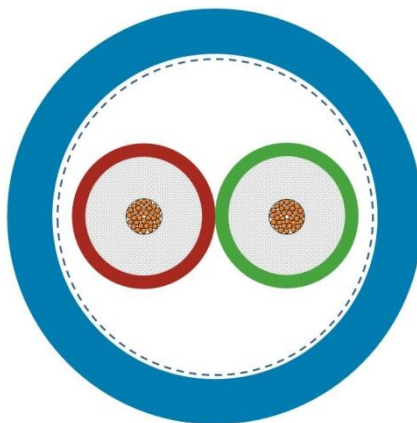


2170234	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® BUS PA 1 x 2 x 1.3	

Application

Data cable for PROFIBUS PA field net according to IEC 61158-2. The cable is intended for fixes laying in dry and damp interiors and with the black outer sheath for laying outdoors.

Design



Conductor	bare copper fine-wire stranded, nom. 1,0 mm ² , core Ø ca. 1.32 mm,
Insulation	foam-skin PE, core Ø nom. 2,5 mm
Core identification code	cores red and green
Stranding	1 layer PETP plastic foil
Screen	braid of tinned copper wires, coverage 85 % (nominal value)
Outer sheath	PVC lead-free, Colour in accordance with part number outer diameter: 8,0 mm

Electrical properties at 20°C

Loop resistance	max. 44 Ω/km
Insulation resistance	min. 5 GΩxkm
Mutual capacitance	A/A: ca. 50 nF/km A/S: ca. 80 nF/km (at 800 Hz)
Inductance	800 Hz: ca. 0,4 mH/km
Characteristic impedance	31,25 kHz: 100 Ω ± 20% ≥ 1 MHz: nom. 80 Ω
Attenuation	39 kHz: max. 0,3 dB/100 m 100 kHz: nom. 0,35 dB/100 m 1 MHz: nom. 1,2 dB/100 m
Velocity of propagation	nom. 0,79 c
Transfer impedance	max. 250 mΩ/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	8 x cable Ø
Temperature range	during installation: -5° C up to +60° C static: -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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