
Insulation resistance	$\geq 5 \text{ G}\Omega\cdot\text{km}$
Conductor resistance	$\leq 78.6 \text{ }\Omega/\text{km}$
Cable capacity	nom. 30 pF/m
Wave impedance	$150 \text{ }\Omega \pm 10 \%$ (3 MHz ... 20 MHz)
Attenuation	$\leq 0.049 \text{ dB/m}$ (at 16 MHz)
Nominal voltage, cable	30 V
Test voltage Core/Core	1500 V (50 Hz, 1 min.)
Test voltage Core/Shield	1500 V (50 Hz, 1 min.)
Flame resistance	UL 1581, Sec. 1060 (FT-1)
	IEC 60332-1-2
Halogen-free	in accordance with DIN VDE 0472 part 815
	according to IEC 60754-1
Other resistance	Low adhesion
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 80 °C (cable, flexible installation)
	$\leq 70 \text{ }^\circ\text{C}$ (cable, drag chain applications)

#### Environmental Product Compliance

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

### Drawings

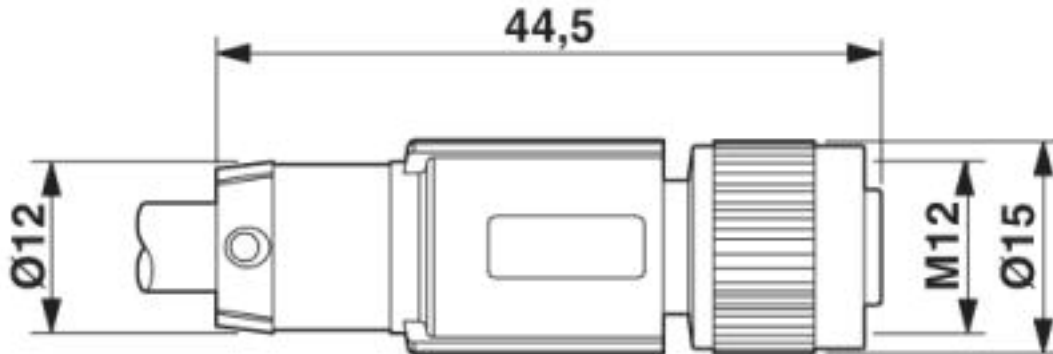
Dimensional drawing



Plug, M12 x 1, straight, shielded

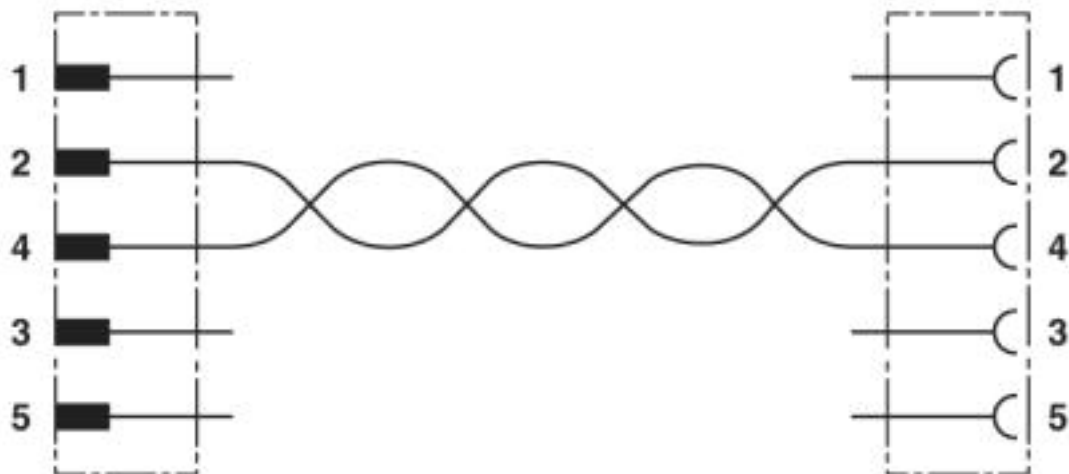
# Bus system cable - SAC-2P-M12MSB/ 2,0-910/M12FSB - 1507379

Dimensional drawing



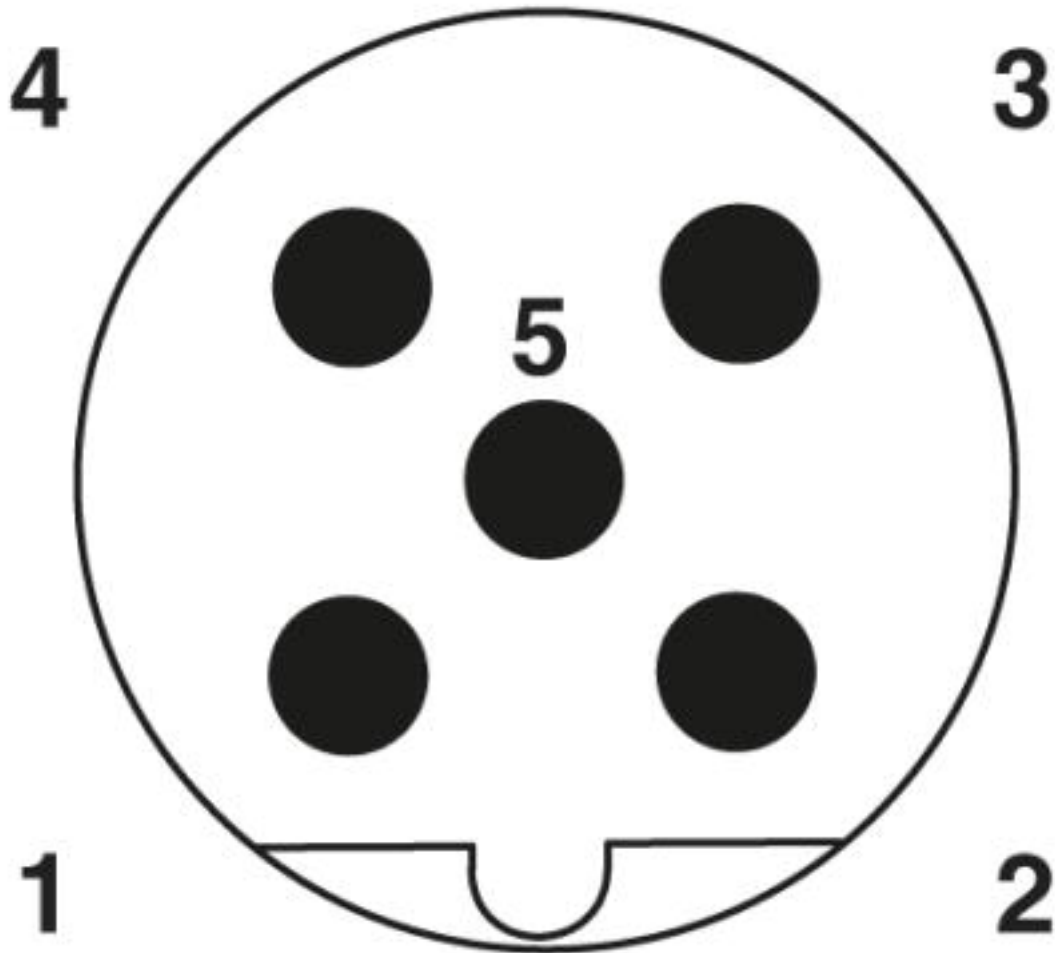
M12 x 1 socket, straight, shielded

Circuit diagram



## Bus system cable - SAC-2P-M12MSB/ 2,0-910/M12FSB - 1507379

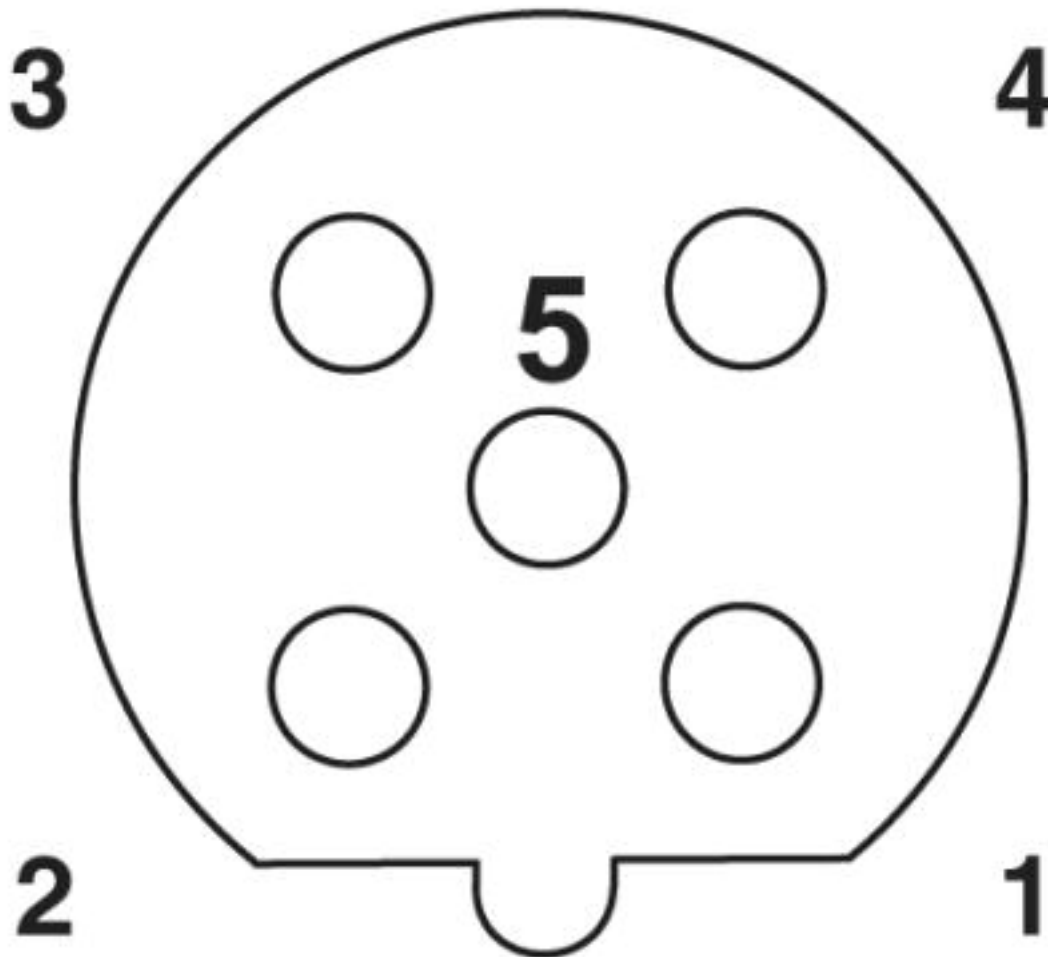
Schematic diagram



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

# Bus system cable - SAC-2P-M12MSB/ 2,0-910/M12FSB - 1507379

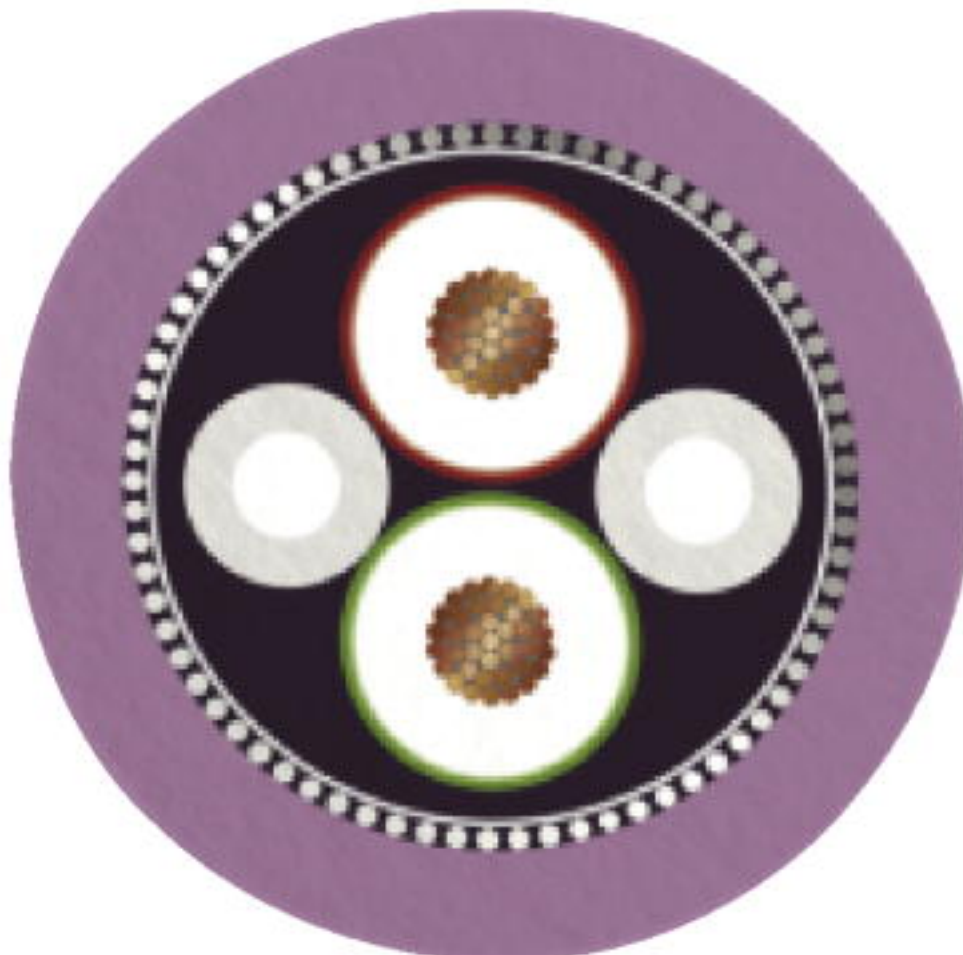
Schematic diagram



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

## Bus system cable - SAC-2P-M12MSB/ 2,0-910/M12FSB - 1507379

Cable cross section



PROFIBUS [910]

Approvals

Approvals

---

Approvals

EAC / EAC

---

Ex Approvals


---

Approval details

## Bus system cable - SAC-2P-M12MSB/ 2,0-910/M12FSB - 1507379

### Approvals

EAC		EAC-Zulassung
-----	---	---------------

EAC		RU C- DE.BL08.B.00286
-----	---	--------------------------

Phoenix Contact 2019 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>