



GOST 24334 Industrial & Welding Rubber Cables

KGtN / AKGtN

Heat-Resistant Flexible Rubber Power and Welding

GOST 24334 · 660 V AC / 1000 V DC · +90 °C heat-resistant ('T') · Oil/flame PCP ('n') ·



GOST 24334

660 V AC / 1000 V DC

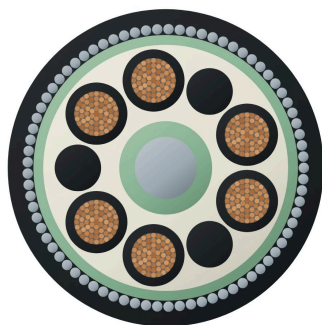
Heat-Resistant 'T' + PCP 'n'

Application

KGtN (flexible copper) and AKGtN (flexible aluminium) are heat-resistant ('T', +90 °C) flexible rubber power and arc-welding cables manufactured to GOST 24334 / TU 16.K73. The 'n' suffix specifies an oil-resistant, flame-retardant polychloroprene (nairit)

Typical uses: Foundries & Steelworks, Manual & Automated Arc Welding, Overhead Bridge & Gantry Cranes, Cement Kiln & Glass Plant Auxiliaries, Tropical & Hot-Climate Mining

Construction



Cross-section, not to scale

1	Flexible Cu (KGtN) or Al (AKGtN)	GOST 22483 / IEC 60228
2	PET thermal separator film	GOST 24334
3	+90 °C heat-resistant rubber ('T')	GOST 24334
4	Oil & flame-retardant PCP sheath ('n')	GOST 24334

Technical data

Typical values

Rated voltage U0/U	660 V AC (up to 400 Hz) / 1000 V DC
Insulation resistance at +20 °C	≥ 50 MΩ·km
Welding duty compatibility	AC & DC arc welding up to 1000 A
Max. conductor operating temp.	+90 °C continuous ('T' heat grade)
Operating ambient range	-30 °C to +55 °C
Weld spatter resistance	Thermoset polychloroprene ('n')
Min. bend radius (dynamic)	8 × overall diameter (D)
Max. tensile pull (AKGTn Al)	10 N/mm ² of total aluminium area Al)
Sheath elongation at break	≥ 300 %
Flame retardance ('n')	GOST / IEC 60332-1-2 self-extinguishing
Solar UV & tropical climate	Sunlight and mould resistant
Abrasion & slag spatter	Heavy-duty welding rubber sheath
Standards	GOST 24334 / TU 16.K73

Routine AC test voltage	2.5 kV rms / 5 min
Conductor standard	GOST 22483 / IEC 60228
Operating frequency	50–400 Hz & DC
Max. short-circuit temperature	+250 °C (max. 5 s)
Difference vs standard KG	+90 °C conductor vs +75 °C on KG
Min. installation temperature	-15 °C without pre-heating
Max. tensile pull (KG Tn Cu)	15 N/mm ² of total copper area Cu)
Sheath tensile strength	≥ 10.8 MPa (RShN compound)
Dynamic flexing cycles	≥ 30,000 reverse bend cycles
Mineral oil & lubricant ('n')	Oil-resistant polychloroprene RShN
Ozone & hot-air ageing	Heat-stabilised RTI-1 & RShN elastomers
Halogen status	Polychloroprene elastomer

Sizes

12 standard constructions

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

Order designation	Type & Core Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
KG Tn — Flexible Class 5 copper conductor (+90 °C heat-resistant) 9 sizes						
☐ KG Tn 1×25 (Cu welding/power)	1×25 (Cu)	25	12.2	240	325	98
☐ KG Tn 1×35 (Cu welding/power)	1×35 (Cu)	35	13.6	336	435	109
☐ KG Tn 1×50 (Cu welding/power)	1×50 (Cu)	50	15.8	480	610	126
☐ KG Tn 1×70 (Cu welding/power)	1×70 (Cu)	70	17.8	672	830	142
☐ KG Tn 3×4+1×2.5 (Cu)	3×4 + 1×2.5 (Cu)	4	15.6	139	345	125
☐ KG Tn 3×10+1×6 (Cu)	3×10 + 1×6 (Cu)	10	20.8	346	690	166
☐ KG Tn 3×16+1×10 (Cu)	3×16 + 1×10 (Cu)	16	24.2	557	1,010	194
☐ KG Tn 3×25+1×10 (Cu)	3×25 + 1×10 (Cu)	25	28.0	816	1,410	224
☐ KG Tn 3×35+1×16 (Cu)	3×35 + 1×16 (Cu)	35	31.4	1,162	1,890	251
AKGTn — Flexible multi-strand aluminium conductor (+90 °C heat-resistant) 3 sizes						
☐ AKGTn 1×35 (Al welding/power)	1×35 (Al)	35	13.8	0	215	110
☐ AKGTn 1×50 (Al welding/power)	1×50 (Al)	50	16.0	0	295	128
☐ AKGTn 3×25+1×10 (Al)	3×25 + 1×10 (Al)	25	28.4	0	860	227

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

Electrical & ampacity data

12 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}
1×25 (Cu)	0.780	123	105	114	2,500
1×35 (Cu)	0.554	152	129	129	2,500
1×50 (Cu)	0.386	189	161	150	2,500
1×70 (Cu)	0.272	233	198	180	2,500
3×4 + 1×2.5 (Cu)	4.950	40	34	84	2,500
3×10 + 1×6 (Cu)	1.910	70	60	92	2,500
3×16 + 1×10 (Cu)	1.210	93	79	101	2,500
3×25 + 1×10 (Cu)	0.780	123	105	114	2,500
3×35 + 1×16 (Cu)	0.554	152	129	129	2,500
1×35 (Al)	0.909	152	129	129	2,500
1×50 (Al)	0.633	189	161	150	2,500
3×25 + 1×10 (Al)	1.279	123	105	114	2,500

– Current ratings apply at +25/+30 °C ambient in free air; apply standard derating factors for elevated ambient or drum coiling.

Standards and approvals

✓ GOST 24334 / TU 16.K73

✓ IEC 60332-1-2

✓ CE / EAC

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

info@tebaoflex.com

Web

tebaoflex.com/cables/kgtn-akgtn-heat-resistant-flexible-rubber-power-and-welding-cable



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