### 2170269

## **DATA SHEET**

valid from: 01.01.2019

UNITRONIC® BUS CAN A 1 x 2 x 0,75 mm<sup>2</sup>

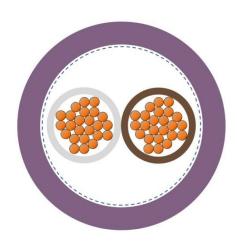


#### **Application**

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 second pair can be used for electrical power supply for the logical bus units. The transmission characteristics of the cable conform to the CAN system and guarantee a high operating security during data transmission.

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

#### Design



Certification UL / cUL type CMX according to UL 444 and CSA C22.2 No.214-02.

Conductor seven-wire strands of bare copper,

0.5mm<sup>2</sup>, (20AWG)

Insulation cellular PE or foam skin,

core diameter approx. 2.1 mm

Core identification code pair 1 white and brown,

pair 2 green and yellow (acc. DIN 47100)

Stranding 2 cores twisted into pairs, 2 pairs arranged to the cable core

plastic foil

Screen braid of tinned copper wires

Outer sheath PVC, violet,

OD approx. 9.6 mm

#### Electrical properties at 20°C

Characteristic impedance at  $f \ge 1$  MHz  $\Omega$  120 ± 15% Attenuation 100 kHz nom. dB/100 m 0,3 1 MHz nom. dB/100 m 0,9 5 MHz nom. dB/100 m 2.4

5 MHz nom. dB/100 m 2,4 10 MHz nom. dB/100 m 3,5 20 MHz nom. dB/100 m 5,2

Velocity of propagation nom. 76 %Signal transit time 4,4 ns/m

 $\begin{array}{lll} \mbox{Transfer impedance} & \mbox{at 30 MHz max. } 250 \ \mbox{m} \mbox{/m} \\ \mbox{Peak operating voltage} & 250 \ \mbox{V (not for power applications)} \\ \mbox{Test voltage} & \mbox{conductor/conductor} & 1500 \ \mbox{V} \\ \mbox{conductor/screen} & 1000 \ \mbox{V} \end{array}$ 

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## Mechanical and thermal properties

Minimum bending radius moved:  $10 \times \text{cable } \emptyset$ Temperature range moved  $-5^{\circ} \text{ C to } + 70^{\circ} \text{ C}$ static  $-30^{\circ} \text{ C to } + 80^{\circ} \text{ C}$ 

Flammability flame retardant 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).