
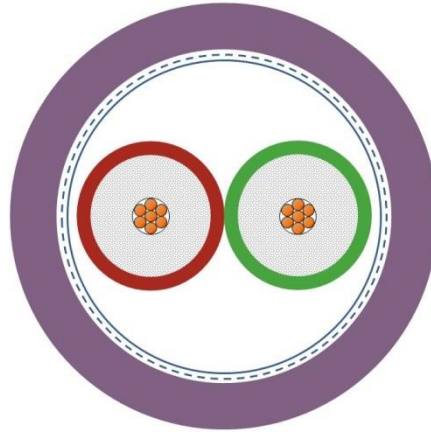


2170824	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® BUS PB 7-W A 1x2x0,64	

Application

UNITRONIC® BUS PB 7-W A is a data cable for PROFIBUS field-bus systems with UL and CSA approval. The cable is intended for limited flexible use and permanent installation in dry and damp interiors.

Design




Certification	c(UL)us type CMG acc. to UL 444, CSA C22.2 No. 214-02
Conductor	stranded bare copper wire 24/7 AWG conductor Ø nom. 0.64 mm or approx. 0.22 mm ²
Insulation	foam-skin PE, core Ø nom. 2.55 mm
Core identification code	red and green
Stranding	2 cores twisted with fillers to a bundle On top: layer of plastic foil
Screen	1 layer plastic-laminated aluminium foil (side with metal outwards), braid of tinned copper wires, coverage approx.. 85 % (nominal value)
Outer sheath	PVC lead-free, TM2 acc. to VDE028 1-1 colour: violet similar RAL4001 outer Ø approx. 7.7 mm

Electrical properties at 20°C

Loop resistance	max. 186 Ω/km
Insulation resistance	min. 5 MΩxkm
Mutual capacitance	ca. 28 nF/km (at 800 Hz)
Characteristic impedance	9.6 kHz: 270 Ω ± 27 38.4 kHz: 185 Ω ± 18.5 3 up to 20 MHz: 150 Ω ± 15
Attenuation	9.6 kHz: max. 0.3 dB/100 m 38.4 kHz: nom. 0.4 dB/100 m 200 kHz: nom. 0.9 dB/100 m 4 MHz: max. 2.5 dB/100 m 16 MHz: nom. 4.9 dB/100 m
Velocity of propagation	nom. 0,81c

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Peak operating voltage	225 V (not for power purposes)
Test voltage	conductor/conductor 1500 V conductor/screen 1500 V

Mechanical and thermal properties

Minimum bending radius	during installation: 6 x cable Ø fixed: 8,5 x cable Ø
Temperature range	during installation: -5° C up to +50° C fixed: -40° C up to +80° C
Flammability	flame retardant acc. to IEC 60332-1-2, VW-1 acc. to UL1581
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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