



GOST KGE / KGESh screened mining & excavator cables

KGE

Screened Flexible Rubber Excavator Trailing Cable

GOST 13497 6/6 kV (3.6/6 kV) screened flexible rubber open-pit excavator trailing cable



GOST 13497 / TU 16.K73

6/6 kV (3.6/6 kV)

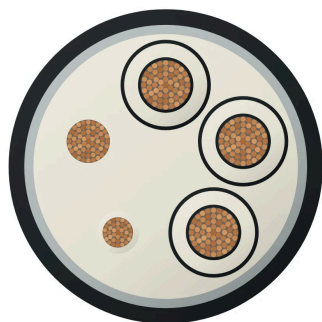
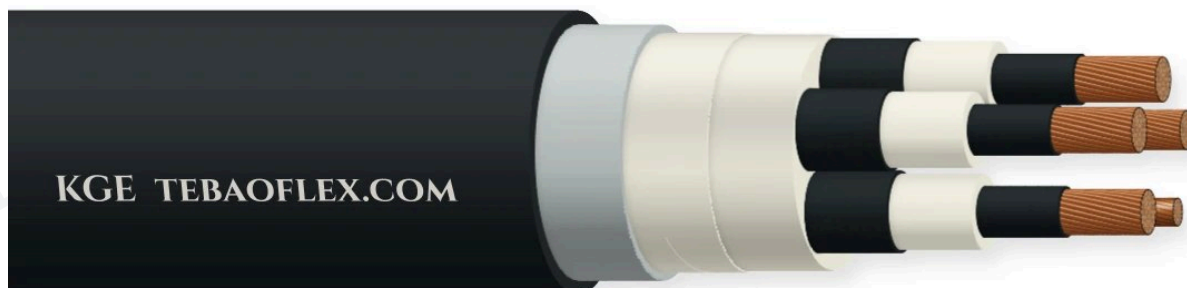
Semicon Screened · -40 to +75 °C

Application

KGE (КГЭ) is the classic GOST 13497 and TU 16.K73.02-88 6/6 kV (3.6/6 kV) screened flexible rubber trailing cable engineered for open-pit electric rope shovels (EKG-5A, EKG-8I, EKG-10, EKG-15), walking draglines, and rotary pit drills operating in harsh

Typical uses: Open-pit coal, iron & copper mines, EKG-series electric rope shovels, Walking draglines & pit crushers, Cold-climate surface mining (-40 °C)

Construction



Cross-section, not to scale

1	Phase & earth/auxiliary conductors	GOST 22483 Class 5
2	Central profiled rubber cradle	GOST 13497
3	Inner conductor screen	GOST 13497
4	6 kV rubber/EPR insulation	GOST 13497
5	Outer core screen (Э)	GOST 13497
6	Heavy outer sheath (RShN-1)	GOST 13497

Technical data

Typical values

Rated voltage (phase-to-phase)	6 kV AC (3.6/6 kV equivalent), 50 Hz	Auxiliary / earth core voltage	380 V AC
AC routine test voltage	15 kV rms / 5 min on 6 kV phase cores; 2 kV	Specific volume resistance of screen	≤ 250 Ω·cm semi-conductive rubber
Max. conductor operating temp.	+75 °C (RTI-1) · +90 °C (EPR upgrade)	Ambient temperature (UHL1)	-40 °C to +50 °C (-60 °C for KGE-HL)
Max. short-circuit temperature	+200 °C / +250 °C (5 s)	Min. bending radius (dynamic)	6 × cable outer diameter
Max. tensile load on copper	19.6 N/mm ² (2.0 kgf/mm ²) per GOST 13497	Cyclic bending endurance	Tested on sheave test rig under tension per
Cold-bend & impact resilience	GOST 13497 UHL1 (-40 °C) / HL1 (-60 °C)	Sunlight, ozone & oil resistance	RShN-1 polychloroprene outdoor pit sheath
Flame retardancy	GOST IEC 60332-1-2 self-extinguishing	Standards	GOST 13497 / TU 16.K73.02-88 (КГЭ)

Sizes

9 standard constructions

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

Order designation	Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard KGE configurations 9 sizes						
☐ KGE 3×10+1×6 - 6 kV	3×10 + 1×6 (6 kV)	10	33.0	345	1,350	198
☐ KGE 3×16+1×10 - 6 kV	3×16 + 1×10 (6 kV)	16	36.2	555	1,690	217
☐ KGE 3×25+1×10 - 6 kV	3×25 + 1×10 (6 kV)	25	39.8	815	2,120	239
☐ KGE 3×35+1×10 - 6 kV	3×35 + 1×10 (6 kV)	35	43.0	1,105	2,580	258
☐ KGE 3×50+1×16 - 6 kV	3×50 + 1×16 (6 kV)	50	47.5	1,595	3,290	285
☐ KGE 3×70+1×25 - 6 kV	3×70 + 1×25 (6 kV)	70	52.8	2,255	4,210	317
☐ KGE 3×95+1×35 - 6 kV	3×95 + 1×35 (6 kV)	95	58.5	3,085	5,380	351
☐ KGE 3×120+1×50 - 6 kV	3×120 + 1×50 (6 kV)	120	63.8	3,950	6,540	383
☐ KGE 3×150+1×50 - 6 kV	3×150 + 1×50 (6 kV)	150	68.5	4,810	7,680	411

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per GOST 13497 / TU 16.K73.02-88 (КГЭ).

Electrical & ampacity data

9 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V rms
3×10 + 1×6 (6 kV)	1.958	70	60	126	15,000
3×16 + 1×10 (6 kV)	1.240	93	79	136	15,000
3×25 + 1×10 (6 kV)	0.799	122	104	151	15,000
3×35 + 1×10 (6 kV)	0.568	150	128	168	15,000
3×50 + 1×16 (6 kV)	0.396	187	159	192	15,000
3×70 + 1×25 (6 kV)	0.279	229	195	226	15,000
3×95 + 1×35 (6 kV)	0.211	276	235	267	15,000
3×120 + 1×50 (6 kV)	0.165	319	271	308	15,000
3×150 + 1×50 (6 kV)	0.132	365	310	358	15,000

– Current ratings apply at +30 °C ambient in free air; apply standard derating factors for elevated ambient or drum layers.

Standards and approvals

- ✓ GOST 13497
- ✓ TU 16.K73.02-88
- ✓ EAC / TR CU

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/kge-screened-flexible-rubber-excavator-trailing-cable



Typical values for this cable type, based on GOST 13497 / TU 16.K73.02-88 (КГЭ). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.