LAPP GROUP	DATA SHEET	0035131
	UNITRONIC® LiYCY (TP)	valid from : 04.09.2006

Application

UNITRONIC® LiYCY (TP) is a screened, paired, flexible cable for control and data transmissions, for weak-current applications. The fine wired conductor (7-wired for 0.34mm^2) and the robust ductile outer sheath gives the cable strength as well as high flexibility. By the pair twisting the electric circuits are well decoupled and with the screen of a tinned copper braiding the cabel is protected against external electrical influences.

The cable is intended for static laying and flexible use in dry and damp interiors. Design and electrical characteristics similar to VDE 0812.

Design

Conductor	fine-wire strands of bare copper wire; 0.14 mm² to 1.5 mm² , 7-wired for 0.34 mm²
Insulation	PVC compound YI2 according to VDE 0207 part 4,
Coding	according to DIN 47100
Pair stranding	cores twisted into pairs
Core stranding	pairs twisted in layers, wrapping by plastic foil
Screening	braiding of tinned copper wires, coverage approx. 85%
Sheath	PVC YM2 according to VDE 0207 part 5, flame retardant, grey, RAL 7032

Marking on the sheath

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Technical Data

Conductor cross section [mm²]	Loop resistance [max.Ω/km]	Mutual capacitance *) core/core 800 Hz [nom. pF/m]	Impedance **)at 50 kHz nom.[Ω]	100 kHz nom.[Ω]	≥ 1 MHz nom.[Ω]
0,14	148	95	115	93	76
0,25	79,9	97	110	90	74
0,34	57,5	97	108	90	74
0,5	38,9	100	98	85	70
0,75	26	112	89	75	65
1,0	19,5	125	83	70	62
1,5	13,3	135	74	62	55

Inductivity		mH/km	appr. 0.65
Specific insulation resistance		min. GΩxcm	20
Operating Voltage for 0.14 mm² (not for power purposes)		V	350
for ≥ 0,25 mm² (not for power purposes)		V	500
Test voltage for 0.14 mm²		$U_{eff.}$ V	1200
for ≥ 0,25 mm²		$U_{eff.}$ V	1500
Temperature range	static	℃	- 40 to + 80
	moved		- 5 to + 70
Minimum bending radius	static		6 x Ø cable
	moved		15 x Ø cable
Flame propagation	flame retardant to VDE 0482, part 265-2-1 / IEC 60 332-1		

*) valid for 4 pairs and more
**) values for f ≥ 1 MHz are for the orientation, because the cables are only limited suitable for f ≥ 500 kHz