

TECHNOTRONIK LiYCY-Nr**CONTROL CABLES FOR INDUSTRIAL ELECTRONIC APPLICATIONS****APPLICATIONS**

TECHNOTRONIK LiYCY-Nr 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,
- black PVC insulation and white conductor numbers printed on it for identification,
- 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-Nr - cables with flexible drain wire stranded of tin-plated annealed copper wires, laid under a shield.

TECHNOTRONIK LiYCY-Nr-O and **TECHNOTRONIK LiYCEY-Nr-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 LiYC11Y-Nr and **TECHNOTRONIK LiYCE11Y-Nr** - 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-Nr and **TECHNOTRONIK LiHCEH-Nr** - 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-Nr - specially designed intrinsically safe cable.

TECHNOTRONIK LiYCY-Nr

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
0123 032	2 x 0,5	4.5	17.7	30
0123 001	3 x 0,5	4.7	22.4	37
0123 002	4 x 0,5	5.3	27.3	46
0123 033	5 x 0,5	5.8	33.7	57
0123 045	6 x 0,5	6.3	38.8	66
0123 034	7 x 0,5	6.3	43.6	69
0123 003	8 x 0,5	6.7	49.2	79
0123 035	10 x 0,5	7.9	64.9	98
0123 036	12 x 0,5	8.1	75.0	111
0123 037	14 x 0,5	8.5	86.2	126
0123 004	16 x 0,5	9.0	96.6	141
0123 005	18 x 0,5	9.9	108.1	168
0123 006	20 x 0,5	10.3	118.1	184
0123 007	21 x 0,5	10.3	122.9	187
0123 046	27 x 0,5	11.8	155.0	235
0123 043	30 x 0,5	12.2	170.5	255
0123 008	36 x 0,5	13.2	201.8	301
0123 009	40 x 0,5	13.6	222.1	326
0123 026	61 x 0,5	16.6	337.4	482
0123 025	2 x 0,75	4.9	22.4	36
0123 028	3 x 0,75	5.3	29.7	47
0123 029	4 x 0,75	5.8	38.5	58
0123 047	5 x 0,75	6.3	46.0	70
0123 048	6 x 0,75	6.8	54.2	83
0123 049	7 x 0,75	6.8	61.4	87
0123 050	8 x 0,75	7.3	69.6	100
0123 051	10 x 0,75	8.6	91.0	124
0123 052	12 x 0,75	8.9	105.9	142
0123 053	16 x 0,75	10.2	137.0	191
0123 054	20 x 0,75	11.3	168.6	235
0123 055	24 x 0,75	12.7	200.5	275
0123 056	27 x 0,75	12.9	222.7	301
0123 057	30 x 0,75	13.4	245.6	328
0123 058	44 x 0,75	16.4	360.7	476
0123 010	2 x 1,0	5.4	27.4	44
0123 011	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 ²	mm	kg/km	kg/km
0123 012	4 x 1,0	6.2	48.2	69
0123 040	5 x 1,0	6.8	59.0	86
0123 013	6 x 1,0	7.3	69.6	101
0123 039	7 x 1,0	7.3	79.2	107
0123 014	10 x 1,0	9.7	116.5	162
0123 042	12 x 1,0	10.0	136.9	185
0123 015	16 x 1,0	11.1	178.0	237
0123 059	20 x 1,0	12.4	219.1	297
0123 017	25 x 1,0	14.3	271.4	371
0123 060	44 x 1,0	17.9	471.0	595
0123 021	2 x 1,5	6.2	38.6	58
0123 031	3 x 1,5	6.5	53.6	75
0123 061	4 x 1,5	7.1	69.2	94
0123 062	5 x 1,5	7.9	88.9	119
0123 063	6 x 1,5	8.5	105.4	142
0123 022	7 x 1,5	8.5	119.8	151
0123 064	9 x 1,5	11.2	154.0	212
0123 038	12 x 1,5	11.8	198.2	260
0123 065	16 x 1,5	13.0	258.9	333
0123 066	20 x 1,5	14.6	320.1	420
0123 067	37 x 1,5	18.8	583.6	717
0123 068	2 x 2,5	7.0	59.4	79
0123 069	3 x 2,5	7.4	84.2	105
0123 070	4 x 2,5	8.2	113.7	136
0123 071	5 x 2,5	9.0	139.8	170
0123 027	6 x 2,5	10.2	165.8	213
0123 072	7 x 2,5	10.2	189.8	227
0123 073	10 x 2,5	13.1	268.8	323
0123 074	12 x 2,5	13.6	318.1	375
0123 075	16 x 2,5	15.3	424.6	499
0123 076	19 x 2,5	16.2	499.4	573
0123 077	24 x 2,5	19.1	627.7	724
0123 078	27 x 2,5	19.5	701.0	799
0123 079	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.