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Bus system cable, INTERBUS, 5-position, PUR halogen-free, green RAL 6017, shielded, Plug straight M12 SPEEDCON, B-coded, on Socket straight M12 SPEEDCON, B-coded, cable length: 4 m



### **Key Commercial Data**

Packing unit	1 pc
Minimum order quantity	15 pc
GTIN	4 046356 451413
GTIN	4046356451413

#### 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	60 V
Number of positions	5
Insulation resistance	$\geq$ 100 M $\Omega$
Coding	B - inverse
Signal type/category	INTERBUS
Status display	No
Overvoltage category	II
Degree of pollution	3



### Technical data

#### Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
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	INTERBUS
Cable type (abbreviation)	900
Cable structure	3 x 2 x 0.22 mm²
Conductor cross section	3x 2x 0.22 mm²
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Wire colors	Green-yellow, white-brown, gray-pink
Twisted pairs	2 cores to the pair
Overall twist	3 pairs to the core
Shielding	Braided copper wires
External sheath, color	may green RAL 6017
External cable diameter D	8 mm
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	15 x D
Number of bending cycles	5000000
Bending radius	120 mm
Traversing path	10 m
Traversing rate	1.6 m/s
Acceleration	3.2 m/s²
Cable weight	70 kg/km
Outer sheath, material	PUR
Material conductor insulation	PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 5 GΩ*km
Loop resistance	≤ 159.80 Ω/km
Cable capacity	≤ 60 nF/km (At 800 Hz)
Wave impedance	120 Ω ±20 % (at 64 kHz)
	100 Ω ±15 % (with 1 MHz)
Near end crosstalk attenuation (NEXT)	≥ 61 dB (at 772 kHz)
	≥ 59 dB (with 1 MHz)



### Technical data

#### Cable

	≥ 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)
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)
Signal speed	0.66 c
Coupling resistance	< 250.00 mΩ/m (at 30 MHz)
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 V <sub>rms</sub>
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)
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### **Environmental Product Compliance**

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## **Drawings**

#### Schematic diagram



Schematic diagram



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

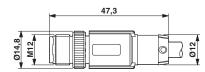
Pin assignment M12 socket, 5-pos., B-coded, female side



Cable cross section



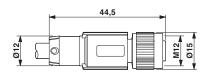
Dimensional drawing



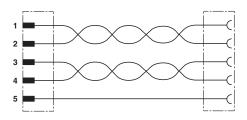
INTERBUS [900]

Plug, M12 x 1, straight, shielded

Dimensional drawing



#### Circuit diagram



M12 x 1 socket, straight, shielded

Contact assignment of the M12 connector and the M12 socket

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