YnHKGSLYkono

MINING CONTROL CABLES

APPLICATIONS

YnHKGSLYkono 150/250 V, YnHKGSLYkono 300/500 V and **YnHKGSLYkono 0,6/1 kV** are overall shielded, mining control cables with individually shielded wires intended for control, communication, measuring and monitoring systems in mines.

Cables can be applied in:

- opencast and underground mines, except explosive condition zones.
- underground mines in their non-methane and methane fields in areas of „a", „b" or „c" degree explosion hazard.
- underground mines in workings of class A or B 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.

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

Cables have positive **Technical Opinion No. 05/53** regarding application in underground mines and **Certificates No. 05/53/A1/2** and **05/53/A2/2** 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

- tinned copper wire braid shield of coverage bigger than 70% on insulated conductors (bare copper wire braid available on request),
- shielded 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, 61, 65, 70 and 75 conductors,
- cable core wrapped in polyester tape,
- tinned copper wire braid shield of coverage bigger than 70%,
- special (oxygen index bigger than 29%) PVC cable sheath, black (RAL 9005) or blue (RAL 5015 intrinsically safe circuits), other colours also available.

AVAILABLE UPON REQUEST

YnHKGSLXkono - 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).

XnHKGSLXkono - 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.

TECHNOKABEL®

CE RoHS EMAG®

ISO 9001:2008

YnHKGSLYkono

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 Uo/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		Cable combustibility	flame retardant
in work conditions	from - 30 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)
in short-circuit	from - 5 to + 70°C	Reference standards	WT-TK-22

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	Product No.
150/250 V	mm^2	mm	kg/km	kg/km
0894 006	2 x 1 + 1	9.0	76	140
0894 007	4 x 1 + 1	10.4	113	195
0894 010	6 x 1 + 1	11.2	148	240
0894 005	9 x 1 + 1	13.9	209	330
0894 015	13 x 1 + 1	15.0	278	415
0894 016	20 x 1 + 1	17.5	619	860
0894 001	2 x 1,5 + 1,5	10.1	102	179
0894 008	4 x 1,5 + 1,5	11.8	153	255
0894 003	6 x 1,5 + 1,5	12.8	205	320
0894 004	9 x 1,5 + 1,5	15.9	283	435
0894 017	13 x 1,5 + 1,5	17.4	394	565

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Product No.
150/250 V	mm^2	mm	kg/km	kg/km
0894 011	2 x 2,5 + 2,5	10.9	147	235
0894 009	4 x 2,5 + 2,5	12.9	224	340
0894 018	6 x 2,5 + 2,5	14.0	294	420
0894 019	9 x 2,5 + 2,5	17.7	423	595
0894 012	18 x 2,5 + 2,5	21.6	701	920
0894 013	23 x 2,5 + 2,5	25.7	903	1200
0894 020	2 x 4 + 4	12.8	221	330
0894 021	4 x 4 + 4	15.1	329	475
0894 014	6 x 4 + 4	16.4	433	595
0894 022	9 x 4 + 4	21.3	618	855

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Product No.
300/500 V	mm^2	mm	kg/km	kg/km
1310 007	2 x 1 + 1	9.9	82	160
1310 008	4 x 1 + 1	11.5	122	225
1310 009	6 x 1 + 1	12.5	164	280
1310 010	9 x 1 + 1	15.5	226	380
1310 011	13 x 1 + 1	16.7	301	480
1310 012	20 x 1 + 1	20.0	653	1020
1310 002	2 x 1,5 + 1,5	10.5	105	189
1310 013	4 x 1,5 + 1,5	12.4	161	275
1310 004	6 x 1,5 + 1,5	13.4	211	335
1310 014	9 x 1,5 + 1,5	16.7	292	460

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Product No.
300/500 V	mm^2	mm	kg/km	kg/km
1310 005	13 x 1,5 + 1,5	18.7	406	620
1310 006	2 x 2,5 + 2,5	11.4	150	245
1310 015	4 x 2,5 + 2,5	13.5	229	360
1310 016	6 x 2,5 + 2,5	14.6	300	440
1310 017	9 x 2,5 + 2,5	18.9	432	640
1310 018	2 x 4 + 4	13.6	227	355
1310 019	4 x 4 + 4	16.2	338	515
1310 003	6 x 4 + 4	17.8	462	660
1310 020	9 x 4 + 4	22.9	637	925

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Product No.
0,6/1 kV	mm^2	mm	kg/km	kg/km
1255 003	2 x 1 + 1	10.7	88	181
1255 004	4 x 1 + 1	12.7	135	265
1255 008	6 x 1 + 1	13.7	176	320
1255 009	9 x 1 + 1	17.3	260	455
1255 010	13 x 1 + 1	19.1	341	585
1255 011	20 x 1 + 1	22.1	687	1170
1255 005	2 x 1,5 + 1,5	11.4	111	215
1255 012	4 x 1,5 + 1,5	13.5	171	310
1255 013	6 x 1,5 + 1,5	14.6	223	380
1255 001	9 x 1,5 + 1,5	18.9	327	555

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Product No.
0,6/1 kV	mm^2	mm	kg/km	kg/km
1255 014	13 x 1,5 + 1,5	20.4	431	695
1255 015	18 x 1,5 + 1,5	22.1	522	800
1255 016	2 x 2,5 + 2,5	12.3	160	275
1255 007	4 x 2,5 + 2,5	14.6	238	395
1255 017	6 x 2,5 + 2,5	15.8	312	485
1255 006	9 x 2,5 + 2,5	20.5	451	705
1255 018	2 x 4 + 4	14.5	234	380
1255 019	4 x 4 + 4	17.5	364	575
1255 020	6 x 4 + 4	19.4	476	730
1255 021	9 x 4 + 4	25.1	680	1050

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

TECHNOKABEL S.A., ul. Nasielska 55, 04-343 Warszawa, Poland
Export Department: tel +(48) 22 516 97 67, fax +(48) 22 516 97 87
www.technokabel.com.pl
export@technokabel.com.pl