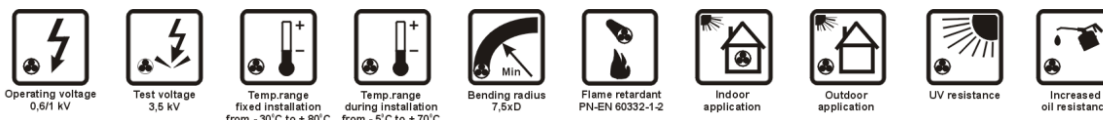


TECHNOKONTROL IB1-YSLY-P

INTRINSICALLY SAFE CABLES



APPLICATIONS

TECHNOKONTROL IB1-YSLY-P are multipair cables intended for intrinsically safe circuits and explosive conditions zones, designed for operating voltage 0.6/1 kV.

Paired structure decreases mutual influence between signals transmitted along the cable and reduces influence of outer sources of interference.

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 and outdoor installations.

CONSTRUCTION

- flexible, multiwire conductors, stranded of bare annealed copper wires (tin-plated on request), meeting requirements of class 2 per PN-EN 60228,
- PVC insulation, identification of pairs:
 - "a" wire – black insulation and white pair number printed on it,
 - "b" wire – white insulation and black pair number printed on it,
- insulated conductors twisted into pairs,
- pairs laid-up in layers,
- cable core wrapped in polyester tape,
- 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-YSLYv-P - intrinsically safe cables with enhanced PVC sheath, suitable for direct earth burial.

TECHNOKONTROL IB1-YSLY-P

CHARACTERISTICS

Conductor cross-section	mm ²	0.5	0.75	1.0	1.5	2.5
DC loop resistance at 20°C, maximum	Ω/km	72.0	49.0	36.2	24.2	14.82
Mutual capacitance at 1 kHz, approximate	nF/km	100	110	120	130	140

Operating voltage U ₀ /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	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 pairs (x 2) x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm ²	mm	kg/km	kg/km
1552 002	2 x 2 x 0,5	10.1	19.2	128
1552 003	3 x 2 x 0,5	10.6	28.8	158
1552 004	4 x 2 x 0,5	11.6	38.4	182
1552 005	5 x 2 x 0,5	12.7	48.0	209
1552 006	6 x 2 x 0,5	13.7	57.6	243
1552 007	7 x 2 x 0,5	13.7	67.2	253
1552 008	8 x 2 x 0,5	14.6	76.8	277
1552 009	10 x 2 x 0,5	16.5	96.0	335
1552 010	12 x 2 x 0,5	17.3	115.2	377
1552 011	16 x 2 x 0,5	19.5	153.6	470
1552 012	18 x 2 x 0,5	20.5	172.8	516
1552 013	20 x 2 x 0,5	21.5	192.0	561
1552 014	25 x 2 x 0,5	24.1	240.0	701
1552 015	30 x 2 x 0,5	26.1	288.0	810
1552 016	40 x 2 x 0,5	30.1	384.0	1060
1552 017	50 x 2 x 0,5	33.2	480.0	1279
1552 018	2 x 2 x 0,75	10.7	28.8	147
1552 019	3 x 2 x 0,75	11.3	43.2	187
1552 020	4 x 2 x 0,75	12.4	57.6	217
1552 021	5 x 2 x 0,75	13.5	72.0	248
1552 022	6 x 2 x 0,75	14.7	86.4	292
1552 023	7 x 2 x 0,75	14.7	100.8	305
1552 024	8 x 2 x 0,75	15.6	115.2	335
1552 025	10 x 2 x 0,75	17.7	144.0	407
1552 026	12 x 2 x 0,75	18.5	172.8	459
1552 027	16 x 2 x 0,75	21.0	230.4	577
1552 028	20 x 2 x 0,75	23.5	288.0	712
1552 029	2 x 2 x 1,0	11.4	38.4	173
1552 030	3 x 2 x 1,0	12.0	57.6	219
1552 031	4 x 2 x 1,0	13.1	76.8	253

Product No.	Number of pairs (x 2) x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm ²	mm	kg/km	kg/km
1552 032	5 x 2 x 1,0	14.4	96.0	293
1552 033	6 x 2 x 1,0	15.6	115.2	345
1552 034	7 x 2 x 1,0	15.6	134.4	362
1552 035	8 x 2 x 1,0	16.6	153.6	399
1552 036	10 x 2 x 1,0	18.9	192.0	486
1552 037	12 x 2 x 1,0	19.8	230.4	551
1552 038	16 x 2 x 1,0	22.4	307.2	696
1552 039	20 x 2 x 1,0	25.1	384.0	857
1552 001	2 x 2 x 1,5	12.3	57.6	213
1552 040	3 x 2 x 1,5	13.0	86.4	271
1552 041	4 x 2 x 1,5	14.2	115.2	316
1552 042	5 x 2 x 1,5	15.6	144.0	367
1552 043	6 x 2 x 1,5	17.0	172.8	435
1552 044	7 x 2 x 1,5	17.0	201.6	461
1552 045	8 x 2 x 1,5	18.2	230.4	510
1552 046	10 x 2 x 1,5	20.7	288.0	623
1552 047	12 x 2 x 1,5	21.6	345.6	709
1552 048	16 x 2 x 1,5	25.0	460.8	922
1552 049	20 x 2 x 1,5	27.5	576.0	1110
1552 050	2 x 2 x 2,5	13.7	96.0	279
1552 051	3 x 2 x 2,5	14.5	144.0	363
1552 052	4 x 2 x 2,5	16.0	192.0	431
1552 053	5 x 2 x 2,5	17.6	240.0	503
1552 054	6 x 2 x 2,5	19.2	288.0	598
1552 055	7 x 2 x 2,5	19.2	336.0	639
1552 056	8 x 2 x 2,5	20.5	384.0	708
1552 057	10 x 2 x 2,5	23.8	480.0	890
1552 058	12 x 2 x 2,5	24.9	576.0	1015
1552 059	16 x 2 x 2,5	28.6	768.0	1319
1552 060	20 x 2 x 2,5	31.6	960.0	1597

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