

PN-G-90006 Polish Underground Mining Power & Control Cables (YnOGY / YKGY / YHKGY)

YnOGYekm Cable

PN-G-90006 0.6/1 kV Class 5 Cu (G), PVC-insulated (Y), flexible Cu-elastomer screen



PN-G-90006 · YnOGYekm

0.6/1 kV · Class 5 Flexible Cu (G)

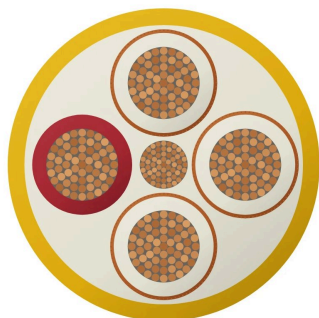
Flexible Braided Screen (ekm) + Yn PVC

Application

YnOGYekm Cable is a Polish-standard (PN-G-90006) 0.6/1 kV extra-flexible screened underground mining power and control cable featuring Class 5 flexible copper conductors ('G'), PVC core insulation ('Y'), a flexible tinned/bare copper wire braid embedded in

Typical uses: Suspended underground monorail loops, Roadheader & stage-loader auxiliary control, Methane-hazardous (Group I) coal mine drives, Underground VFD pump & booster fan feeders

Construction



Cross-section, not to scale

1	Flexible Class 5 copper conductor (G)	PN-G-90006 / PN-EN 60228
2	PVC core insulation (Y)	PN-G-90006
3	Inner PVC bedding	PN-G-90006
4	Flexible copper-elastomer composite	PN-G-90006
5	Flame-retardant mining PVC outer	PN-G-90006 / PN-EN 60332-1-2

Technical data

Typical values

Rated voltage U ₀ /U	0.6/1 kV AC (600/1000 V)	AC dielectric test voltage	3,500 V AC for 5 minutes (core-to-core &
Max. conductor operating temp.	+70 °C continuous · +160 °C short-circuit	Screen coverage & fault rating	≥ 85 % optical Cu braid + 100 %
Operating temperature range	-25 °C to +70 °C (fixed) · -5 °C to +70 °C	Minimum installation temp.	-5 °C
Min. bending radius	6 × D (fixed) · 10 × D (flexible routing)	Flexing screen stability	Braided 'ekm' construction prevents helical
Flame retardance	PN-EN 60332-1-2 & PN-G-04035 mining flame	Mine water & oil resistance	Resistant to saline mine water, hydraulic resistance
Standards	PN-G-90006 · ZN-TF / WUG underground mining		

Sizes

6 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Cores × Size	Main cross-section	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard YnOGYekm configurations 6 sizes						
☐ YnOGYekm 4 × 2.5 mm ² 0.6/1 kV	4 × 2.5 mm ² + ekm	2.5 mm ²	15.6	155	355	94
☐ YnOGYekm 7 × 2.5 mm ² 0.6/1 kV	7 × 2.5 mm ² + ekm	2.5 mm ²	18.4	240	505	110
☐ YnOGYekm 4 × 6.0 mm ² 0.6/1 kV	4 × 6.0 mm ² + ekm	6.0 mm ²	19.8	320	630	119
☐ YnOGYekm 4 × 16 mm ² 0.6/1 kV	4 × 16 mm ² + ekm	16.0 mm ²	26.6	760	1,250	160
☐ YnOGYekm 4 × 35 mm ² 0.6/1 kV	4 × 35 mm ² + ekm	35.0 mm ²	34.2	1,565	2,260	205
☐ YnOGYekm 4 × 70 mm ² 0.6/1 kV	4 × 70 mm ² + ekm	70.0 mm ²	44.0	3,010	3,980	264

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per PN-G-90006 / ZN-TF (YnOGYekm 0.6/1 kV Composite-Screened Flexible Mining Cable).

Electrical & ampacity

6 sizes

Configuration	Max. DC R @ 20 °C Ω/km	I _z free air A	I _z tray / duct A	I _{sc} (1 s) kA	Voltage drop mV/A/m	Dielectric test V
4 × 2.5 mm ² + ekm	7.98	25	23	0.29	17.50	3,500
7 × 2.5 mm ² + ekm	7.98	20	18	0.29	17.50	3,500
4 × 6.0 mm ² + ekm	3.30	42	38	0.69	7.30	3,500
4 × 16 mm ² + ekm	1.21	77	70	1.84	2.70	3,500
4 × 35 mm ² + ekm	0.55	126	114	4.03	1.25	3,500
4 × 70 mm ² + ekm	0.27	195	176	8.05	0.62	3,500

– Conductor DC resistance at +20 °C per IEC 60228 and reference current ratings at 30 °C ambient per PN-G-90006 / ZN-TF (YnOGYekm 0.6/1 kV Composite-Screened Flexible Mining Cable).

Standards and approvals

- ✓ PN-G-90006
- ✓ PN-EN 60332-1-2
- ✓ CE / WUG Compliant

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/ynogyekm-cable



Typical values for this cable type, based on PN-G-90006 / ZN-TF (YnOGYekm 0.6/1 kV Composite-Screened Flexible Mining Cable). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.