



GOST KGE / KGESh screened mining & excavator cables

KGES / KGRES

Screened Mining Coal-Cutter Rubber Trailing Cable

GOST 24334 660/1140 V cradle-reinforced (C) & heat-resistant EPR (P) coal-cutter cable



GOST 24334 / TU 16.K73

660/1140 V (1.14 kV)

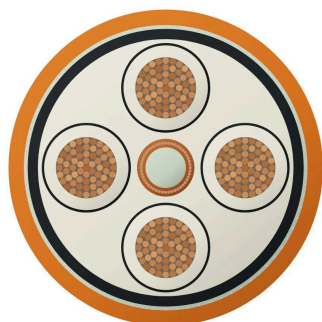
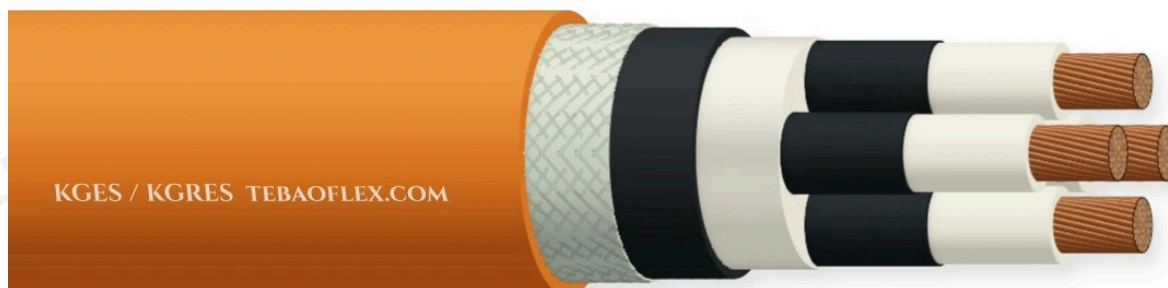
Load-Bearing Cradle · +90 °C EPR

Application

KGES / KGRES (КГЭС / КГРЭС) are 660/1140 V (0.66/1.14 kV) underground longwall coal-shearer flexible trailing cables built to GOST 24334, featuring a high-strength central load-bearing cradle core (C) and, in KGRES, +90 °C ethylene-propylene rubber

Typical uses: Underground longwall coal mining, 1140 V shearers & roadheaders, Mechanized face conveyor drives, CIS & Eastern European collieries

Construction



Cross-section, not to scale

1	Phase, earth & control conductors	GOST 22483 Class 5
2	Reinforced central cradle (C)	GOST 24334
3	EPR core insulation (P)	GOST 24334
4	Phase & control screens (Э)	GOST 24334
5	Outer mine sheath (RShN-1)	GOST 24334

Technical data

Typical values

Rated voltage U0/U	660/1140 V (0.66/1.14 kV) AC, 50 Hz	Control core voltage	Up to 220 V / 380 V AC intrinsic safety &
AC routine test voltage	3.5 kV rms / 5 min (power) · 1.5 kV (control)	Insulation resistance @ 20 °C	≥ 100 MΩ·km (KGRES EPR)
Max. conductor temp. (KGRES / KGES)	+90 °C (KGRES EPR) · +75 °C (KGES)	Max. short-circuit temperature	+250 °C (KGRES) · +200 °C (KGES)
Ambient temperature range	-30 °C to +50 °C	Min. bending radius	5 × cable outer diameter
Max. tensile load	24.5 N/mm ² (2.5 kgf/mm ²) with central C	Crush & impact resistance	Profiled central cradle prevents inter-core
Flame retardancy	GOST IEC 60332-1-2 underground mine flame	Oil & hydraulic emulsion	GOST 24334 RShN-1 oil-resistant jacket
Abrasion & tear resistance	Heavy-duty longwall coal-face rubber	Standards	GOST 24334 / TU 16.K73 (КГЭС / КГРЭС)

Sizes

10 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 KGES / KGRES configurations 10 sizes						
☐ KGRES 3×16+1×10+3×2.5	3×16 + 1×10 + 3×2.5	16	33.5	640	1,480	168
☐ KGRES 3×25+1×10+3×2.5	3×25 + 1×10 + 3×2.5	25	37.2	900	1,890	186
☐ KGRES 3×35+1×16+3×2.5	3×35 + 1×16 + 3×2.5	35	41.0	1,245	2,380	205
☐ KGRES 3×50+1×16+3×2.5	3×50 + 1×16 + 3×2.5	50	45.5	1,680	3,020	228
☐ KGRES 3×70+1×25+3×2.5	3×70 + 1×25 + 3×2.5	70	50.8	2,340	3,910	254
☐ KGRES 3×95+1×35+3×2.5	3×95 + 1×35 + 3×2.5	95	56.2	3,170	5,010	281
☐ KGRES 3×120+1×35+3×2.5	3×120 + 1×35 + 3×2.5	120	60.8	3,890	5,980	304
☐ KGES 3×50+1×16+4×2.5	3×50 + 1×16 + 4×2.5 (KGES)	50	46.2	1,705	3,110	231
☐ KGES 3×70+1×25+4×2.5	3×70 + 1×25 + 4×2.5 (KGES)	70	51.5	2,365	4,010	258
☐ KGES 3×95+1×35+4×2.5	3×95 + 1×35 + 4×2.5 (KGES)	95	57.0	3,195	5,120	285

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per GOST 24334 / TU 16.K73 (КГЭС / КГРЭС).

Electrical & ampacity data

10 sizes

Configuration	Max. DCR @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V _{rms}
3×16 + 1×10 + 3×2.5	1.240	93	79	136	3,500
3×25 + 1×10 + 3×2.5	0.799	122	104	151	3,500
3×35 + 1×16 + 3×2.5	0.568	150	128	168	3,500
3×50 + 1×16 + 3×2.5	0.396	187	159	192	3,500
3×70 + 1×25 + 3×2.5	0.279	229	195	226	3,500
3×95 + 1×35 + 3×2.5	0.211	276	235	267	3,500
3×120 + 1×35 + 3×2.5	0.165	319	271	308	3,500
3×50 + 1×16 + 4×2.5 (KGES)	0.396	187	159	192	3,500
3×70 + 1×25 + 4×2.5 (KGES)	0.279	229	195	226	3,500
3×95 + 1×35 + 4×2.5 (KGES)	0.211	276	235	267	3,500

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

Standards and approvals

- ✓ GOST 24334
- ✓ TU 16.K73
- ✓ EN 10204 3.1

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

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Email

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Web

tebaoflex.com/cables/kges-kgres-screened-mining-coal-cutter-rubber-trailing-cable



Typical values for this cable type, based on GOST 24334 / TU 16.K73 (КГЭС / КГРЭС). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.