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|-----------------------------------|--|---|
| <b>2170634</b>                    | <b>DATA SHEET</b>  |  |
| <b>valid from:<br/>10.02.2020</b> | <b>UNITRONIC® LAN 1000 S/FTP Cat.7 LSZH D<br/>2x(4x2x23/1) AWG</b> |   |

## Application

Data cable for transmission of digital and analog signals up to 1000 MHz. It is designed for horizontal cabling subsystems as connection between a floor distribution and the telecommunication outlets (TO's). Acc. to TIA/EIA-568, ISO/IEC 11801 2nd edition, EN 50173, EN 50288-4-1, IEC 61156-5. For application in LANs like IEEE 802.3: 10Base-T, 100Base-T, 1000Base-T, 10GBase-T; IEEE 802.3at: suitable for PoE; FDDI; ISDN; ATM; Cable Sharing.

## Design

|                          |   |
|--------------------------|---|
| Conductor                | bare copper AWG 23/1, massive   |
| Insulation               | Skin-Foam-Skin PE, ca. 1.37 mm outer Ø  |
| Core identification code | pair 1: white(-blue)/blue, pair 2: white(-orange)/orange,<br>pair 3: white(-green)/green, pair 4: white(-brown)/brown |
| Stranding                | cores stranded to pair,<br>4 pairs stranded to bundle   |
| Screen                   | pair screening: plastic laminated aluminium foil<br>braid of copper wire, tinned wire ca. 0,10 mm                     |
| Outer sheath             | halogen free compound (FRNC)<br>yellow, similar RAL 1021<br>outer Ø: ca. 15,3x7.5 mm                                  |

## Electrical properties at 20°C

|                          |  |
|--------------------------|--|
| Loop resistance          | max. 15 Ω/100 m                        |
| Insulation resistance    | min. 5 GΩ x km                         |
| Mutual capacitance       | nom. 45 nF/km                          |
| Characteristic impedance | nom. 100 Ω acc. to IEC 61156-5         |
| Velocity of propagation  | 0,79 c                                 |
| Signal propagation time  | ≤ 425 ns/100 m                         |
| Delay                    | ≤ 8 ns/100 m                           |
| Screening attenuation    | > 75 dB                                |
| Peak operating voltage   | 100 V (not for power purposes)         |
| Test voltage             | Core/Core: 700 V<br>Core/Screen: 700 V |

## Mechanical and thermal properties

|                           |   |
|---------------------------|---|
| Minimum bending radius    | during installation: 8 x cable Ø<br>fixed: 4 x cable Ø  |
| Temperature range         | during installation: 0° C up to +50° C<br>fixed: -20° C up to +60° C  |
| Flammability              | flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2  |
| Halogen free              | acc. to VDE 0472-815  |
| Corrosivity of gases      | acc. to IEC 60754-2   |
| Smoke density             | acc. to IEC 61034 resp. EN 61034  |
| General requirements      | These cables are conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances) and the LV-Directive 2014/35/EU (Low voltage Directive). |
| Environmental information | These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).  |

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| Creator: KIOS / PDC  | Document: DB2170634EN | Page 1 of 1 |
| Released: ALTE / PDC | Version: 7            |             |