

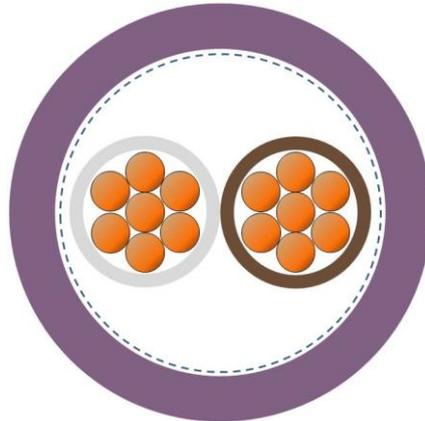
2170803	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® BUS LD A	

Application

UNITRONIC® BUS LD A is a screened, twisted paired cable for bus systems with a data transmission rate up to 10 MBit/s. The twisting of the conductors into pairs ensures maximum interference suppression of the individual signals. The copper screening protects against external electromagnetic influences.

Cables of this composition are intended for limited flexible use and for permanent installation in dry and damp interiors.

Design



Certification	UL/cUL Type CMX acc. to UL 444 and CSA C22.2 No. 214-02
Conductor	multiple wire stranding of bare copper wires
Insulation	Insulation special PE-based compound
Core identification code	acc. to DIN 47100
Stranding	cores twisted into pair, pairs twisted together
Screen	braiding of tinned copper wires
Taping	plastic foil
Outer sheath	special PVC-based compound sheath colour: violet similar to RAL 4001

Diameter of the outer sheath

Article number	Dimension	Outer sheath \varnothing
2170803	1 x 2 x 0.22 mm ²	ca. 5,7 mm
2170804	2 x 2 x 0.22 mm ²	ca. 7,1 mm
2170805	3 x 2 x 0.22 mm ²	ca. 7,2 mm

Electrical properties at 20°C

Loop resistance	max. 186 Ω /km
Insulation resistance	min. 5 G Ω xkm
Mutual capacitance	max. 60 nF/km at 800 Hz
Characteristic impedance	100 - 120 Ω
Attenuation	at 100 kHz: nom. dB/100m 0.9 at 1 MHz: nom. dB/100m 25
Near-end cross-talk	at 1 MHz: min. dB 50 at 10 MHz: min. dB 40
Velocity of propagation	nom. 0.66 c
Signal transit time	nom. 5.06 ns/m
Transfer impedance	at 30 MHz: max. 250 m Ω /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: 8 x cable diameter moved: 20 x cable diameter
Temperature range	fixed use: -40°C to +80°C flexible use: -5°C to +70°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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