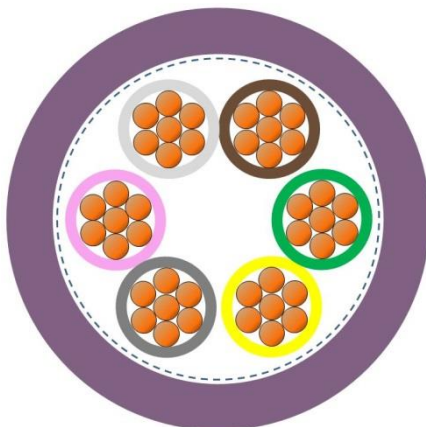


<b>2170206</b>	<b>DATA SHEET</b>	
<b>valid from:</b> <b>01.01.2019</b>	<b>UNITRONIC® BUS IBS</b> <b>3 x 2 x 0,22 mm<sup>2</sup></b>	

## Application

UNITRONIC® BUS IBS is a data cable 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 is certified by the INTERBUS-CLUB. The cable is intended for limited flexible use and for permanent installation in dry and damp interiors.

## Design



Conductor	multi-wire stranded ( 7 x 0.2 mm) of bare copper
Insulation	PE, 2YI1 in acc. to VDE 0207 part 2
Core identification code	colour-coded to DIN 47100
Stranding	2 cores twisted to pair, 3 pairs laid up, one layer polyester foil
Screen	copper wire braid
Outer sheath	Sheath PVC, violet, outer diameter approx 7.4 mm

## Electrical properties at 20°C

Loop resistance	max. 186 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)
Test voltage	conductor/conductor 1500 V conductor/screen 1000 V

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### Mechanical and thermal properties

Minimum bending radius	fixed installation mm 64
Temperature range	static -30° C up to +80° C
Flammability	flame retardant to VDE 0482, part 265-2-1 / IEC 60332-1
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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