

TECHNOKONTROL IB-YSLY

INTRINSICALLY SAFE CABLES

Operating voltage
300/500 VTest voltage
3 kVTemp. range
fixed installation
from -30°C to +80°CTemp. range
during installation
from -5°C to +70°CBending radius
7,5xDFlame retardant
PN-EN 60332-1-2Indoor
application

UV resistance

Increased
oil resistance

APPLICATIONS

TECHNOKONTROL IB-YSLY are cables intended for intrinsically safe circuits and explosive conditions zones, designed for operating voltage 300/500 V.

The cables are designed to offer high flexibility combined with tensile strength.

Sheathing PVC of high oxygen index is UV radiation and weather resistant, is self-extinguishing and flame retardant. The cables pass combustibility test according to PN-EN 60332-3 standard.

The cables are oil-resistant and designed for frequent contact with petroleum products, as in petrol stations and stores, where engine fuels and lubricants are pumped or handled.

The cables are suitable for fixed indoor installations.

CONSTRUCTION

- flexible, multiwire conductors, stranded of bare annealed copper wires (tin-plated on request), meeting requirements of class 2 per PN-EN 60228,
- black PVC insulation and white conductor numbers printed on it for identification,
- insulated conductors laid-up in layers,
- oil, petrol and UV radiation resistant and self-extinguishing (oxygen index bigger than 29%) PVC cable sheath, blue RAL 5015 according to VDE 0165 6.1.3.2.3.

AVAILABLE UPON REQUEST

TECHNOKONTROL IB-YSLYv - intrinsically safe cables with enhanced PVC sheath, suitable for outdoor installations and direct earth burial.

TECHNOKONTROL IB-YSLY

CHARACTERISTICS

Conductor cross-section	mm ²	0.5	0.75	1.0	1.5	2.5
DC conductor resistance at 20°C, maximum	Ω/km	36.0	24.5	18.1	12.1	7.41
Capacitance between conductors at 1 kHz, appr.	nF/km	130	140	140	140	170

Operating voltage U ₀ /U	300/500 V	Operating temperature range	
Voltage test	3.0 kV rms	for fixed installation	from - 30 to + 80°C
Insulation resistance, minimum	20 MΩ·km	for movable installation	from - 5 to + 70°C
Inductance, approximate	0.7 mH/km	Minimum bending radius	7.5 x cable diameter
		Cable combustibility	flame retardant
		Combustibility tests	PN-EN 60332-1-2, IEC 60332-1-2
		Oil resistance	PN-EN 60811-404

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
0752 018	2 x 0,5	4.6	9.6	33
0752 024	3 x 0,5	4.9	14.4	40
0752 021	4 x 0,5	5.3	19.2	48
0752 037	5 x 0,5	5.8	24.0	59
0752 008	6 x 0,5	6.3	28.8	70
0752 031	7 x 0,5	6.3	33.6	73
0752 038	8 x 0,5	6.8	38.4	84
0752 005	10 x 0,5	8.0	48.0	103
0752 025	12 x 0,5	8.2	57.6	116
0752 039	14 x 0,5	8.7	67.2	132
0752 040	16 x 0,5	9.1	76.8	148
0752 041	18 x 0,5	10.0	86.4	175
0752 042	19 x 0,5	10.0	91.2	178
0752 043	21 x 0,5	10.5	100.8	197
0752 044	24 x 0,5	11.7	115.2	223
0752 045	27 x 0,5	12.2	129.6	250
0752 046	30 x 0,5	12.6	144.0	272
0752 047	36 x 0,5	13.6	172.8	322
0752 048	37 x 0,5	13.6	177.6	325
0752 049	40 x 0,5	14.3	192.0	358
0752 050	44 x 0,5	15.4	211.2	391
0752 051	48 x 0,5	15.7	230.4	419
0752 052	52 x 0,5	16.1	249.6	448
0752 053	56 x 0,5	16.6	268.8	480
0752 054	60 x 0,5	17.1	288.0	513
0752 017	2 x 0,75	5.0	14.4	41
0752 011	3 x 0,75	5.3	21.6	50
0752 023	4 x 0,75	5.8	28.8	61
0752 032	5 x 0,75	6.3	36.0	74
0752 055	6 x 0,75	6.9	43.2	88
0752 033	7 x 0,75	6.9	50.4	93
0752 056	8 x 0,75	7.4	57.6	107
0752 019	10 x 0,75	8.7	72.0	131
0752 057	12 x 0,75	9.0	86.4	150

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
0752 058	14 x 0,75	9.9	100.8	179
0752 059	16 x 0,75	10.4	115.2	202
0752 060	18 x 0,75	11.0	129.6	226
0752 061	19 x 0,75	11.0	136.8	231
0752 062	21 x 0,75	11.5	151.2	255
0752 063	24 x 0,75	13.0	172.8	295
0752 064	27 x 0,75	13.3	194.4	323
0752 065	30 x 0,75	13.8	216.0	353
0752 066	36 x 0,75	15.1	259.2	426
0752 067	37 x 0,75	15.1	266.4	431
0752 068	40 x 0,75	15.6	288.0	465
0752 069	44 x 0,75	16.9	316.8	509
0752 070	48 x 0,75	17.2	345.6	547
0752 071	52 x 0,75	17.7	374.4	587
0752 072	56 x 0,75	18.4	403.2	637
0752 073	60 x 0,75	19.0	432.0	680
0752 006	2 x 1,0	5.4	19.2	50
0752 003	3 x 1,0	5.7	28.8	61
0752 004	4 x 1,0	6.2	38.4	74
0752 030	5 x 1,0	6.8	48.0	92
0752 074	6 x 1,0	7.4	57.6	109
0752 034	7 x 1,0	7.4	67.2	115
0752 075	8 x 1,0	8.0	76.8	133
0752 035	10 x 1,0	9.8	96.0	172
0752 076	12 x 1,0	10.2	115.2	197
0752 077	14 x 1,0	10.7	134.4	223
0752 078	16 x 1,0	11.3	153.6	253
0752 079	18 x 1,0	12.1	172.8	289
0752 080	19 x 1,0	12.1	182.4	295
0752 022	21 x 1,0	12.7	201.6	326
0752 081	24 x 1,0	14.3	230.4	376
0752 082	27 x 1,0	14.6	259.2	413
0752 083	30 x 1,0	15.2	288.0	453
0752 084	36 x 1,0	16.3	345.6	536

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	mm ²	mm	kg/km	kg/km
0752 085	37 x 1,0	16.3	355.2	543
0752 086	40 x 1,0	17.0	384.0	588
0752 087	44 x 1,0	18.6	422.4	652
0752 088	48 x 1,0	18.9	460.8	701
0752 089	52 x 1,0	19.4	499.2	752
0752 090	56 x 1,0	20.0	537.6	807
0752 091	60 x 1,0	20.6	576.0	862
0752 007	2 x 1,5	5.9	28.8	64
0752 001	3 x 1,5	6.3	43.2	80
0752 036	4 x 1,5	6.9	57.6	99
0752 026	5 x 1,5	7.5	72.0	121
0752 092	6 x 1,5	8.2	86.4	145
0752 002	7 x 1,5	8.2	100.8	154
0752 027	8 x 1,5	8.9	115.2	179
0752 010	10 x 1,5	10.9	144.0	230
0752 093	12 x 1,5	11.3	172.8	264
0752 094	14 x 1,5	12.1	201.6	307
0752 028	16 x 1,5	12.8	230.4	348
0752 095	18 x 1,5	13.5	259.2	390
0752 096	19 x 1,5	13.5	273.6	399
0752 097	21 x 1,5	14.4	302.4	449
0752 029	24 x 1,5	16.0	345.6	509
0752 098	27 x 1,5	16.3	388.8	560
0752 099	30 x 1,5	16.9	432.0	614
0752 100	36 x 1,5	18.5	518.4	740
0752 101	37 x 1,5	18.5	532.8	750
0752 102	40 x 1,5	19.2	576.0	811
0752 103	44 x 1,5	20.8	633.6	889
0752 104	48 x 1,5	21.1	691.2	957

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
0752 105	52 x 1,5	21.7	748.8	1028
0752 106	56 x 1,5	22.6	806.4	1115
0752 107	60 x 1,5	23.3	864.0	1192
0752 020	2 x 2,5	7.2	48.0	97
0752 013	3 x 2,5	7.6	72.0	120
0752 015	4 x 2,5	8.4	96.0	151
0752 014	5 x 2,5	9.2	120.0	186
0752 108	6 x 2,5	10.5	144.0	233
0752 009	7 x 2,5	10.5	168.0	249
0752 012	8 x 2,5	11.4	192.0	289
0752 109	10 x 2,5	13.6	240.0	361
0752 110	12 x 2,5	14.3	288.0	422
0752 111	14 x 2,5	15.0	336.0	480
0752 112	16 x 2,5	15.9	384.0	546
0752 113	18 x 2,5	16.8	432.0	612
0752 114	19 x 2,5	16.8	456.0	628
0752 115	21 x 2,5	17.6	504.0	695
0752 116	24 x 2,5	19.9	576.0	800
0752 117	27 x 2,5	20.3	648.0	881
0752 118	30 x 2,5	21.1	720.0	968
0752 119	36 x 2,5	23.0	864.0	1165
0752 120	37 x 2,5	23.0	888.0	1181
0752 121	40 x 2,5	23.9	960.0	1279
0752 122	44 x 2,5	25.9	1056.0	1401
0752 123	48 x 2,5	26.4	1152.0	1512
0752 124	52 x 2,5	27.2	1248.0	1627
0752 125	56 x 2,5	28.0	1344.0	1747
0752 126	60 x 2,5	28.9	1440.0	1869

Other cross-sections and conductor counts available on request.

TECHNOKABEL S.A. reserves the right to change specifications without prior notice.