High-temperature mica, glass-braid & silicone cables

UL 5390/5400 550°C Mica Wire

UL 5390 / 5400 550 °C 600 V Mica-Glass High-Temp Wire

Extreme 550 °C pure nickel / nickel-Cu mica-tape fibreglass furnace wire

UL AWM Style 5390 | **600 V · +550 °C** | **High-Temp Mica**

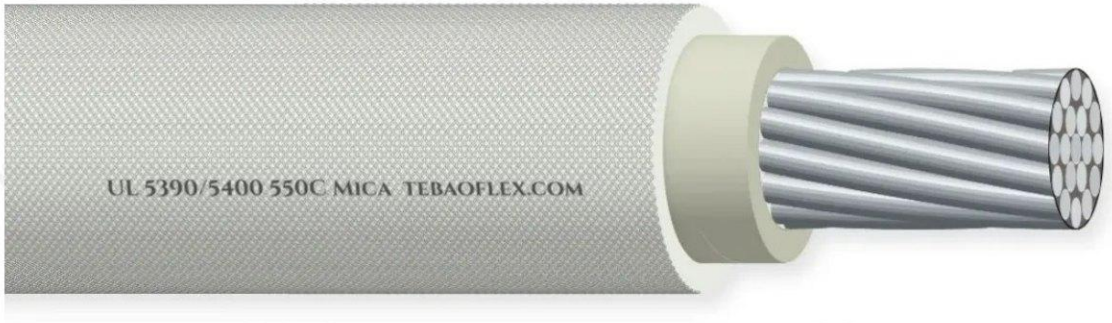


Application

UL 5390 / 5400 550 °C Mica Wire wraps stranded nickel-plated copper (or pure nickel) in multi-layer phlogopite mica tape under a white high-temperature treated fibreglass outer braid rated 600 V and +550 °C continuous.

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 primary dielectric · UL AWM Style 5390
3	**Fibreglass outer braid**	White high-temperature varnished fibreglass outer braid (mica/glass) · 550 °C Continuous Rating

Technical data

Typical values

Rated voltage	600 V	**Test voltage**	2.5 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 +550 °C
Temp. range (flexing)	-40 °C to +450 °C	**Peak / short-circuit**	+600 °C (short-term)
Min. bending radius	8 × OD	**Primary performance**	550 °C Continuous Rating
Environment / duty	UL VW-1 Non-Flammable	**Mechanical / special**	Phlogopite Mica Barrier
Outer finish	White high-temperature varnished		

Sizes

8 standard constructions

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

	Conductor AWG	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 8×D mm
☐	1×18 AWG	2.7	25.984	8	20	22
☐	1×16 AWG	3.0	16.464	12	28	24
☐	1×14 AWG	3.5	10.158	19	43	28
☐	1×12 AWG	4.0	6.395	31	66	32
☐	1×10 AWG	4.6	4.021	49	99	37
☐	1×8 AWG	5.4	2.531	78	153	43
☐	1×6 AWG	6.4	1.590	124	237	51
☐	1×4 AWG	7.7	0.999	197	371	62

- Conductor DC resistance R20 at 20 °C per ASTM B355 Nickel Cu.
- Minimum bending radius calculated at 8 × nominal outer diameter (OD). Custom terminations available on request.

Standards and approvals

- UL AWM Style 5390
- UL AWM Style 5400
- UL 758
- 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/ul-5390-5400-550c-600v-mica-glass-high-temp-wire

Typical values for this cable type, based on UL AWM Style 5390 · UL AWM Style 5400 · UL 758. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.