

UNITRONIC® LiYY (TP)

DB0035101

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Application

UNITRONIC® LiYY (TP) is a twisted pair data cable for low frequency applications. The cable is designed for fixed installation and for conditional flexible use. It is used in dry and damp interiors but not appropriate for outside usage. The twisted pairs with short lay lengths provides good decoupling of the conductor circuits. The cable is used for example in computer systems, instrumentation technology, office equipment and balances.

Design

Design	Design based on standard VDE 0812
Conductor	fine wire strands of bare copper wires
Insulation	special PVC-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
Outer sheath	special PVC-based compound colour: grey (RAL 7032)

Electrical properties at 20°C

Conductor resistance	Cross section	max.
	[mm ²]	[Ω/km]
	0.14	138.0
	0.25	79.0
	0.34	57.0
	0.5	39.0
	0.75	26.0
	1.0	19.5
1.5	13.3	
Specific insulation resistance	> 20 G Ω x cm	
Mutual capacitance	C/C: approx. 120 nF/km (at 800 Hz)	
Inductivity	approx. 0.65 mH/km	
Peak working voltage	0.14 mm ² : 350 V (not for power applications) ≥ 0.25 mm ² : 500 V (not for power applications)	
Test voltage	0.14 mm ² : 1200 V ≥ 0.25 mm ² : 1500 V	

Mechanical and thermal properties

Minimum bending radius	Flexing: 10 x cable Ø Fixed installation: 4 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).