

YnHKGSlykonožo-P; YnHKGSlykonožo-T**MINING CONTROL CABLES**Operating voltage
150/250 VTest voltage
1,5 kVOperating voltage
300/500 VTest voltage
3 kVOperating voltage
0,6/1 kVTest voltage
4 kVTemp. range
fixed installation
from -30°C to +70°CTemp. range
during installation
from -5°C to +70°CBending radius
10xDFlame retardant
PN-EN 60332-1-2Flame retardant
PN-EN 60332-3-24EMC
Electromagnetic
compatibility**APPLICATIONS**

YnHKGSlykonožo-P are multipair, pair and overall shielded and **YnHKGSlykonožo-T** are multitruple, triple and overall shielded, mining control cables 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.

Shielded pair or triple structure substantially 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.

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, identification colour code:
 - pairs – black and brown insulation and white pair number printed on it,
 - triples – black, brown and blue insulation and white triple number printed on it,
- insulated conductors twisted into pairs or triples,
- tinned copper wire braid shield of coverage bigger than 70% on pairs or triples (bare copper wire braid available on request),
- shielded pairs or triples laid-up in layers into a cable core, green-yellow protective conductor located in the outer layer, cables are made of 2, 3, 4, 5, 7, 8, 10, 12, 14, 15, 16, 18, 19, 21, 24, 25, 28, 30, 40 and 50 pairs or triples,
- 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 – for intrinsically safe circuits), other colours also available.

AVAILABLE UPON REQUEST

YnHKGSlykonožo-P, YnHKGSlykonožo-T - polyethylene insulated cables (X) of low capacitance, designed to transmit signals over long distances. Cables are designed for operating voltage 300/300 V. Cable sheath made of special self-extinguishing and flame retardant PVC (Yn).

XnHKGSlykonožo-P, XnHKGSlykonožo-T - 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 300/300 V.

YnHKGSlykonožo-P; YnHKGSlykonožo-T

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	78.0	52.0	39.0	26.6	16.0
Operating voltage U ₀ /U	V	300/300		300/500		600/1000
Voltage test	V rms	1500		3000		3500
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-24

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.)
300/300 V	mm ²	mm	kg/km	kg/km
1749 001	2 x 2 x 0,75 + 0,75	11.1	84	164
1749 002	4 x 2 x 0,75 + 0,75	12.7	146	250
1749 003	7 x 2 x 0,75 + 0,75	15.0	234	370
1749 004	12 x 2 x 0,75 + 0,75	19.3	398	600
1749 005	16 x 2 x 0,75 + 0,75	21.7	515	760
1749 006	18 x 2 x 0,75 + 0,75	22.7	573	835
1749 007	2 x 2 x 1 + 1	11.4	98	180
1749 008	4 x 2 x 1 + 1	13.1	171	280
1749 009	7 x 2 x 1 + 1	15.5	275	415
1749 010	12 x 2 x 1 + 1	20.0	467	680

Product No.	Number of pairs (x 2) x conductor cross- section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
300/300 V	mm ²	mm	kg/km	kg/km
1749 011	16 x 2 x 1 + 1	22.4	607	860
1749 012	2 x 2 x 1,5 + 1,5	13.2	137	240
1749 013	4 x 2 x 1,5 + 1,5	15.2	233	365
1749 014	7 x 2 x 1,5 + 1,5	18.6	393	590
1749 015	12 x 2 x 1,5 + 1,5	23.8	637	930
1749 016	2 x 2 x 2,5 + 2,5	14.5	194	310
1749 017	4 x 2 x 2,5 + 2,5	17.0	350	500
1749 018	7 x 2 x 2,5 + 2,5	20.7	563	785
1749 019	12 x 2 x 2,5 + 2,5	26.7	942	1280

Product No.	Number of pairs (x 2) x conductor cross- section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
300/500 V	mm ²	mm	kg/km	kg/km
0444 008	2 x 2 x 0,75 + 0,75	12.5	97	195
0444 004	4 x 2 x 0,75 + 0,75	14.4	161	290
0444 009	7 x 2 x 0,75 + 0,75	17.2	273	450
0444 010	12 x 2 x 0,75 + 0,75	22.0	437	710
0444 011	16 x 2 x 0,75 + 0,75	25.4	589	945
0444 012	18 x 2 x 0,75 + 0,75	26.6	654	1040
0444 005	2 x 2 x 1 + 1	12.8	111	215
0444 013	4 x 2 x 1 + 1	14.8	186	325
0444 014	7 x 2 x 1 + 1	17.7	315	500
0444 002	12 x 2 x 1 + 1	22.7	507	790

Product No.	Number of pairs (x 2) x conductor cross- section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
300/500 V	mm ²	mm	kg/km	kg/km
0444 015	16 x 2 x 1 + 1	26.2	682	1050
0444 006	2 x 2 x 1,5 + 1,5	13.9	142	255
0444 016	4 x 2 x 1,5 + 1,5	16.0	240	390
0444 017	7 x 2 x 1,5 + 1,5	19.7	406	625
0444 018	12 x 2 x 1,5 + 1,5	25.3	681	1020
0444 007	2 x 2 x 2,5 + 2,5	15.2	199	325
0444 019	4 x 2 x 2,5 + 2,5	17.8	358	525
0444 020	7 x 2 x 2,5 + 2,5	21.7	575	825
0444 021	12 x 2 x 2,5 + 2,5	28.0	964	1350

Product No.	Number of pairs (x 2) x conductor cross- section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
0,6/1 kV	mm ²	mm	kg/km	kg/km
0886 007	2 x 2 x 0,75 + 0,75	13.9	106	230
0886 008	4 x 2 x 0,75 + 0,75	16.0	176	340
0886 009	7 x 2 x 0,75 + 0,75	19.7	298	540
0886 010	12 x 2 x 0,75 + 0,75	25.3	501	875
0886 011	16 x 2 x 0,75 + 0,75	28.5	644	1100
0886 012	18 x 2 x 0,75 + 0,75	30.3	715	1240
0886 003	2 x 2 x 1 + 1	14.2	120	245
0886 013	4 x 2 x 1 + 1	16.4	201	370
0886 014	7 x 2 x 1 + 1	20.2	341	595
0886 001	12 x 2 x 1 + 1	26.0	572	960

Product No.	Number of pairs (x 2) x conductor cross- section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
0,6/1 kV	mm ²	mm	kg/km	kg/km
0886 015	16 x 2 x 1 + 1	29.7	737	1240
0886 004	2 x 2 x 1,5 + 1,5	15.2	151	285
0886 016	4 x 2 x 1,5 + 1,5	17.8	272	455
0886 017	7 x 2 x 1,5 + 1,5	21.7	431	705
0886 018	12 x 2 x 1,5 + 1,5	28.0	724	1150
0886 005	2 x 2 x 2,5 + 2,5	16.6	208	360
0886 019	4 x 2 x 2,5 + 2,5	19.9	375	600
0886 020	7 x 2 x 2,5 + 2,5	24.3	623	955
0886 006	12 x 2 x 2,5 + 2,5	31.1	1006	1520

Other cross-sections and conductor counts available on request.

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