

DATA SHEET

Date:

Application

UNITRONIC[®] Li2YCY **PiMF** ...x 2 x 1.0 mm² (**P**air in **M**etal **F**oil) with individual screening of the pairs is particularly suitable for wiring data systems and controls for the transmission of sensitive signals and high bit rates, for enhanced requirements in respect of near-end cross-talk attenuation, and in conditions of high electrical interference on the line circuits. Therefore for measurements value transmission, field bus systems, and serial 2 wire interfaces.

Cables of this type are intended for limited flexible use and for static laying in dry and damp interiors.

Design

Conductor	fine-wire strands of bare copper wire; 1.0 mm ² (18AWG)
Core insulation	Polyethylene (2Y), core diameter 2.3 mm
Core identification	a-core white , b-core black
Pair stranding	cores twisted in pairs
Pair screening	pair screen of polymer clad metal foil with a drain wire wrapping by plastic foil
	Numbering of each screened pair by a number-printed holding helix
Stranding	screened pairs twisted in layers, wrapping by plastic foil
Screen	screen braiding of bare copper wires
Outer sheath	PVC grey, RAL 7032, flame retardant

Technical data

Loop resistance Insulation resistance Mutual capacitance	core/core	max. Ω/km min. GΩxkm max. nF/km	39 5 85	
Impedance at	f > 1 MHz	nom. Ω	75	
Line attenuation at	100 kHz	nom. dB/100m	0.5	
	1 MHz	nom. dB/100m	2.0	
	10 MHz	nom. dB/100m	6.3	
	20 MHz	nom. dB/100m	9.1	
Near end cross talk attenuation(NEXT)	1 MHz	min. dB	70	
	10 MHz	min. dB	65	
	20 MHz	min. dB	60	
Nominal velocity of propagation		nom.	0.66 c	
Transfer impedance at	10 MHz	nom. mΩ/m	10	
Operating voltage (not for power purposes)		peak value max. V	250	
Test voltage	core/core	U _{eff.} V	2000	
	core/screen	U _{eff.} 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 t	flame retardant to IEC 60 332-1-2		

Originator: Petra Samek, TE-K approved: Harry Pfeffer, TE-K

Document:

DB0034070EN03