0031370	DATA SHEET	LAPP
valid from: 01.01.2019	UNITRONIC® Li2YCY (TP) fine-wire	

Application

UNITRONIC® Li2YCY (TP) fine-wire (fine-wired) is a data cable with low capacitance for wiring of data systems at transmission rates up to 10 Mbit/s and is qualified for the serial interfaces RS422 und RS485. The cable can be used as a signal-, control- and measuring cable as well as for transmission of low, sensitive signals and high bit rates.
Decoupling by means of twisted pair cable design and the screen protects against electromagnetic interferences.
The cable is designed for fixed installation in dry and damp interiors and for conditional flexible use.

Design

Design	Design based on standard VDE 0812
Conductor	fine-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 stranded in layers, wrapping with foil on the outer layer
Screen	Braiding with tinned copper wires
Outer sheath	special PVC-based compound colour: grey (similar RAL 7032)

Electrical properties at 20°C

Loop resistance	max. 160.0 Ω/km
Specific volume resistivity	> 5 G Ω x km
Mutual capacitance	C/C approx. 60 nF/km C/S approx. 160 nF/km (at 800 Hz)
Inductance	approx. 0.65 mH/km
Characteristic impedance	100 ± 15 Ω (> 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

Minimum bending radius	Flexing: 15 x cable Ø Fixed installation: 6 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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