

TECHNOTRONIK LiY(St)CY**CONTROL CABLES FOR INDUSTRIAL ELECTRONIC APPLICATIONS****APPLICATIONS**

TECHNOTRONIK LiY(St)CY are overall double shielded control cables intended for control and instrumentation circuits, for signal, monitoring and data processing systems and for analogue or digital data transmission, all for industrial electronic applications.

To achieve high analogue or digital data transmission performance the cable is protected against external electromagnetic interferences by an overall shield.

The cables can also be used for power supply to small auxiliary devices on condition that current-carrying capacity limit (see our *Technical Guide*) is not exceeded.

The cables are suitable for indoor installations connecting fixed and movable equipment.

Cable outer sheath is oil-resistant.

CONSTRUCTION

- flexible, multiwire conductors, stranded of bare annealed copper wires (tin-plated on request), meeting requirements of class 5 per PN-EN 60228,
- PVC insulation - identification colour code in accordance with DIN VDE 47100,
- insulated conductors laid-up in layers,
- cable core wrapped in polyester tape,
- collective shield incorporating aluminium-polyester tape under tinned copper wire braid of coverage bigger than 60%,
- PVC cable sheath, grey RAL 7001, other colours also available.

AVAILABLE UPON REQUEST

TECHNOTRONIK LiY(St)CY-Nr – cable with black conductor insulation and white conductor numbers printed on it for identification.

TECHNOTRONIK LiY(St)CY-O – cables designed for frequent contact with petroleum products, as in petrol stations and stores, where engine fuels and lubricants are pumped or handled. The cable sheath is then made of special PVC compound meeting oil resistance requirements of Polish standard PN-EN 60811-404.

TECHNOTRONIK LiY(St)C11Y – polyurethane sheathed cables of enhanced protection against mechanical damage, particularly to abrasion and tear, also resistant to oils, petrol, bacteria and ultraviolet radiation.

TECHNOTRONIK LiH(St)CH – halogen free cables, applied when higher safety in case of fire is required. The cables are flame retardant, their smoke emission in fire is low and released gases are not corrosive.

TECHNOTRONIK IB-LiY(St)CY – specially designed intrinsically safe cable.

TECHNOTRONIK LiY(St)CY

CHARACTERISTICS

Conductor cross-section	mm ²	0.5	0.75	1.0	1.5	2.5
Operating voltage, peak value	V	500	500	500	500	500
Voltage test	V rms	1500	1500	1500	1500	1500
DC conductor resistance at 20°C, maximum	Ω/km	39.0	26.0	19.5	13.3	7.98
Capacitance between conductors at 1 kHz, appr.	nF/km	110	120	130	140	140

Operating voltage U₀/U 300/300 V
Insulation resistance, minimum 20 MΩ·km
Inductance, approximate 0.7 mH/km
Impedance, approximate 80 Ω

Operating temperature range
for fixed installation from - 30 to + 80°C
for movable installation from - 5 to + 70°C
Minimum bending radius 10 x cable diameter
Cable combustibility flame retardant
Combustibility tests PN-EN 60332-1-2, IEC 60332-1-2
Reference standards DIN VDE 0812, DIN VDE 0814

CE = the cable meets requirements of the low voltage directive 2014/35/EU

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm ²	mm	kg/km	kg/km
0083 009	2 x 0,5	4.6	16.0	30
0083 003	3 x 0,5	4.8	20.8	36
0083 010	4 x 0,5	5.4	25.9	46
0083 004	5 x 0,5	5.9	32.0	56
0083 011	6 x 0,5	6.4	37.1	66
0083 012	7 x 0,5	6.4	41.9	68
0083 013	8 x 0,5	6.8	48.1	80
0083 014	10 x 0,5	7.9	58.7	94
0083 015	12 x 0,5	8.1	68.6	107
0083 016	16 x 0,5	9.0	89.3	136
0083 017	19 x 0,5	10.0	108.5	169
0083 018	21 x 0,5	10.4	119.8	186
0083 019	27 x 0,5	11.9	150.5	233
0083 020	36 x 0,5	13.3	197.2	299
0083 021	48 x 0,5	15.2	257.8	385
0083 022	2 x 0,75	5.2	20.8	38
0083 023	3 x 0,75	5.4	28.3	47
0083 024	4 x 0,75	5.9	36.8	58
0083 025	5 x 0,75	6.4	44.3	69
0083 026	6 x 0,75	6.9	52.9	84
0083 027	7 x 0,75	6.9	60.1	88
0083 028	8 x 0,75	7.4	67.5	100
0083 029	10 x 0,75	8.6	83.8	119
0083 030	12 x 0,75	8.9	98.7	137
0083 031	16 x 0,75	10.3	133.1	190
0083 032	19 x 0,75	10.9	156.0	216
0083 033	24 x 0,75	12.8	195.5	273
0083 034	27 x 0,75	13.0	217.6	299
0083 035	34 x 0,75	14.7	271.1	385
0083 036	36 x 0,75	14.7	285.5	393
0083 037	2 x 1,0	5.5	27.2	45
0083 005	3 x 1,0	5.8	36.8	57

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm ²	mm	kg/km	kg/km
0083 038	4 x 1,0	6.3	46.5	69
0083 039	5 x 1,0	6.9	57.7	86
0083 006	6 x 1,0	7.4	67.5	101
0083 040	7 x 1,0	7.4	77.1	106
0083 007	10 x 1,0	9.8	112.9	161
0083 041	12 x 1,0	10.1	132.7	183
0083 042	16 x 1,0	11.2	173.4	235
0083 043	21 x 1,0	12.5	223.7	301
0083 044	25 x 1,0	14.4	265.7	369
0083 045	27 x 1,0	14.4	284.9	380
0083 046	36 x 1,0	16.0	374.7	491
0083 047	2 x 1,5	6.3	36.9	57
0083 048	3 x 1,5	6.6	52.9	75
0083 049	4 x 1,5	7.2	67.3	93
0083 050	5 x 1,5	7.9	82.7	115
0083 051	6 x 1,5	8.5	98.1	137
0083 052	7 x 1,5	8.5	112.5	146
0083 053	8 x 1,5	9.7	131.9	183
0083 054	12 x 1,5	11.9	193.7	258
0083 055	16 x 1,5	13.1	253.8	331
0083 056	19 x 1,5	14.0	298.4	385
0083 057	21 x 1,5	14.7	328.7	426
0083 058	24 x 1,5	16.3	375.3	480
0083 059	25 x 1,5	16.6	390.3	510
0083 060	37 x 1,5	18.9	574.3	712
0083 008	2 x 2,5	7.1	57.7	79
0083 061	3 x 2,5	7.5	82.1	105
0083 062	4 x 2,5	8.2	107.2	132
0083 063	5 x 2,5	9.0	132.5	165
0083 064	12 x 2,5	13.7	312.6	372

Other cross-sections and conductor counts available on request.
TECHNOKABEL S.A. reserves the right to change specifications without prior notice.