IBS RBC METER/E-T

Remote Bus Cable for Outdoor and Underground Installation



AUTOMATION

Data Sheet
7715_en_01

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1 Description

The remote bus cable can be used for permanent indoor and outdoor installation as well as for underground installation. When the cable is installed above ground, the outer sheath is insensitive to atmospheric UV radiation.

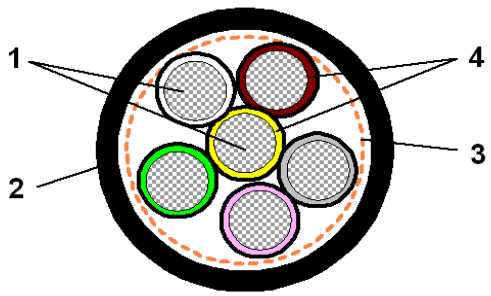


Figure 1 Cable design

Key for Figure 1:

1 Wire
2 Outer cable sheath
3 Copper shield
4 Outer wire sheath

Make sure you always use the latest documentation.
It can be downloaded at www.download.phoenixcontact.com.
A conversion table is available on the Internet at www.download.phoenixcontact.com/general/7000_en_00.pdf.

2 Ordering Data

Products

Description	Type	Order No.	Pcs./Pck.
Installation remote bus cable for permanent installation	IBS RBC METER/E-T	2723149	Sold by the meter

3 Technical Data

Individual Wire	
Material	Bare Cu litz wire
Design	7 x 0.2 mm^2
Conductor cross-section	0.22 mm^2 +/- 0.02 mm^2
Conductor insulation	Polyethylene (PE)
Color	According to DIN 47100
Number of wires	6
Wire twisting	2 wires twisted together to form a pair, 3 pairs twisted together to form the core
Wire pairs	Yellow/green; white/brown; pink/gray

Braided Shield	
Material	Bare braided copper shield

Outer Sheath	
Material	Polyvinyl chloride (PVC)
Color	Black, RAL 9005
Outer Diameter	9 mm, approximately
Imprinting color	May green, RAL 6017
Imprinting	

INTERBUS Certified! No.116 IBS RBC METER/E-T 2723149

Electrical Properties at 20°C

Conductor resistance (loop)	186 Ω/km, maximum
Insulation resistance	min.5 GΩ x km, minimum
Effective capacitance at 800 H	60 nF/km, nominal
Wave impedance at 64 kHz	120 Ω +/- 20%
Wave impedance at 1 MHz	100 Ω +/- 15%
Wave attenuation at 0.256 MHz	1.5 dB/100 m, maximum
Wave attenuation at 0.772 MHz	2.4 dB/100 m, maximum
Wave attenuation at 4 MHz	5.2 dB/100 m, maximum
Wave attenuation at 10 MHz	8.4 dB/100 m, maximum
Wave attenuation at 16 MHz	11.2 dB/100 m, maximum
Wave attenuation at 20 kHz	11.9 dB/100 m, maximum
Near-end crosstalk attenuation at 0.772 MHz	61 dB, minimum
Near-end crosstalk attenuation at 1 MHz	59 dB, minimum
Near-end crosstalk attenuation at 2 MHz	55 dB, minimum
Near-end crosstalk attenuation at 4 MHz	50 dB, minimum
Near-end crosstalk attenuation at 8 MHz	46 dB, minimum
Near-end crosstalk attenuation at 10 MHz	44 dB, minimum
Near-end crosstalk attenuation at 16 MHz	41 dB, minimum
Near-end crosstalk attenuation at 20 MHz	40 dB, minimum
Coupling resistance at 30 MHz	250 MΩ/m, maximum
Signal propagation velocity	66 %, nominal
Operating voltage, peak value (not for heavy power applications)	250 V
Test voltage wire/wire	U_{RMS} 1500 V
Test voltage wire/shield	U_{RMS} 1000 V

Mechanical and Thermal Cable Properties

Minimum bending radius (fixed)	Cable diameter x 7.5
Permissible temperature range (fixed)	-30°C to +70°C
Permissible temperature range (during installation)	-5°C to +70°C
Fire load	0.29 kWh/m
Burning behavior	Flame-retardant according to VDE 0472, Part 804, Test Type B / IEC 60332-1

Approvals, Certifications

Free from substances that would hinder coating with paint or varnish according to central standard 57650 of VW, Audi and Seat

Certification according to the "Technical Guideline - Data Cables for the Sensor/Actuator Bus" issued by the INTERBUS Club e.V.