

TECHNOKONTROL IB-YSLCY

INTRINSICALLY SAFE CABLES



APPLICATIONS

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

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 IB-YSLCEY - cables with drain wire stranded of tin-plated annealed copper wires (class 2), laid under a shield.

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

TECHNOKONTROL IB-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	160	170	180	180	200

Operating voltage U₀/U 300/500 V

Voltage test 3.0 kV rms

Insulation resistance, minimum 20 MΩ·km

Inductance, approximate 0.7 mH/km

Operating temperature range

for fixed installation

for movable installation

from - 30 to + 80°C

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

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
0581 057	1 x 0,5	3.5	8.8	21
0581 001	2 x 0,5	5.1	17.6	36
0581 022	3 x 0,5	5.4	22.5	44
0581 042	4 x 0,5	5.8	28.9	54
0581 058	5 x 0,5	6.3	33.7	64
0581 012	6 x 0,5	6.8	39.4	75
0581 040	7 x 0,5	6.8	44.2	78
0581 059	8 x 0,5	7.3	50.0	91
0581 043	10 x 0,5	8.6	67.0	113
0581 050	12 x 0,5	8.8	76.6	128
0581 060	14 x 0,5	9.3	87.2	144
0581 047	16 x 0,5	10.1	98.5	171
0581 061	18 x 0,5	10.6	108.7	190
0581 062	19 x 0,5	10.6	113.5	193
0581 063	21 x 0,5	11.1	124.4	212
0581 064	24 x 0,5	12.5	142.3	245
0581 065	27 x 0,5	12.8	157.1	267
0581 044	30 x 0,5	13.2	172.5	290
0581 066	36 x 0,5	14.4	203.9	348
0581 067	37 x 0,5	14.4	208.7	352
0581 068	40 x 0,5	14.9	224.4	379
0581 069	44 x 0,5	16.1	253.6	419
0581 070	48 x 0,5	16.4	273.8	449
0581 071	52 x 0,5	16.8	294.2	479
0581 072	56 x 0,5	17.3	314.9	512
0581 073	60 x 0,5	17.8	335.9	546
0581 074	1 x 0,75	3.7	12.0	25
0581 016	2 x 0,75	5.5	22.5	43
0581 008	3 x 0,75	5.8	31.3	54
0581 002	4 x 0,75	6.3	38.5	65
0581 007	5 x 0,75	6.8	46.6	79
0581 033	6 x 0,75	7.4	55.0	95
0581 017	7 x 0,75	7.4	62.2	99
0581 030	8 x 0,75	8.0	74.2	118
0581 075	10 x 0,75	9.3	92.0	141

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
0581 028	12 x 0,75	10.0	107.1	170
0581 076	14 x 0,75	10.5	122.9	192
0581 077	16 x 0,75	11.0	138.6	216
0581 026	18 x 0,75	11.6	154.5	241
0581 078	19 x 0,75	11.6	161.7	246
0581 079	21 x 0,75	12.3	177.4	277
0581 054	24 x 0,75	13.6	202.4	311
0581 080	27 x 0,75	13.9	224.7	341
0581 081	30 x 0,75	14.6	247.6	378
0581 082	36 x 0,75	15.8	300.7	454
0581 083	37 x 0,75	15.8	307.9	459
0581 084	40 x 0,75	16.3	331.4	494
0581 085	44 x 0,75	17.6	363.9	538
0581 086	1 x 1,0	3.8	14.4	28
0581 010	2 x 1,0	5.9	28.9	51
0581 021	3 x 1,0	6.2	38.5	64
0581 003	4 x 1,0	6.7	48.8	78
0581 004	5 x 1,0	7.3	59.6	97
0581 053	6 x 1,0	8.0	74.2	119
0581 024	7 x 1,0	8.0	83.8	125
0581 025	8 x 1,0	8.6	95.8	145
0581 052	10 x 1,0	10.4	117.8	183
0581 051	12 x 1,0	10.8	138.1	209
0581 087	14 x 1,0	11.3	158.8	237
0581 035	16 x 1,0	12.1	179.3	273
0581 088	18 x 1,0	12.7	200.0	304
0581 089	19 x 1,0	12.7	209.6	311
0581 090	21 x 1,0	13.3	230.4	343
0581 048	24 x 1,0	14.9	262.8	393
0581 091	27 x 1,0	15.3	299.2	438
0581 092	30 x 1,0	15.9	329.8	479
0581 093	36 x 1,0	17.0	390.8	566
0581 094	37 x 1,0	17.0	400.4	572
0581 095	40 x 1,0	17.7	431.4	618

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	mm ²	mm	kg/km	kg/km
0581 096	1 x 1,5	4.1	19.8	34
0581 005	2 x 1,5	6.4	38.6	63
0581 006	3 x 1,5	6.8	53.8	82
0581 032	4 x 1,5	7.4	69.4	102
0581 009	5 x 1,5	8.1	88.9	130
0581 097	6 x 1,5	8.8	105.4	155
0581 018	7 x 1,5	8.8	119.8	165
0581 098	8 x 1,5	9.9	135.7	200
0581 099	10 x 1,5	11.5	168.6	239
0581 034	12 x 1,5	12.1	198.5	282
0581 049	14 x 1,5	12.7	228.8	320
0581 038	16 x 1,5	13.4	259.4	363
0581 100	18 x 1,5	14.3	290.1	412
0581 015	19 x 1,5	14.3	304.5	422
0581 101	21 x 1,5	15.1	341.8	473
0581 102	24 x 1,5	16.7	389.9	532
0581 055	27 x 1,5	17.0	434.0	586
0581 103	30 x 1,5	17.6	479.1	642

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
0581 104	34 x 1,5	19.2	541.0	752
0581 105	1 x 2,5	4.7	30.4	47
0581 011	2 x 2,5	7.7	60.4	91
0581 013	3 x 2,5	8.2	89.1	124
0581 014	4 x 2,5	9.0	115.2	156
0581 056	5 x 2,5	10.2	141.7	203
0581 106	6 x 2,5	11.1	167.6	242
0581 107	7 x 2,5	11.1	191.6	258
0581 108	8 x 2,5	12.2	217.9	305
0581 109	10 x 2,5	14.4	271.1	373
0581 110	12 x 2,5	14.9	320.4	432
0581 111	14 x 2,5	15.7	377.2	499
0581 041	16 x 2,5	16.6	427.9	567
0581 112	18 x 2,5	17.5	478.8	635
0581 113	19 x 2,5	17.5	502.8	651
0581 114	21 x 2,5	18.5	553.2	729
0581 115	24 x 2,5	20.6	631.8	821

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