

## YHKGYFoy 0,6/1 kV

### MINING POWER CABLES



### APPLICATIONS

**YHKGYFoy 0,6/1 kV** are armoured, 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.

Steel tape armoured cables can be installed in mine workings with an angle of inclination up to 90°.

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,
- galvanized steel wire armour,
- special (oxygen index bigger than 29%) PVC cable sheath, yellow, other colours also available.

### CHARACTERISTICS

Operating voltage U <sub>0</sub> /U	0,6/1 kV	Temperature range	
Voltage test	4 kV rms	during operation	from - 30 to + 70°C
Conductor temperature limit		during installation	from - 5 to + 70°C
in work conditions	+ 70°C	Minimum bending radius	12 x cable diameter
in short-circuit	+ 160°C	Cable combustibility	flame retardant
		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-27

**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 <sup>2</sup>	mm	kg/km	kg/km	Ω/km	mH/km	Ω/km	A	kA
1627 006	3 x 10/6	28.9	346	2315	1.830	0.34	0.108	68	1.15
1627 007	3 x 16/16	30.6	614	2830	1.150	0.33	0.103	88	1.84
1627 008	3 x 25/16	35.5	874	3710	0.727	0.31	0.098	117	2.88
1627 002	3 x 35/16	36.6	1162	3920	0.524	0.31	0.096	142	4.03
1627 003	3 x 50/16	40.6	1594	4860	0.387	0.30	0.091	172	5.75
1627 004	3 x 70/25	44.3	2256	6490	0.268	0.28	0.089	213	8.05
1627 005	3 x 95/25	50.7	3072	8200	0.193	0.27	0.088	261	10.93
1627 009	3 x 120/35	54.7	3936	11180	0.153	0.26	0.086	301	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.**