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| 0034060 | DATA SHEET |  |
| valid from: 01.03.2019 | UNITRONIC® Li2YCY PiMF | |

Application

UNITRONIC® Li2YCY PiMF with individual screening of the pairs (PiMF: Pair in Metal Foil) is particularly suitable for wiring data systems and controls in large industrial plants, for the transmission of sensitive signals and high bit rates for enhanced requirements in near-end cross-talk attenuation and high electrical interference in the circuits. It can be used for measurement value transmission and serial 2-wire interfaces.

Cables of this type are intended for limited flexible use, and for fixed installation in dry or damp interiors.

Design

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| Design | Design based on standard VDE 0812 |
| Conductor | 7-wire strands of bare copper wires |
| Insulation | special Polyolefin-based compound |
| Core identification code | according to DIN 47100 |
| Stranding | cores twisted to pairs, pairs are screened with aluminium-laminated plastic foil with copper drain wire for each pair, metal side inside, and taped with plastic foil, screened pairs are stranded in layers, wrapping with foil on the outer layer |
| Screen | Braiding with bare or tinned copper wires |
| Outer sheath | special PVC-based compound colour: grey (similar RAL 7032) |

Electrical properties at 20°C

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| Loop resistance | 0.22 mm ² : max. 186 Ω/km 0.34 mm ² : max. 115 Ω/km 0.5 mm ² : max. 78.4 Ω/km |
| Specific volume resistivity | > 5 G Ω x km |
| Mutual capacitance | C/C approx. 75 nF/km (at 800 Hz) |
| Inductance | approx. 0.4 mH/km |
| Characteristic impedance | approx. 85 Ω (> 1 MHz) |
| Near-end cross-talk | min. 80 dB (up to 1 MHz) |
| Velocity of propagation | nom. 0.66 c |
| Peak operating voltage | 250 V (not for power applications) |
| Test voltage | C/C: 2000 V C/S: 1000 V |

Mechanical and thermal properties

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| Minimum bending radius | Flexing: 20 x cable Ø Fixed installation: 10 x cable Ø |
| Temperature range | Flexing: - 5 °C up to +70 °C Fixed installation: - 40 °C up to +80 °C |
| Flammability | flame retardant acc. to IEC 60332-1-2 |
| 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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