

UNITRONIC® Li2YCY PiMF

The low capacitance data transmission cable with shielded twisted pairs and copper braiding.

High near-end cross-talk attenuation



Application

UNITRONIC® Li2YCY PiMF with individual screening of the pairs is particularly suitable for wiring data and control systems in large industrial plants, for the transmission of sensitive signals and high bit rates, for enhanced requirements with respect to near-end cross-talk attenuation (NEXT), and in conditions of high electrical interference on the line circuits. Therefore it is ideal for measurement value transmission and serial 2-wire interfaces.

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

PiMF = Pair in Metal Foil

Special Feature

The cable is designed for connection engineering, such as insulation displacement and TERMI-POINT® technology. The additional overall screening protects the cable against external electromagnetic interferences. The cables with a cross-section of 0,22 up to 0,5 mm² are designed for connection engineering, such as insulation displacement technology and TERMI-POINT® technology.

*TERMI-POINT® is a registered trademark of AMP.

Cable Make-up

Cross-section 0,22mm²-0,5mm²

Strands, 7-wires of plain copper, PE core insulation, cores twisted in pairs, pair screening of aluminum laminated foil with drain wire, screened pairs twisted in layers, plastic foil wrapping, screen braiding of copper wire, outer sheath of special PVC-based compound, flame-retardant according to VDE 0482, part 265-2-1/ IEC 60332-1 (equivalent to VDE 0472 part 804 test type B), pebble grey (RAL 7032).

Cross-section 1,0mm²

Fine wire strands of plain copper wire, PE core insulation, one black and one white core twisted into a pair, pairs marked by number printed retaining spiral. Pair screening of aluminum laminated plastic foil with drain wire, screened pairs twisted in layers, plastic foil wrapping, screen braiding of copper wire, outer sheath of special PVC-based compound, flame-retardant according to VDE 0482, part 265-2-1/ IEC 60332-1 (equivalent to VDE 0472 part 804 test type B), pebble grey (RAL 7032).

Technical Data

Minimum bending radius for static: 10 x cable diameter

Temperature range: static: -30 °C to +70 °C

Conductor stranding: 7- resp. fine-wired strands, acc. to VDE 0881

Core ident code: 0,22mm²-0,5mm²: DIN 47100, see chart T9 1,0mm²: see cable make-up

Loop resistance: 0,22 mm² max. 186 Ohm/km 0,34 mm² max. 115 Ohm/km 0,5 mm² max. 78,4 Ohm/km 1,0 mm² max. 39 Ohm/km

Mutual capacitance: at 800 Hz: 0,22mm² max.70 nF/km 0,34mm² max.70 nF/km 0,5mm² max. 75 nF/km 1,0mm² max. 85 nF/km

Inductance: approx. 0,4 mH/km

Characteristic Impedance: at 1 MHz: 0,22mm² approx. 80 Ohm 0,34mm² approx. 85 Ohm 0,5mm² approx. 80 Ohm 1,0mm² approx. 75 Ohm

Near-end crosstalk attenuation: up to 1 MHz min. 75 dB

Peak working voltage: (not for purposes of power/high-voltage current): 250 V

Test voltage: C/C: 2000 V C/S: 1000 V

Attenuation: (synthetic data) 0,22 mm²: 100 kHz 11,5 dB/km 1 MHz 46,0 dB/km (synthetic data) 0,34 mm²: 100 kHz 9,0 dB/km 1 MHz 38,0 dB/km (synthetic data) 0,5 mm²: 100 kHz 7 dB/km 1 MHz 35 dB/km (synthetic data) 1,0 mm²: 100 kHz 5 dB/km 1 MHz 20 dB/km

Insulation resistance: > 5 GOhm x km

Part number	No. of pairs and mm ² per conductor	Approx. outside diameter in mm	Copper weight kg/km	Approx. weight kg/km	Part number	No. of pairs and mm ² per conductor	Approx. outside diameter in mm	Copper weight kg/km	Approx. weight kg/km
UNITRONIC® Li2YCY PiMF					7-wired				
0034 040	2 x 2 x 0,22	7,7	33	38	0034 060	2 x 2 x 0,5	9,9	47	96
0034 041	3 x 2 x 0,22	7,8	37	57	0034 061	3 x 2 x 0,5	10,0	64	116
0034 042	4 x 2 x 0,22	8,3	49	83	0034 062	4 x 2 x 0,5	10,4	81	141
0034 043	8 x 2 x 0,22	10,8	85	133	0034 063	5 x 2 x 0,5	11,3	98	167
0034 044	10 x 2 x 0,22	11,5	100	164	0034 064	8 x 2 x 0,5	14,9	162	271
0034 045	2 x 2 x 0,34	9,0	44	70	0034 065	10 x 2 x 0,5	15,9	202	327
0034 046	3 x 2 x 0,34	9,1	55	85	fine wired				
0034 047	4 x 2 x 0,34	9,4	67	103	0034 070	2 x 2 x 1,0	11,7	70	126
0034 048	8 x 2 x 0,34	13,4	114	191	0034 071	3 x 2 x 1,0	11,8	97	156
0034 049	10 x 2 x 0,34	14,3	150	230	0034 072	4 x 2 x 1,0	12,7	124	193
					0034 073	10 x 2 x 1,0	19,7	332	492

No cutting charge for standard stock units (50, 100, 250, 500, 1000 m). Please state your desired design (e.g. 1 x 500 m drum or 5 x 100 rings). Coils < 30 kg, beyond automatically drums. Copper base: 150.- Euro/100 kg