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| DATA SHEET | 2170260 |
| UNITRONIC® BUS CAN UL/CSA 1 x 2 x 0.22 mm² | valid from : 06.11.2003 |

Application

UNITRONIC® BUS CAN UL/CSA is a data cable with UL and CSA 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. The possible data transmission acc. to ISO 11898 for max. 40m is 1 Mbit/s.

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

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

Design

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| Conductor | seven-wire strands of bare copper, 0.22mm ² , (24AWG) |
| Insulation | cellular PE or foam skin, core diameter approx. 1.6 mm |
| Colour code | white and brown (acc. DIN 47100) |
| Twisting | 2 cores twisted into a pair |
| Wrapping | plastic foil |
| Screening | braid of tinned copper wires |
| Sheath | PVC, violet, OD approx. 5.8 mm |

LAPP KABEL STUTTGART **UNITRONIC® BUS CAN** 1 x2 x 0,22 (UL) CMX 75°C AWG 24 (SHIELDED)
ART. 2170260

Electrical properties at 20° C

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|---|-------------|--------------------|----------|
| Loop resistance | | max. Ω/km | 186 |
| Insulation resistance | | min. GΩxkm | 5 |
| Mutual capacitance | at 800 Hz | nom. nF/km | 40 |
| Impedance | at > 1 MHz | Ω | 120 ± 15 |
| Line attenuation | at 100 kHz | nom. dB/100 m | 0.6 |
| | at 1 MHz | nom. dB/100 m | 1.7 |
| | at 5 MHz | nom. dB/100 m | 3.9 |
| | at 10 MHz | nom. dB/100 m | 5.6 |
| | at 20 MHz | nom. dB/100 m | 8.1 |
| Nominal velocity of propagation | | % | 76 |
| Signal delay | | ns/m | 4.4 |
| Transfer impedance | at 30 MHz | max. mΩ/m | 250 |
| Peak operation voltage (not for purposes of power/high voltage current) | | V | 250 |
| Test voltage | core/core | U _{eff} V | 1500 |
| | core/screen | U _{eff} V | 1000 |

Mechanical and thermal properties

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|-------------------------------|-------------------|---|--------------|
| Minimum bending radius | moved | cable diameter x | 10 |
| Permissible temperature range | moved | °C | - 5 to + 70 |
| | static | °C | - 30 to + 80 |
| | Flame propagation | flame retardant acc. to VDE 0482, part 265-2-1 / IEC 60 332-1 | |