

## Bus system cable - SAC-2P-M12MSB/ 4,0-910/M12FSB - 1529221

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Bus system cable, PROFIBUS, 2-position, PUR halogen-free, violet RAL 4001, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, Cable length: 4 m



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	301.8 g
Custom tariff number	85444290
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	4 m
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#### Ambient conditions

Degree of protection	IP65
	IP67
	IP68

#### General

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	2
Insulation resistance	≥ 100 MΩ
Coding	B - inverse
Signal type/category	PROFIBUS
Status display	No
Overvoltage category	II
Degree of pollution	3

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## Technical data

### General

Insertion/withdrawal cycles	≥ 100
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### Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 66
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

### Standards and Regulations

Flammability rating according to UL 94	V0
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### 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

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### Technical data

#### Cable

Traversing rate	3 m/s
Acceleration	3 m/s <sup>2</sup>
Outer sheath, material	PUR
Material, filler	PP
Material conductor insulation	Foam-Skin PP
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 5 GΩ*km
Conductor resistance	≤ 78.6 Ω/km
Cable capacity	nom. 30 pF/m
Wave impedance	150 Ω ±10 % (3 MHz ... 20 MHz)
Wave attenuation	≤ 0.049 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)
	≤ 70 °C (cable, drag chain applications)

### Classifications

#### eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

#### ETIM

ETIM 2.0	EC000830
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## Classifications

### ETIM

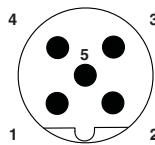
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

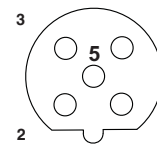
## Drawings

Schematic diagram



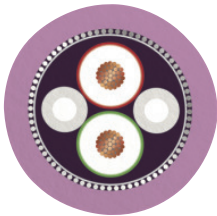
Pin assignment M12 male connector, 5-pos., B-coded, male side

Schematic diagram

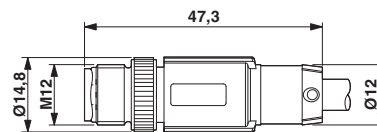


Pin assignment M12 socket, 5-pos., B-coded, female side

Cable cross section



Dimensional drawing

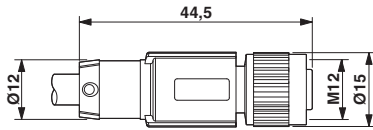


PROFIBUS [910]

Plug, M12 x 1, straight, shielded

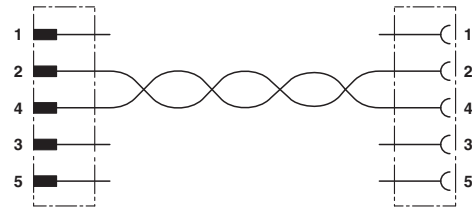
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Dimensional drawing



M12 x 1 socket, straight, shielded

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

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