

YnKGSLY

MINING CONTROL CABLES



Operating voltage
150/250 V



Test voltage
1,5 kV



Operating voltage
300/500 V



Test voltage
3 kV



Operating voltage
0,6/1 kV



Test voltage
4 kV



Temp. range
fixed installation
from - 30°C to + 70°C



Temp. range
during installation
from - 5°C to + 70°C



Bending radius
10xD



Flame retardant
PN-EN 60332-1-2



Flame retardant
PN-EN 60332-3-24

APPLICATIONS

YnKGSLY 150/250 V, **YnKGSLY 300/500 V** and **YnKGSLY 0.6/1 kV** are mining control cables intended for control, communication, measuring and monitoring systems in mines.

Cables can be applied in:

- w opencast and underground mines, except explosive condition zones.
- underground mines in their non-methane and methane fields in areas of „a” degree explosion hazard.
- underground mines in workings of class A coal dust explosion hazard.
- intrinsically safe circuits in opencast and underground mines in explosion hazardous areas.
- intrinsically safe circuits in underground mines in areas classified as „a”, „b”, or „c” degree explosion hazard.

Cables can not be used for power supplying in power engineering installations.

Cables have positive **Technical Opinion No. 05/53** regarding application in underground mines and **Certificate No. 05/53/A1/2** issued by **TI EMAG Institute**.

CONSTRUCTION

- flexible, multiwire conductors, stranded of bare annealed copper wires (tin-plated on request), meeting requirements of class 5 per PN-EN 60228,
- PVC insulation, colours of insulation:

Number of conductors	Colours of insulation	
	protective conductor	insulated conductors
3	green-yellow	black and blue
4	green-yellow	black, blue and brown
5	green-yellow	black, blue, brown and black
> 5	green-yellow	black and white conductor number printed on it

- insulated conductors laid-up in layers into a cable core, cables are made of 3, 4, 5, 7, 10, 12, 14, 16, 19, 21, 24, 27, 30, 33, 37, 40, 44, 48, 52, 56, and 61 conductors,
- cable core wrapped in polyester tape,
- special (oxygen index bigger than 29%) PVC cable sheath, black (RAL 9005) or blue (RAL 5015 - for intrinsically safe circuits), other colours also available.

AVAILABLE UPON REQUEST

YnKGSXLX - polyethylene insulated cables (X) of low capacitance, designed to transmit signals over long distances. Cables are designed for operating voltage 150/250 V. Cable sheath made of special self-extinguishing and flame retardant PVC (Yn).

XnKGSXLX - halogen free cables of reduced combustibility, sheathed with special halogen free material (Xn), applied when higher safety in case of fire is required. The cables are flame retardant, their smoke emission in fire is low and released gases are not corrosive. Cables are designed for operating voltage 150/250 V.

YnKGSly

CHARACTERISTICS

Conductor cross-section	mm ²	1.0	1.5	2.5	4
DC conductor resistance at 20°C, maximum	Ω/km	19.5	13.3	7.98	4.95
Operating voltage U _o /U	V	150/250	300/500	600/1000	
Voltage test	V rms	1500	3000	4000	
Insulation resistance, minimum	MΩ·km	20	20	100	

Inductance, approximate	0.7 mH/km	Minimum bending radius	10 x cable diameter
Conductor temperature limit in work conditions	from - 30 to + 70°C	Cable combustibility	flame retardant
in short-circuit	from - 5 to + 70°C	Combustibility tests	PN-EN 60332-1-2, IEC 60332-1-2 PN-EN 60332-3-24, IEC 60332-3-24 (cat. C)
Reference standards			WT-TK-21

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.)
150/250 V	mm ²	mm	kg/km	kg/km
0363 010	2 x 1 + 1	6.4	28.8	56
0363 008	3 x 1 + 1	7.8	38.4	91
0363 018	4 x 1 + 1	8.3	48.0	109
0363 009	6 x 1 + 1	8.9	67.0	133
0363 019	9 x 1 + 1	10.9	96.0	181
0363 020	13 x 1 + 1	12.2	134.0	255
0363 021	23 x 1 + 1	15.5	230.0	405
0363 001	2 x 1,5 + 1,5	8.5	43.2	107
0363 003	4 x 1,5 + 1,5	9.9	72.0	158
0363 004	6 x 1,5 + 1,5	10.5	101.0	178
0363 012	9 x 1,5 + 1,5	12.7	144.0	248

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
150/250 V	mm ²	mm	kg/km	kg/km
0363 014	13 x 1,5 + 1,5	14.4	202.0	355
0363 005	2 x 2,5 + 2,5	8.8	72.0	125
0363 006	3 x 2,5 + 2,5	9.3	96.0	145
0363 007	4 x 2,5 + 2,5	10.7	120.0	198
0363 011	6 x 2,5 + 2,5	11.6	168.0	250
0363 022	9 x 2,5 + 2,5	14.9	240.0	390
0363 023	2 x 4 + 4	11.1	115.0	210
0363 024	4 x 4 + 4	13.2	192.0	325
0363 025	6 x 4 + 4	14.3	269.0	420
0363 026	9 x 4 + 4	18.5	384.0	600

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
300/500 V	mm ²	mm	kg/km	kg/km
0364 009	2 x 1 + 1	7.7	28.8	79
0364 016	3 x 1 + 1	8.9	38.4	105
0364 001	4 x 1 + 1	9.7	48.0	135
0364 026	6 x 1 + 1	10.4	67.0	167
0364 022	9 x 1 + 1	12.3	96.0	220
0364 011	13 x 1 + 1	13.9	134.0	295
0364 027	23 x 1 + 1	18.3	230.0	490
0364 017	36 x 1 + 1	20.8	355.0	700
0364 002	2 x 1,5 + 1,5	8.3	43.2	97
0364 004	4 x 1,5 + 1,5	9.9	75.0	152
0364 019	6 x 1,5 + 1,5	11.3	101.0	210

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
300/500 V	mm ²	mm	kg/km	kg/km
0364 018	9 x 1,5 + 1,5	14.1	144.0	290
0364 013	13 x 1,5 + 1,5	15.3	202.0	380
0364 005	2 x 2,5 + 2,5	9.2	75.0	135
0364 028	4 x 2,5 + 2,5	11.5	120.0	230
0364 010	6 x 2,5 + 2,5	12.5	168.0	295
0364 020	9 x 2,5 + 2,5	15.7	240.0	410
0364 025	2 x 4 + 4	11.3	115.0	201
0364 029	4 x 4 + 4	14.2	192.0	350
0364 030	6 x 4 + 4	15.5	269.0	450
0364 031	9 x 4 + 4	20.1	384.0	650

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
0,6/1 kV	mm ²	mm	kg/km	kg/km
0362 015	2 x 1 + 1	9.1	28.8	106
0362 016	4 x 1 + 1	10.7	48.0	156
0362 013	6 x 1 + 1	11.6	67.0	186
0362 017	9 x 1 + 1	14.5	96.0	265
0362 018	13 x 1 + 1	15.7	134.0	345
0362 019	23 x 1 + 1	20.7	230.0	570
0362 011	2 x 1,5 + 1,5	9.8	43.2	123
0362 005	4 x 1,5 + 1,5	10.9	72.0	191
0362 003	6 x 1,5 + 1,5	11.9	101.0	215
0362 006	9 x 1,5 + 1,5	15.3	144.0	331

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
0,6/1 kV	mm ²	mm	kg/km	kg/km
0362 008	13 x 1,5 + 1,5	17.0	202.0	421
0362 002	2 x 2,5 + 2,5	10.1	63.0	149
0362 020	4 x 2,5 + 2,5	12.6	120.0	255
0362 012	6 x 2,5 + 2,5	13.7	168.0	325
0362 021	9 x 2,5 + 2,5	17.3	240.0	450
0362 022	2 x 4 + 4	12.8	115.0	245
0362 023	4 x 4 + 4	15.3	192.0	380
0362 024	6 x 4 + 4	16.7	269.0	490
0362 025	9 x 4 + 4	21.7	384.0	705

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