2170266

# **DATA SHEET**

valid from: 01.01.2019 UNITRONIC® BUS CAN A

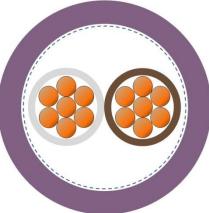


# 1 x 2 x 0,5 mm<sup>2</sup>

#### Application

UNITRONIC<sup>®</sup> 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. UNITRONIC<sup>®</sup> 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, 0.5mm², (20AWG)
Insulation	cellular PE or foam skin, core diameter approx. 2.4 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. 7.5 mm
Electrical properties at 2	20°C
Loop resistance	max. 78 Ω/km
Insulation resistance	min. 5 GΩxkm
Mutual capacitance	nom. nF/km 40
Characteristic impedance	at f $\geq$ 1 MHz $\Omega$ 120 ± 15%
Attenuation	<ul> <li>100 kHz nom. dB/100 m 0,3</li> <li>1 MHz nom. dB/100 m 1,1</li> <li>5 MHz nom. dB/100 m 2,8</li> <li>10 MHz nom. dB/100 m 3,9</li> <li>20 MHz nom. dB/100 m 5,7</li> </ul>
Velocity of propagation	nom. 76 %
Signal transit time	4,4 ns/m
Transfer impedance	at 30 MHz max. 250 m $\Omega/m$
Peak operating voltage	250 V (not for power applications)
<b>T</b> 1 11	

Test voltage

#### 250 V (not for power applications) conductor/conductor 1500 V conductor/screen 1000 V

Creator:	TOST / PDC	Document: DB2170266EN	Daga 1 of 2
Released:	ALTE / PDC	Version: 04	Page 1 of 2

valid from: 01.01.2019

DATA SHEET

UNITRONIC<sup>®</sup> BUS CAN A

1 x 2 x 0,5 mm<sup>2</sup>



## 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 to VDE 0482, part 265-2-1 / IEC 60 332-1	
General requirements	his cable is conform to the EU-Directive 2011/65/EU RoHS, Restriction of the use of certain hazardous substances).	

Creator: TOST / PDC Document: DB2170266EN Released: ALTE / PDC Version: 04

Page 2 of 2