

1517945

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Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, may green RAL 6017, shielded, free cable end, on Socket straight M12 SPEEDCON, coding: B, cable length: 15 m

### Commercial data

Item number	1517945
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	AF1CKB
GTIN	4017918968069
Weight per piece (including packing)	1,067 g
Weight per piece (excluding packing)	1,014.9 g
Customs tariff number	85444290
Country of origin	PL



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### Technical data

### Product properties

Product type	Data cable preassembled
Application	Standard
Sensor type	INTERBUS
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	В

### Insulation characteristics

Overvoltage category	П
Degree of pollution	3

### Interfaces

Bus system	INTERBUS
Signal type/category	INTERBUS, 16 Mbps

### Signaling

Status display	no
Status display present	no

### Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A
Transmission medium	Copper
Transmission speed	16 Mbps

### 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	Zinc die-cast, nickel-plated

### Connection data

### Connection assignment

Contact   Color (signal designation)   Contact (optional)	1 (Socket)   YE ( <u>DO</u> )
	2 (Socket)   GN ( <u>DO</u> )



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	3 (Socket)   GY (DI)
	4 (Socket)   PK ( <u>DI</u> )
	5 (Socket)   BN (GND)

### Connector

### Connection 1

Туре	free cable end	
Connection 2		
Type	free cable end	

### Cable/line

### INTERBUS [900]

Dimensional drawing



Cable weight	70 kg/km
Number of positions	6
Shielded	yes
Cable type	INTERBUS [900]
Conductor structure	3 x 2 x 0.22 mm <sup>2</sup>
Signal speed	0.66 c
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	3x 2x 0.22 mm²
External cable diameter	8.00 mm
Outer sheath, material	PUR
External sheath, color	may green RAL 6017
Conductor material	Bare Cu litz wires
Material wire insulation	PE
Single wire, color	green-yellow, white-brown, gray-pink
Twisted pairs	2 cores to the pair
Overall twist	3 pairs to the core
Insulation resistance	≥ 5 GΩ*km
Coupling resistance	< 250.00 mΩ/m (at 30 MHz)
Loop resistance	≤ 159.80 Ω/km
Wave impedance	120 Ω ±20 % (at 64 kHz)



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	100 Ω ±15 % (with 1 MHz)
Cable capacity	≤ 60 nF/km (At 800 Hz)
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	1000.00 V <sub>rms</sub>
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	15 x D
Smallest bending radius, fixed installation	60 mm
Smallest bending radius, movable installation	120 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 120 mm, Traversing path: 10 m, Traversing rate: 1.6 m/s, Acceleration: 3.3 m/s²
Near end crosstalk attenuation (NEXT)	≥ 61 dB (at 772 kHz)
	≥ 59 dB (with 1 MHz)
	≥ 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)
Shield 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)
me 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)

### Environmental and real-life conditions

### Ambient conditions

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

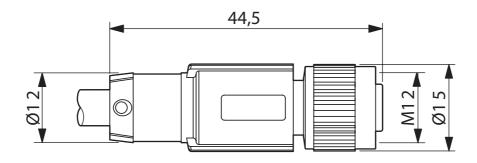


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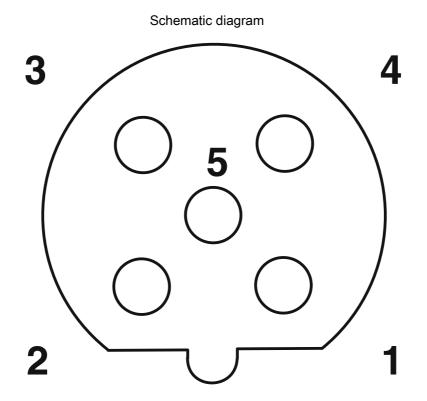
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# **Drawings**

### Dimensional drawing



M12 x 1 socket, straight, shielded



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



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# Circuit diagram YE GN GY PK BN WH

Contact assignment of the M12 socket



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### **Approvals**

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### **EAC-RoHS**

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



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# Classifications

### **ECLASS**

	ECLASS-13.0	27060307	
	ECLASS-15.0	27060307	
ETIM			
	ETIM 9.0	EC001855	
LINEDEC			
UNSPSC			
	UNSPSC 21.0	26121600	



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# Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
nvironment 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%
EF3.0 Climate Change	
CO2e kg	5.402 kg CO2e

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