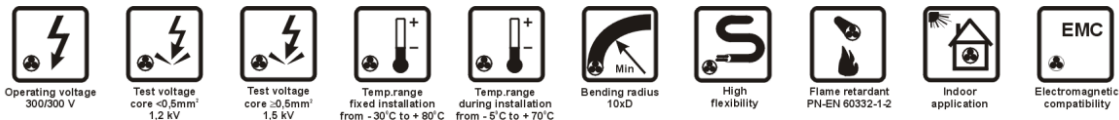


**TECHNOTRONIK LIYCY****CONTROL CABLES FOR INDUSTRIAL ELECTRONIC APPLICATIONS****APPLICATIONS**

**TECHNOTRONIK LIYCY** are overall 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 are designed to offer high flexibility and small outer diameter combined with tensile strength.

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,
- tinned copper wire braid shield of effective density coverage,
- PVC cable sheath, grey RAL 7001, other colours also available.

**AVAILABLE UPON REQUEST**

**TECHNOTRONIK LIYCEY** - cables with flexible drain wire stranded of tin-plated annealed copper wires, laid under a shield.

**TECHNOTRONIK LIYCY-O** and **TECHNOTRONIK LIYCEY-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 LIYCY11Y** and **TECHNOTRONIK LIYCE11Y** - polyurethane sheathed cables of enhanced protection against mechanical damage, particularly to abrasion and tear, also resistant to oils, petrol, bacteria and ultraviolet radiation.

**TECHNOTRONIK LIHCH** and **TECHNOTRONIK LIHCEH** - 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-LIYCY** - specially designed intrinsically safe cable.

## TECHNOTRONIK LIYCY

### CHARACTERISTICS

Conductor cross-section	mm <sup>2</sup>	0.14	0.25	0.34	0.5	0.75	1.0	1.5	2.5
Operating voltage, peak value	V	350	350	350	500	500	500	500	500
Voltage test	V rms	1200	1200	1200	1500	1500	1500	1500	1500
DC conductor resistance at 20°C, maximum	Ω/km	144.0	79.0	57.0	39.0	26.0	19.5	13.3	7.98
Capacitance between conductors at 1 kHz, appr.	nF/km	90	100	110	110	120	130	140	140

Operating voltage U <sub>o</sub> /U	300/300 V	Operating temperature range	
Insulation resistance, minimum	20 MΩ·km	for fixed installation	from - 30 to + 80°C
Inductance, approximate	0.7 mH/km	for movable installation	from - 5 to + 70°C
Impedance, approximate	80 Ω	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 <sup>2</sup>	mm	kg/km	kg/km
0112 004	2 x 0,14	3.5	7.5	17
0112 006	3 x 0,14	3.6	9.4	20
0112 007	4 x 0,14	3.9	11.8	24
0112 010	5 x 0,14	4.2	13.2	27
0112 012	6 x 0,14	4.5	16.1	32
0112 013	7 x 0,14	4.5	17.5	33
0112 014	8 x 0,14	4.8	18.8	36
0112 016	10 x 0,14	5.7	23.1	46
0112 017	12 x 0,14	5.9	25.8	51
0112 018	14 x 0,14	6.1	28.5	55
0112 020	16 x 0,14	6.4	31.7	62
0112 021	18 x 0,14	6.8	35.2	69
0112 023	20 x 0,14	7.1	38.5	75
0112 211	21 x 0,14	7.1	39.8	75
0112 028	27 x 0,14	8.0	53.4	95
0112 030	30 x 0,14	8.3	58.3	103
0112 032	36 x 0,14	8.9	67.9	120
0112 033	40 x 0,14	9.6	74.0	138
0112 212	44 x 0,14	10.3	81.2	151
0112 213	48 x 0,14	10.5	87.1	160
0112 214	52 x 0,14	10.8	93.2	170
0112 215	56 x 0,14	11.1	99.6	181
0112 216	61 x 0,14	11.4	106.9	192
0112 036	2 x 0,25	3.8	10.2	21
0112 037	3 x 0,25	4.0	13.6	26
0112 038	4 x 0,25	4.3	16.0	30
0112 039	5 x 0,25	4.6	20.1	36
0112 040	6 x 0,25	5.2	22.5	44
0112 041	7 x 0,25	5.2	24.9	45
0112 042	8 x 0,25	5.5	27.6	50
0112 043	10 x 0,25	6.4	34.2	60
0112 044	12 x 0,25	6.5	39.2	67
0112 155	14 x 0,25	6.9	44.8	76
0112 045	16 x 0,25	7.2	50.2	85
0112 046	18 x 0,25	7.7	59.6	98
0112 047	20 x 0,25	8.0	65.1	108
0112 217	21 x 0,25	8.0	67.5	108

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm <sup>2</sup>	mm	kg/km	kg/km
0112 218	24 x 0,25	8.8	76.8	122
0112 219	27 x 0,25	9.0	84.6	133
0112 220	30 x 0,25	9.7	92.5	153
0112 049	36 x 0,25	10.4	108.7	179
0112 173	40 x 0,25	10.8	119.4	193
0112 221	44 x 0,25	11.8	131.0	217
0112 222	48 x 0,25	12.0	141.1	231
0112 223	52 x 0,25	12.3	151.9	246
0112 224	56 x 0,25	12.7	162.1	263
0112 225	61 x 0,25	13.0	174.9	280
0112 132	2 x 0,34	4.0	12.9	25
0112 133	3 x 0,34	4.2	16.2	30
0112 134	4 x 0,34	4.5	21.1	36
0112 135	5 x 0,34	4.9	24.4	43
0112 136	6 x 0,34	5.5	28.0	52
0112 137	7 x 0,34	5.5	31.2	54
0112 138	8 x 0,34	5.9	35.8	61
0112 139	10 x 0,34	6.8	43.6	74
0112 140	12 x 0,34	7.0	50.5	84
0112 152	14 x 0,34	7.3	57.7	94
0112 163	16 x 0,34	7.8	68.9	110
0112 141	18 x 0,34	8.2	76.4	122
0112 130	20 x 0,34	8.6	84.2	135
0112 181	21 x 0,34	8.6	87.5	136
0112 226	27 x 0,34	10.1	109.8	178
0112 227	30 x 0,34	10.4	120.2	193
0112 228	36 x 0,34	11.2	141.9	226
0112 142	40 x 0,34	11.8	156.0	250
0112 229	44 x 0,34	12.7	171.4	274
0112 230	48 x 0,34	12.9	184.9	293
0112 231	52 x 0,34	13.2	198.8	312
0112 232	56 x 0,34	13.6	212.9	334
0112 143	61 x 0,34	14.2	230.2	364
0112 051	1 x 0,5	3.0	8.8	17
0112 052	2 x 0,5	4.5	17.7	30
0112 053	3 x 0,5	4.7	22.4	37

**TECHNOTRONIK LIYCY**

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm <sup>2</sup>			
0112 054	4 x 0,5	5.3	27.3	46
0112 055	5 x 0,5	5.8	33.7	57
0112 056	6 x 0,5	6.3	38.8	66
0112 057	7 x 0,5	6.3	43.6	69
0112 058	8 x 0,5	6.7	49.2	79
0112 059	10 x 0,5	7.9	64.9	98
0112 060	12 x 0,5	8.1	75.0	111
0112 061	14 x 0,5	8.5	86.2	126
0112 062	16 x 0,5	9.0	96.6	141
0112 063	18 x 0,5	9.9	108.1	168
0112 064	20 x 0,5	10.3	118.1	184
0112 065	21 x 0,5	10.3	122.9	187
0112 067	27 x 0,5	11.8	155.0	235
0112 068	30 x 0,5	12.2	170.5	255
0112 069	36 x 0,5	13.2	201.8	301
0112 070	40 x 0,5	13.6	222.1	326
0112 233	42 x 0,5	14.3	233.0	355
0112 234	44 x 0,5	15.0	250.8	369
0112 235	48 x 0,5	15.2	270.7	394
0112 236	52 x 0,5	15.6	291.1	421
0112 237	56 x 0,5	16.1	312.2	451
0112 238	61 x 0,5	16.6	337.4	482
0112 074	2 x 0,75	4.9	22.4	36
0112 075	3 x 0,75	5.3	29.7	47
0112 077	4 x 0,75	5.8	38.5	58
0112 080	5 x 0,75	6.3	46.0	70
0112 081	6 x 0,75	6.8	54.2	83
0112 083	7 x 0,75	6.8	61.4	87
0112 084	8 x 0,75	7.3	69.6	100
0112 085	10 x 0,75	8.6	91.0	124
0112 086	12 x 0,75	8.9	105.9	142
0112 088	16 x 0,75	10.2	137.0	191
0112 090	20 x 0,75	11.3	168.6	235
0112 091	24 x 0,75	12.7	200.5	275
0112 239	27 x 0,75	12.9	222.7	301
0112 072	30 x 0,75	13.4	245.6	328
0112 093	34 x 0,75	14.6	276.9	387
0112 240	36 x 0,75	14.6	291.3	395
0112 241	40 x 0,75	15.2	328.3	437
0112 094	2 x 1,0	5.4	27.4	44
0112 096	3 x 1,0	5.7	38.5	57

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm <sup>2</sup>			
0112 097	4 x 1,0	6.2	48.2	69
0112 176	5 x 1,0	6.8	59.0	86
0112 099	6 x 1,0	7.3	69.6	101
0112 100	7 x 1,0	7.3	79.2	107
0112 102	10 x 1,0	9.7	116.5	162
0112 103	12 x 1,0	10.0	136.9	185
0112 105	16 x 1,0	11.1	178.0	237
0112 107	20 x 1,0	12.4	219.1	297
0112 109	25 x 1,0	14.3	271.4	371
0112 110	27 x 1,0	14.3	290.6	382
0112 146	30 x 1,0	14.9	327.4	424
0112 242	36 x 1,0	16.0	388.4	501
0112 112	2 x 1,5	6.2	38.6	58
0112 113	3 x 1,5	6.5	53.6	75
0112 114	4 x 1,5	7.1	69.2	94
0112 115	5 x 1,5	7.9	88.9	119
0112 116	6 x 1,5	8.5	105.4	142
0112 117	7 x 1,5	8.5	119.8	151
0112 118	9 x 1,5	11.2	154.0	212
0112 120	12 x 1,5	11.8	198.2	260
0112 121	16 x 1,5	13.0	258.9	333
0112 122	20 x 1,5	14.6	320.1	420
0112 243	21 x 1,5	14.6	334.5	429
0112 244	24 x 1,5	16.3	389.3	490
0112 150	25 x 1,5	16.6	404.6	521
0112 123	37 x 1,5	18.8	583.6	717
0112 124	2 x 2,5	7.0	59.4	79
0112 125	3 x 2,5	7.4	84.2	105
0112 126	4 x 2,5	8.2	113.7	136
0112 145	5 x 2,5	9.0	139.8	170
0112 245	6 x 2,5	10.2	165.8	213
0112 127	7 x 2,5	10.2	189.8	227
0112 246	10 x 2,5	13.1	268.8	323
0112 247	12 x 2,5	13.6	318.1	375
0112 248	16 x 2,5	15.3	424.6	499
0112 249	19 x 2,5	16.2	499.4	573
0112 250	24 x 2,5	19.1	627.7	724
0112 251	27 x 2,5	19.5	701.0	799
0112 252	30 x 2,5	20.2	775.1	877

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