

TECHNOKONTROL IB-YSLCY-P**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
10xDFlame retardant
PN-EN 60332-1-2Indoor
applicationOutdoor
application

UV resistance

Increased
oil resistanceElectromagnetic
compatibility**APPLICATIONS**

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

Paired structure decreases mutual influence between signals transmitted along the cable.

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 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,
- tinned copper wire braid shield of effective density coverage,
- cable screen 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 IB-YSLCYv-P - intrinsically safe cables with enhanced PVC sheath, suitable for direct earth burial.

TECHNOKONTROL IB-YSLCY-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	130	140	150	150	170

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 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

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
0582 001	2 x 2 x 0,5	9.0	31.2	96
0582 026	3 x 2 x 0,5	9.5	45.4	113
0582 027	4 x 2 x 0,5	10.2	57.4	134
0582 028	5 x 2 x 0,5	11.1	68.7	156
0582 029	6 x 2 x 0,5	11.9	80.5	177
0582 030	7 x 2 x 0,5	11.9	90.1	191
0582 031	8 x 2 x 0,5	12.6	101.4	211
0582 032	10 x 2 x 0,5	14.1	124.5	253
0582 033	12 x 2 x 0,5	14.6	145.0	285
0582 034	14 x 2 x 0,5	15.6	166.8	322
0582 035	16 x 2 x 0,5	16.5	195.1	365
0582 036	18 x 2 x 0,5	17.3	216.7	401
0582 037	20 x 2 x 0,5	18.0	238.1	435
0582 038	24 x 2 x 0,5	19.4	280.9	504
0582 039	25 x 2 x 0,5	19.7	291.4	521
0582 040	30 x 2 x 0,5	21.3	344.4	605
0582 015	2 x 2 x 0,75	9.7	45.9	120
0582 012	3 x 2 x 0,75	10.2	62.2	136
0582 019	4 x 2 x 0,75	11.0	78.1	161
0582 041	5 x 2 x 0,75	11.9	94.9	188
0582 042	6 x 2 x 0,75	12.8	111.6	215
0582 010	7 x 2 x 0,75	12.8	126.0	234
0582 003	8 x 2 x 0,75	13.6	142.4	260
0582 043	10 x 2 x 0,75	15.3	175.6	315
0582 007	12 x 2 x 0,75	16.0	212.8	365
0582 044	14 x 2 x 0,75	17.0	245.0	412
0582 002	16 x 2 x 0,75	17.9	276.3	458
0582 045	18 x 2 x 0,75	18.8	307.8	504
0582 005	20 x 2 x 0,75	19.6	339.1	550
0582 011	2 x 2 x 1,0	10.3	57.4	137
0582 046	3 x 2 x 1,0	10.8	77.6	158
0582 004	4 x 2 x 1,0	11.7	99.1	191

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
0582 020	5 x 2 x 1,0	12.8	121.2	225
0582 021	6 x 2 x 1,0	13.8	142.9	259
0582 013	7 x 2 x 1,0	13.8	162.1	283
0582 047	8 x 2 x 1,0	14.6	183.4	315
0582 016	10 x 2 x 1,0	16.5	233.5	390
0582 022	12 x 2 x 1,0	17.2	274.1	445
0582 023	14 x 2 x 1,0	18.4	316.2	506
0582 009	16 x 2 x 1,0	19.4	357.7	565
0582 048	18 x 2 x 1,0	20.3	398.9	622
0582 049	20 x 2 x 1,0	21.2	440.0	680
0582 014	2 x 2 x 1,5	11.3	79.3	167
0582 008	3 x 2 x 1,5	11.8	109.0	198
0582 050	4 x 2 x 1,5	12.9	140.6	242
0582 051	5 x 2 x 1,5	14.0	172.3	287
0582 052	6 x 2 x 1,5	15.2	204.2	334
0582 018	7 x 2 x 1,5	15.2	233.0	369
0582 053	8 x 2 x 1,5	16.2	271.0	419
0582 017	10 x 2 x 1,5	18.3	335.1	509
0582 024	12 x 2 x 1,5	19.1	395.1	585
0582 054	14 x 2 x 1,5	20.4	456.8	667
0582 055	16 x 2 x 1,5	21.5	517.7	747
0582 056	18 x 2 x 1,5	22.6	578.8	827
0582 057	20 x 2 x 1,5	24.3	662.8	953
0582 058	2 x 2 x 2,5	13.4	123.1	238
0582 059	3 x 2 x 2,5	14.1	172.5	284
0582 060	4 x 2 x 2,5	15.4	223.9	353
0582 061	5 x 2 x 2,5	17.0	283.4	431
0582 062	6 x 2 x 2,5	18.4	335.4	501
0582 063	7 x 2 x 2,5	18.4	383.4	557
0582 064	10 x 2 x 2,5	22.3	539.5	764
0582 025	12 x 2 x 2,5	23.9	661.2	930

Other cross-sections and pair counts available on request.

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