
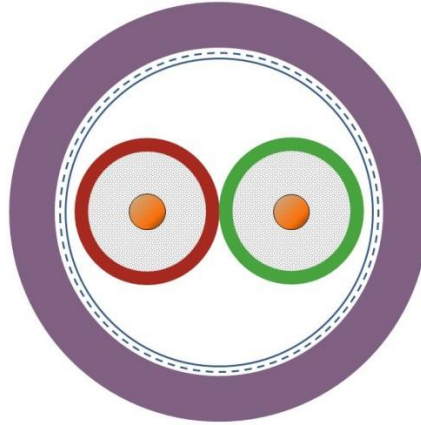


2170620	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® BUS PB ROBUST	

Application

UNITRONIC® BUS PB ROBUST 1x2x0,64 is a field bus cable with 150 Ω nominal impedance. It is intended for fixed installation in dry, damp and wet rooms. In consideration of the temperature range, it can be used outdoors. At room temperature the cable is increased resistant against acids, leaches and certain oils, greases and animal, vegetable and synthetic based waxes.

Design




Conductor	bare copper conductor, solid copper, ca. 0.64 mm diameter
Insulation	foam-skin PE, core diameter ca. 2.55 mm
Core identification code	red (similar to RAL 3000) and green (similar to RAL 6018)
Stranding	two cores stranded together with two fillers
Braid	plastic laminated aluminum foil, metal-side outwards on top: braid of tinned copper wire, coverage ca. 85 %
Taping	one layer plastic foil
Outer sheath	special TPE compound, flame retardant, violet (similar to RAL 4001), outer diameter ca. 7.8 mm

Electrical properties at 20°C

Loop resistance	max. 110 Ω/km
Insulation resistance	min. 5GΩ x km
Mutual capacitance	max. 30 nF/km (at 800 Hz)
Characteristic impedance	9.6 kHz: 270 Ω ± 27 Ω 38.4 kHz: 185 Ω ± 18.5 Ω 3 MHz - 20 MHz: 135 Ω - 165 Ω
Attenuation	9.6 kHz: max. 0.25 dB/100 m 38.4 kHz: max. 0.4 dB/100 m 200 kHz: max. 0.9 dB/100 m 4 MHz: max. 2.2 dB/100 m 16 MHz: max. 4.2 dB/100 m
Peak operating voltage	250 V (not for power applications)
Test voltage	conductor/conductor 1500 V conductor/screen 1500 V

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Mechanical and thermal properties

Minimum bending radius	moved: 150 mm
	fixed installation: 75 mm
Temperature range	from -40 °C up to +80 °C
Flammability	flame retardant acc. to IEC 60332-1-2
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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