



GOST KGE / KGESh screened mining & excavator cables

KOGRESH

Optical-Power Composite Screened Mining Trailing Cable

GOST 24334 / TU 3541 660/1140 V & 1.9/3.3 kV optical-power hybrid coal-shearer cable



GOST 24334 / TU 3541

660/1140 V · 1.9/3.3 kV

Power + G.657A2 / OM3 Fibre

Application

KOGRESH (КОГРЭШ / КОГРЭСШ) is an optical-power composite (O = оптический модуль) +90 °C EPR-insulated (P) screened (Э) underground mine (Ш) trailing cable for 660/1140 V and 1.9/3.3 kV automated longwall coal shearers and roadheaders, combining 3 phase

Typical uses: Automated & unmanned longwall coal faces, Remote-controlled roadheaders, Smart mine Gigabit Ethernet & video, 1140 V & 3300 V shearer telemetry

Construction



Cross-section, not to scale

1	Phase, earth & control conductors	GOST 22483 Class 5
2	Cradle & optical fibre module (O)	TU 3541 / ITU-T G.657A2
3	+90 °C EPR insulation (P)	GOST 24334 / TU 3541
4	Phase & control screens (Э)	GOST 24334
5	Inner sheath & anti-tear braid	TU 3541
6	Outer mine sheath (Ш)	GOST 24334

Technical data

Typical values

Rated voltage U0/U	660/1140 V (0.66/1.14 kV) & 1.9/3.3 kV AC	AC routine test voltage	3.5 kV rms (1.14 kV) · 6.5 kV rms (3.3 kV)
Control core rating	220/380 V AC screened pilot/control	Insulation resistance @ 20 °C	≥ 100 MΩ·km
Max. conductor operating temp.	+90 °C continuous (P EPR)	Max. short-circuit temperature	+250 °C (5 s)
Ambient temperature range	-30 °C to +55 °C	Min. bending radius (dynamic)	6 × D (1.14 kV) · 8 × D (3.3 kV)
Max. tensile load	24.5 N/mm ² on copper cross-section	Optical element crush resistance	≥ 3000 N/100 mm radial crush protection
Fibre type options	ITU-T G.657A2 bend-insensitive SM (9/125)	Attenuation @ 1310 / 1550 nm (SM)	≤ 0.40 dB/km @ 1310 nm · ≤ 0.30 dB/km @
Attenuation @ 850 / 1300 nm (OM3)	≤ 3.5 dB/km @ 850 nm · ≤ 1.5 dB/km @ 1300 nm	Standard fibre count	4, 6, 8, or 12 fibres in aramid-reinforced
Flame retardancy	GOST IEC 60332-1-2 underground mine flame	Oil & hydraulic emulsion	DIN EN 60811-404 / GOST RShN-1
Abrasion & tear resistance	Heavy-duty longwall coal-face polychloroprene	Standards	GOST 24334 / TU 3541 (КОГРЭШ) / ITU-T G.657A2

Sizes

8 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 KOGRESh configurations 8 sizes						
☐ KOGRESh 3×35+1×16+3×2.5+6FO(G.657A2) - 1140 V	3×35 + 1×16E + 3×2.5 + 6FO (1140 V)	35	42.5	1,245	2,490	255
☐ KOGRESh 3×50+1×16+3×2.5+6FO(G.657A2) - 1140 V	3×50 + 1×16E + 3×2.5 + 6FO (1140 V)	50	47.0	1,680	3,150	282
☐ KOGRESh 3×70+1×25+3×2.5+8FO(G.657A2) - 1140 V	3×70 + 1×25E + 3×2.5 + 8FO (1140 V)	70	52.2	2,340	4,050	313
☐ KOGRESh 3×95+1×35+3×2.5+8FO(G.657A2) - 1140 V	3×95 + 1×35E + 3×2.5 + 8FO (1140 V)	95	57.5	3,170	5,180	345
☐ KOGRESh 3×120+1×35+3×2.5+12FO(G.657A2) - 1140 V	3×120 + 1×35E + 3×2.5 + 12FO (1140 V)	120	62.0	3,890	6,160	372
☐ KOGRESh 3×50+1×25+3×4+8FO(G.657A2) - 1.9/3.3 kV	3×50 + 1×25E + 3×4 + 8FO (1.9/3.3 kV)	50	51.2	1,830	3,790	307
☐ KOGRESh 3×70+1×35+3×4+8FO(G.657A2) - 1.9/3.3 kV	3×70 + 1×35E + 3×4 + 8FO (1.9/3.3 kV)	70	56.5	2,510	4,790	339
☐ KOGRESh 3×95+1×50+3×4+12FO(G.657A2) - 1.9/3.3 kV	3×95 + 1×50E + 3×4 + 12FO (1.9/3.3 kV)	95	62.0	3,390	6,040	372

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per GOST 24334 / TU 3541 (КОГРЭШ).

Electrical & ampacity data

8 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
3×35 + 1×16E + 3×2.5 + 6FO (1140 V)	0.568	150	128	168	3,500
3×50 + 1×16E + 3×2.5 + 6FO (1140 V)	0.396	187	159	192	3,500
3×70 + 1×25E + 3×2.5 + 8FO (1140 V)	0.279	229	195	226	3,500
3×95 + 1×35E + 3×2.5 + 8FO (1140 V)	0.211	276	235	267	3,500
3×120 + 1×35E + 3×2.5 + 12FO (1140 V)	0.165	319	271	308	3,500
3×50 + 1×25E + 3×4 + 8FO (1.9/3.3 kV)	0.396	187	159	192	6,500
3×70 + 1×35E + 3×4 + 8FO (1.9/3.3 kV)	0.279	229	195	226	6,500
3×95 + 1×50E + 3×4 + 12FO (1.9/3.3 kV)	0.211	276	235	267	6,500

– 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 3541
- ✓ ITU-T G.657A2 / ISO OM3
- ✓ EN 10204 3.1 + OTDR

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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Typical values for this cable type, based on GOST 24334 / TU 3541 (КОГРЭШ). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.