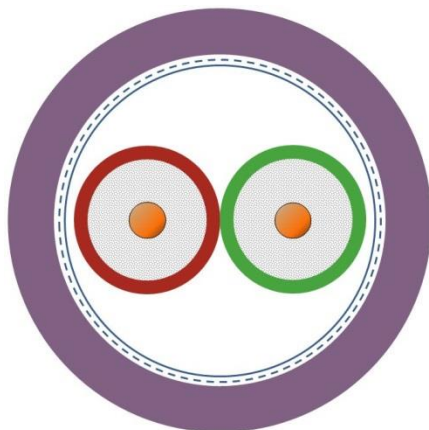


2170856	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® BUS PB TRAY	

Application

Data cable for fieldbus system PROFIBUS DP and PROFIBUS FMS (Siemens SIMATIC NET) with "fast connect" design. The cable is designed for the system-defined transmission rates of 9.6 kbit/s up to 12 Mbit/s, the transmission characteristics are conform to the system and guarantee a high operating security during the data transmission. The cable is intended for fixed installation.

Design



Certification	c(UL)us type CMG (75 °C) acc. to UL 444 and CSA C22.2 No. 217-02; UL type PLTC-ER acc. to UL 13; UL AWM style 20201 (PVC, 60 °C, 600 V, external wiring)
Conductor	bare copper wire, $\varnothing$ ca. 0.64 mm
Insulation	foam skin PO, core diameter ca. 2.55 mm
Core identification code	a-core red, b-core green
Stranding	two cores stranded together
Inner sheath	PVC, outer diameter ca. 5.5 mm
Screen	one layer plastic laminated aluminium foil on top: braid of tinned copper wires, coverage ca. 60%
Taping	one layer plastic foil
Outer sheath	PVC compound, violet (similar to RAL 4001), outer diameter: ca. 8.4 mm

Electrical properties at 20°C

Loop resistance	max. 110 Ω /km
Insulation resistance	min. 5 G Ω km
Mutual capacitance	ca. 30 nF/km (at 1 kHz)
Characteristic impedance	9.6 kHz: 270 Ω $\pm$ 27 Ω 38.4 kHz: 185 Ω $\pm$ 18.5 Ω 3 bis 20 Mhz: 150 Ω $\pm$ 15 Ω
Attenuation	9.6 kHz: max. 0.25 dB/100 m 38.4 kHz: max. 0.4 dB/100 m 4 MHz: max. 2.2 dB/100 m 16 MHz: max. 4.2 dB/100 m
Test voltage	conductor/conductor 2000 V conductor/screen 2000 V

Creator: TOST / PDC	Document: DB2170856EN	Page 1 of 2
Released: ALTE / PDC	Version: 02	

2170856	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® BUS PB TRAY	

Mechanical and thermal properties

Minimum bending radius	8 x cable diameter
Temperature range	moved: -10°C up to +70°C fixed installation: -40°C up to +80°C
Flammability	flame retardant acc. to FT 4 (Vertical Tray) acc. to UL 1685
UV resistance	sunlight resistant acc. to UL 1581 Sec. 1200
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

Creator: TOST / PDC Released: ALTE / PDC	Document: DB2170856EN Version: 02	Page 2 of 2
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