2170386

DATA SHEET

valid from: 01.01.2019

**UNITRONIC® BUS HEAT 6722** 



# 1x4x0,34mm<sup>2</sup>

## Application

UNITRONIC<sup>®</sup> BUS HEAT 6722 is a bus cable for the Contoll Area Network (CAN) and is normatively specified by ISO 11898 (Maximum bitrate: 1Mbit/s for 40m). The cable with an impedance of  $120 \Omega$  has excellent shielding properties. It is used primarily for the transmission of commands in automotive area. The product is heat resistant up to 105 ° C and can also be used outdoors. It is suitable for fixed installation, limited moved applications in dry and damp area and has a moderate resistance to acids and alkalis and certain oils at room temperature.

#### Design

Certification	certified acc. to ECE-R 118
Conductor	bare copper wire 19 x 0,160 mm, Ø approx. 0,80 mm
Insulation	foamed skin polypropylene (09YS), Ø 2,10 mm (nominal value)
Core identification code	quad: white/green/brown/yellow
Stranding	4 cores stranded to quad, thin non-woven tape
Screen	aluminium laminated shield foil under braid, tinned coper wires, coverage 85 $\%$ ±5 $\%$
Taping	thin non-woven tape (optional)
Outer sheath	PUR, black (similar RAL 9005), outer Ø: 7,60 mm Ø 0,30 mm

## Electrical properties at 20°C

Conductor resistance	max. 57,5 Ω/km
Insulation resistance	min. 5 GΩxkm
Inductance	nom. 850 µH/km (800 Hz)
Characteristic impedance	120 $\Omega$ (±15%) in frequency range > 1 MHz
Attenuation	nom. 0,6 dB/100m (100 kHz) nom. 1,7 dB/100m (1 MHz) nom. 3,9 dB/100m (5 MHz) nom. 5,5 dB/100m (10 MHz) nom. 7,8 dB/100m (20 MHz)
Near-end cross-talk	min. 50 dB (1 MHz) min. 40 dB (20 MHz)
Signal transit time	nom. 440 ns/100m (20 MHz)
Peak operating voltage	250 V (not for power applications)
Test voltage	conductor/conductor 1500 V conductor/screen 1500 V

## Mechanical and thermal properties

Minimum bending radius	moved: fixed installation:	15 x cable Ø 8 x cable Ø
Temperature range	moved: fixed installation: -	-30°C up to +105°C (3000h) -40°C up to +105°C (3000h)
Flammability	acc. to ISO 6722-	1 clause 5.22
Halogen free	acc. to VDE 0472-815	
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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