
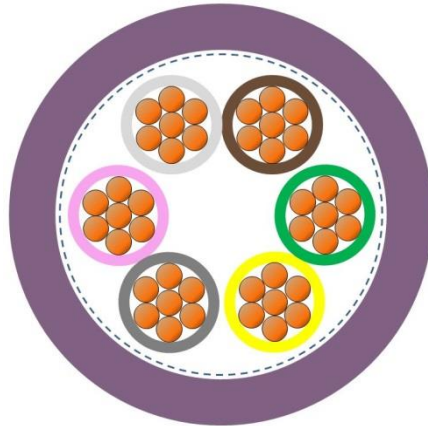


2170209	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® BUS IBS A 3 x 2 x 0,22 mm²	

Application

UNITRONIC® BUS IBS A is a data cable with UL and CSA approval for the field-bus system INTERBUS with a data transmission rate of 500kBit/s at a length of 400m. The field-bus cable is designed to the requirements of the bus-system INTERBUS, the transmission characteristics conform to the system and guarantee a high operating security during data transmission. UNITRONIC® BUS IBS A is certified by the INTERBUS-CLUB. The cable is intended for limited flexible use and for permanent installation in dry and damp interiors.

Design




Certification	UL/CSA Type CMX according to UL 444 and CSA C22.2 No. 214-02
Conductor	multi-wire stranded (7 x 0.2 mm) of bare copper
Insulation	PE, 2Y11 in acc. to VDE 0207 part 2
Core identification code	colour-coded to DIN 47100
Stranding	Stranding 2 cores twisted to pair, 3 pairs laid up, one layer polyester foil
Screen	copper wire braid
Outer sheath	PVC compound, violet, outer diameter approx 7.4 mm

Electrical properties at 20°C

Conductor resistance	acc. to UL 444 max. 87,6 Ω/km
Insulation resistance	min. 5 GΩ x km
Mutual capacitance	800 Hz max. 60 nF/km
Characteristic impedance	64 kHz Ω 120 +/- 20% 1 MHz Ω 100 +/- 15%
Attenuation	0,256 MHz max. dB/100m 1,5 0,772 MHz max. dB/100m 2,4 4 MHz max. dB/100m 5,2 10 MHz max. dB/100m 8,4 16 MHz max. dB/100m 11,2 20 MHz max. dB/100m 11,9
Near-end cross-talk	0,772 MHz min. dB 61 1 MHz min. dB 59 2 MHz min. dB 55 4 MHz min. dB 50 8 MHz min. dB 46 10 MHz min. dB 44 16 MHz min. dB 41 20 MHz min. dB 40
Velocity of propagation	nom. 0,66c
Transfer impedance	30 MHz: max. 250 mΩ/m
Peak operating voltage	250 V (not for power applications)

Creator: TOST / PDC	Document: DB2170209EN	Page 1 of 2
Released: ALTE / PDC	Version: 03	

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Test voltage conductor/conductor 1500 V
conductor/screen 1000 V

Mechanical and thermal properties

Minimum bending radius fixed installation mm 64
Temperature range static -30° C up to +80° C
Flammability flame retardant acc. to IEC 60 332-1-2 / UL-1581 VW-1
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	Document: DB2170209EN	Page 2 of 2
Released: ALTE / PDC	Version: 03	