



# DATA SHEET

0031320

UNITRONIC® Li2YCY (TP)

valid from :  
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## Application

UNITRONIC® Li2YCY (TP) is a low capacitance data cable, suitable for wiring of data systems, for interfaces of types RS 422, RS 485, in field bus networks with a nominal impedance of 100 to 120 Ohms. By the pair twisting with different length of lay, the electrical circuits are well de coupled and with the screen of a bare copper braid the cable is protected against external electrical influences.

The cable is designed for modern connection techniques such as insulation displacement technology, Termi-Point® technology. UNITRONIC® Li2YCY (TP) is intended for limited flexible use and for static laying in dry and damp interiors.

## Design

Conductor	7-wire strands of bare copper wire; 0.22 mm <sup>2</sup> , 0.34 mm <sup>2</sup> and 0.5 mm <sup>2</sup>
Insulation	Polyethylene (2Y),
Core diameter	1.2 mm at 0.22 mm <sup>2</sup> ; 1.55 mm at 0.34 mm <sup>2</sup> ; 1.8 mm at 0.5 mm <sup>2</sup>
Coding	to DIN 47100,
Stranding	cores twisted in pairs, pairs arranged in layers
Wrapping	plastic foil
Screening	braiding of bare copper wires
Sheath	PVC grey, RAL 7032, flame retardant

Marking on the sheath

LAPP KABEL STUTTGART UNITRONIC® Li2YCY (TP)

ART. 0031320

## Technical Data

		Conductor	0.22 mm <sup>2</sup>	0.34 mm <sup>2</sup>	0.5 mm <sup>2</sup>
Loop resistance		max. Ω/km	186	115	78.4
Insulation resistance		min. GΩxkm	5	5	5
Mutual capacitance	core/core	max. nF/km	60	60	60
	core/screen	max. nF/km	160	160	160
Impedance at	f > 1 MHz	Ω	100 ± 15	100 ± 15	100 ± 15
Line attenuation at	100 kHz	nom. dB/100m	0.75	0.53	0.45
	1 MHz	nom. dB/100m	2.1	1.7	1.5
	10 MHz	nom. dB/100m	6.6	5.4	4.7
	20 MHz	nom. dB/100m	9.3	7.6	6.6
Cross-talk at	1 MHz	min. dB	50	50	50
	10 MHz	min. dB	40	40	40
	20 MHz	min. dB	37	37	37
nominal velocity of propagation		nom.		0.66 c	
Transfer impedance at	30 MHz	mΩ/m		250	
Operating voltage (not for power purposes)		peak value	max. V		250
Test voltage	core/core		U <sub>eff.</sub> V		2000
	core/screen		U <sub>eff.</sub> V		1000
Minimum bending radius	static			cable diameter x 10	
Temperature range	moved		°C	- 5 to + 70	
	static		°C	- 30 to + 80	
flame propagation		flame retardant to VDE 0482, part 265-2-1 / IEC 60 332-1			