


2170260	<b>DATA SHEET</b>	
valid from: 01.01.2019	<b>UNITRONIC® BUS CAN A</b> <b>1 x 2 x 0,22 mm<sup>2</sup></b>	

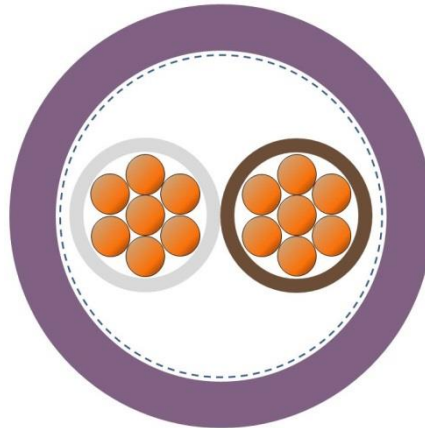
## Application

UNITRONIC® BUS CAN A is a data cable with UL and cUL approval, for CAN (Controller Area Network) fieldbus system according to ISO11898 as well as for high performance data networks with 120 Ohms nominal impedance. The transmission characteristics of the cable conform to the CAN system and guarantee a high operating security during data transmission.

The possible data transmission acc. to ISO 11898 for max. 40m is 1 Mbit/s.

UNITRONIC® BUS A is intended for permanent installation and conditional flexible use in dry and damp interiors.

## Design




Certification	Approval: UL / cUL type CMX according to UL 444 and CSA C22.2 No.214-02.
Conductor	seven-wire strands of bare copper, 0.22mm <sup>2</sup> , (24AWG)
Insulation	cellular PE or foam skin, core diameter approx. 1.6 mm
Core identification code	white and brown (acc. DIN 47100)
Stranding	2 cores twisted into a pair plastic foil
Screen	braid of tinned copper wires
Outer sheath	PVC, violet, OD approx. 5.8 mm

## Electrical properties at 20°C

Loop resistance	max. 186 Ω/km
Insulation resistance	min. 5 GΩxkm
Mutual capacitance	nom. nF/km 40
Characteristic impedance	at f ≥ 1 MHz Ω 120 ± 15%
Attenuation	100 kHz nom. dB/100 m 0,6 1 MHz nom. dB/100 m 1,7 5 MHz nom. dB/100 m 3,9 10 MHz nom. dB/100 m 5,6 20 MHz nom. dB/100 m 8,1
Velocity of propagation	nom. 76 %
Signal transit time	4,4 ns/m
Transfer impedance	at 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	moved: 10 x cable Ø
Temperature range	moved - 5° C to + 70° C static - 30° C to + 80° C
Flammability	flame retardant acc. to VDE 0482, part 265-2-1 / IEC 60 332-1
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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