High-temperature mica, glass-braid & silicone cables

AC Induction 1000V 450°C Cable

AC Induction 1,000 V 450 °C Air-Cooled High-Current Cable

450 °C 1,000 V nickel-plated copper mica-glass heavy induction furnace lead

IEC 60228 Class 5 | 1000 V · +450 °C | High-Temp Mica



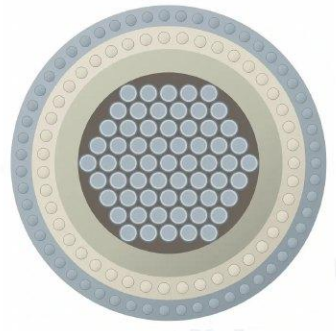
Application

AC Induction 1,000 V 450 °C wraps heavy-gauge nickel-plated copper strands in overlapping phlogopite mica tapes and a double grey fibreglass outer braid for air-cooled 1,000 V induction heating and kiln feeders.

Typical uses: Steelworks, rolling mills & aluminum smelters, Industrial ovens, ceramic kilns & glassworks, Commercial heating elements & cartridge heaters, Power plants, boiler rooms & hot switchgear

Construction





Cross-section, not to scale

1	**Conductor**	ASTM B355 Class K stranded nickel-plated copper (27% Ni high-temp) · ASTM B355 Nickel Cu
2	**Mica / PTFE tape dielectric**	Multi-layer overlapping phlogopite mica tape dielectric (1,000 V) · IEC 60228 Class 5
3	**Fibreglass outer braid**	Grey high-temperature double-braided fibreglass outer jacket (mica/glass) · 450 °C Continuous Air-Cooled

Technical data

Typical values

Rated voltage	1000 V	Test voltage	4 kV AC
Conductor	Nickel-Plated Cu	Core / dielectric	Multi-layer overlapping phlogopite mica
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-60 °C to +450 °C
Temp. range (flexing)	-40 °C to +400 °C	Peak / short-circuit	+600 °C (short-term)
Min. bending radius	10 × OD	Primary performance	450 °C Continuous Air-Cooled
Environment / duty	1,000 V Mica Dielectric	Mechanical / special	Double Fibreglass Braid
Outer finish	Grey high-temperature double-braided		

Sizes

10 standard constructions

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

Conductor mm²	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 10×D mm
☐ 1×16 mm²	8.7	1.355	154	298	87
☐ 1×25 mm²	10.1	0.874	240	448	101
☐ 1×35 mm²	11.3	0.621	336	611	113
☐ 1×50 mm²	12.9	0.432	480	856	129
☐ 1×70 mm²	14.7	0.305	672	1,181	147
☐ 1×95 mm²	16.6	0.231	912	1,584	166
☐ 1×120 mm²	18.3	0.180	1,152	1,987	183
☐ 1×150 mm²	20.1	0.144	1,440	2,469	201
☐ 1×185 mm²	21.9	0.119	1,776	3,026	219
☐ 1×240 mm²	24.5	0.090	2,304	3,902	245

- Conductor DC resistance R20 at 20 °C per ASTM B355 Nickel Cu.
- Minimum bending radius calculated at 10 × nominal outer diameter (OD). Custom terminations available on request.

Standards and approvals

- IEC 60228 Class 5
- DIN VDE 0250 (ref.)
- ASTM B355 Nickel Cu
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

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/ac-induction-1000v-450c-mica-glass-high-current-cable

Typical values for this cable type, based on IEC 60228 Class 5 · DIN VDE 0250 (ref.) · ASTM B355 Nickel Cu. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.