

YHKGYyn 0,6/1 kV

MINING POWER CABLES



APPLICATIONS

YHKGYyn 0,6/1 kV are mining power cables with individually shielded wires intended to work in power engineering installations.

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.

Cables have positive **Technical Opinion** No. **2242/2011** regarding application in underground mines and Certificates No. **2242/A1/2011** and **2242/A2/2011** issued by **TI EMAG Institute**.

CONSTRUCTION

- bare annealed copper conductors, meeting requirements of class 1 or 2 per PN-EN 60228,

- PVC insulation, colours of insulation: natural, red and blue,
- copper tape shield,
- copper single wire or multiwire conductor as a central element,
- shielded conductors laid-up around the central element,
- inner covering on cable core, PVC or unvulcanised rubber,
- PVC inner sheath,
- special (oxygen index bigger than 29%) PVC cable sheath, yellow, other colours also available.

CHARACTERISTICS

Operating voltage Uo/U Voltage test Conductor temperature limit in work conditions in short-circuit	0.6/1 kV 4 kV rms + 70°C + 160°C	Temperature range during operation during installation Minimum bending radius Cable combustibility Combustibility tests	from - 30 to + 70°C from - 5 to + 70°C 12 x cable diameter flame retardant PN-EN 60332-1-2, IEC 60332-1-2 PN-EN 60332-3-24 JEC 60332-3-24 (cat. 6
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Reference standards

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.)	DC conductor resistance at 20°C, maximum	Inductance, approximate	Inductive reactance	Current carrying capacity	Short-circuit current rating for 1 sec*
	mm ²	mm	kg/km	kg/km	Ω/km	mH/km	Ω/km	A	kA
1729 001	3 x 10/6	25.7	346	1145	1.830	0.30	0.098	68	1.15
1729 009	3 x 16/16	27.4	614	1390	1.150	0.30	0.094	88	1.84
1729 005	3 x 25/16	31.5	874	1860	0.727	0.28	0.089	116	2.88
1729 003	3 x 35/16	32.6	1162	2070	0.524	0.28	0.087	140	4.03
1729 006	3 x 50/16	36.6	1594	2950	0.387	0.28	0.084	170	5.75
1729 004	3 x 70/25	40.3	2256	3510	0.268	0.26	0.081	212	8.05
1729 007	3 x 95/25	45.7	3072	4950	0.193	0.24	0.080	259	10.93
1729 008	3 x 120/35	49.7	3936	5880	0.153	0.24	0.078	299	13.80

* 1 second short-circuit current rating is calculated assuming that the temperature of power conductors during short-circuit equals the maximum conductor operating temperature under normal conditions.

Other cross-sections and conductor counts available on request.

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

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