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|---------------------------|--|---|
| 2170385                   | <b>DATA SHEET</b>  |  |
| valid from:<br>01.01.2019 | <b>UNITRONIC® BUS HEAT 6722</b><br><b>1x4x0,25mm<sup>2</sup></b> |   |

## Application

UNITRONIC® 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 Ω 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<br>19 x 0,127 mm, Ø approx. 0,61 mm                                 |
| Insulation               | foamed skin polypropylene (09YS),<br>Ø 1,60 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 copper wires, coverage 85 % ±5 % |
| Taping                   | thin non-woven tape (optional)   |
| Outer sheath             | PUR, black (similar RAL 9005),<br>outer Ø: 6,40 mm Ø 0,30 mm                         |

## Electrical properties at 20°C

|                          |   |
|--------------------------|---|
| Conductor resistance     | max. 77,8 Ω/km  |
| Insulation resistance    | min. 5 GΩxkm  |
| Inductance               | nom. 850 µH/km (800 Hz)   |
| Characteristic impedance | 120 Ω (±15%) in frequency range > 1 MHz   |
| Attenuation              | nom. 0,7 dB/100m (100 kHz)<br>nom. 2,3 dB/100m (1 MHz)<br>nom. 5,1 dB/100m (5 MHz)<br>nom. 7,2 dB/100m (10 MHz)<br>nom. 10,2 dB/100m (20 MHz) |
| Near-end cross-talk      | min. 50 dB (1 MHz)<br>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<br>conductor/screen 1500 V   |

## Mechanical and thermal properties

|                        |  |
|------------------------|--|
| Minimum bending radius | moved: 15 x cable Ø<br>fixed installation: 8 x cable Ø   |
| Temperature range      | moved: -30 ° C up to +105 ° C (3000h)<br>fixed installation: -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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