

TECHNOKONTROL IB1-YSLCY**INTRINSICALLY SAFE CABLES****APPLICATIONS**

TECHNOKONTROL IB1-YSLCY are overall shielded cables, intended for intrinsically safe circuits and explosive conditions zones, designed for the operating voltage 0.6/1 kV.

The overall shield protects the cables against external electromagnetic interferences and prevents emission of interferences produced in the cables.

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,
- cable core wrapped in polyester tape,
- tinned copper wire braid shield of effective density coverage,
- 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 IB1-YSLCEY - cables with drain wire stranded of tin-plated annealed copper wires (class 2), laid under a shield.

TECHNOKONTROL IB1-YSLCYv - intrinsically safe cables with enhanced PVC sheath, suitable for outdoor installations and direct earth burial.

TECHNOKONTROL IB1-YSLCY

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	120	130	140	150	170

Operating voltage U _o /U	0.6/1 kV	Operating temperature range	
Voltage test	3.5 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	10 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
0942 015	1 x 0,5	4.3	9.6	29
0942 016	2 x 0,5	6.5	19.3	52
0942 017	3 x 0,5	6.8	24.2	63
0942 018	4 x 0,5	7.4	30.2	76
0942 019	5 x 0,5	8.0	36.2	92
0942 005	6 x 0,5	8.7	46.2	112
0942 020	7 x 0,5	8.7	51.0	116
0942 021	8 x 0,5	9.4	57.6	134
0942 022	10 x 0,5	11.1	71.1	164
0942 023	12 x 0,5	11.4	82.0	185
0942 024	14 x 0,5	12.2	92.6	213
0942 025	16 x 0,5	12.8	103.9	240
0942 026	18 x 0,5	13.4	114.9	266
0942 027	19 x 0,5	13.4	119.7	269
0942 028	21 x 0,5	14.1	131.1	297
0942 029	24 x 0,5	15.9	156.4	347
0942 030	27 x 0,5	16.2	171.7	377
0942 031	30 x 0,5	16.8	187.9	410
0942 032	36 x 0,5	18.0	220.7	483
0942 033	37 x 0,5	18.0	225.5	486
0942 034	40 x 0,5	19.1	241.9	541
0942 035	41 x 0,5	19.7	248.5	574
0942 036	1 x 0,75	4.5	12.6	33
0942 037	2 x 0,75	6.9	24.4	59
0942 013	3 x 0,75	7.2	32.2	73
0942 007	4 x 0,75	7.8	40.6	90
0942 014	5 x 0,75	8.6	53.1	113
0942 038	6 x 0,75	9.3	62.2	134
0942 039	7 x 0,75	9.3	69.4	139
0942 040	8 x 0,75	10.2	78.3	165
0942 041	10 x 0,75	11.8	96.9	196
0942 042	12 x 0,75	12.4	112.3	228
0942 043	14 x 0,75	13.0	128.3	257
0942 044	16 x 0,75	13.7	144.5	290
0942 045	18 x 0,75	14.6	160.7	330

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
0942 046	19 x 0,75	14.6	167.9	335
0942 047	21 x 0,75	15.4	190.8	376
0942 048	24 x 0,75	17.0	217.4	421
0942 049	27 x 0,75	17.4	240.3	461
0942 050	30 x 0,75	18.0	263.9	502
0942 051	34 x 0,75	19.7	296.5	601
0942 052	1 x 1,0	4.7	16.0	38
0942 002	2 x 1,0	7.2	29.8	67
0942 009	3 x 1,0	7.6	40.2	85
0942 004	4 x 1,0	8.4	55.0	109
0942 053	5 x 1,0	9.1	67.0	133
0942 011	6 x 1,0	10.0	77.8	161
0942 054	7 x 1,0	10.0	87.4	168
0942 008	8 x 1,0	10.8	99.1	194
0942 055	10 x 1,0	12.8	123.1	238
0942 056	12 x 1,0	13.1	142.9	270
0942 003	14 x 1,0	13.8	164.0	306
0942 012	16 x 1,0	14.7	185.0	352
0942 057	18 x 1,0	15.6	213.1	400
0942 058	19 x 1,0	15.6	222.7	407
0942 059	21 x 1,0	16.3	244.0	449
0942 060	24 x 1,0	18.1	278.4	504
0942 061	27 x 1,0	18.9	308.4	570
0942 062	30 x 1,0	19.5	339.1	621
0942 063	1 x 1,5	5.0	20.8	44
0942 064	2 x 1,5	7.8	40.6	82
0942 006	3 x 1,5	8.3	59.6	109
0942 065	4 x 1,5	9.0	76.6	135
0942 066	5 x 1,5	10.0	92.2	169
0942 067	6 x 1,5	10.9	109.0	201
0942 068	7 x 1,5	10.9	123.4	212
0942 069	8 x 1,5	11.7	139.8	245
0942 070	10 x 1,5	13.9	173.8	300
0942 071	12 x 1,5	14.5	203.7	350

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	mm ²	mm	kg/km	kg/km
0942 072	14 x 1,5	15.3	241.0	404
0942 073	16 x 1,5	16.1	272.2	457
0942 074	18 x 1,5	17.0	303.8	510
0942 075	19 x 1,5	17.0	318.2	521
0942 076	21 x 1,5	17.8	349.5	575
0942 077	24 x 1,5	20.1	398.6	665
0942 078	25 x 1,5	20.6	414.6	710
0942 079	1 x 2,5	5.4	32.1	57
0942 010	2 x 2,5	8.7	65.4	111
0942 080	3 x 2,5	9.2	91.0	145

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
0942 081	4 x 2,5	10.3	117.7	186
0942 082	5 x 2,5	11.2	143.4	229
0942 083	6 x 2,5	12.3	169.7	278
0942 084	7 x 2,5	12.3	193.7	295
0942 085	8 x 2,5	13.3	220.3	341
0942 086	10 x 2,5	15.8	280.9	424
0942 087	12 x 2,5	16.3	330.4	489
0942 088	14 x 2,5	17.2	381.2	558
0942 089	16 x 2,5	18.1	432.0	632
0942 090	18 x 2,5	19.5	483.1	727

Other cross-sections and conductor counts available on request.

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