Self-regulating process heating cables

ELSR-SH 250°C Heating Cable

ELSR-SH 250 °C Self-Regulating Process Heating Cable

High-temperature 250 °C fluoropolymer-jacketed self-regulating heat trace

IEC 60079-30-1 | 230 V · +250 °C | Fluoropolymer HT



Application

ELSR-SH 250 °C Heating Cable embeds dual nickel-plated copper bus wires in a conductive PTC self-regulating heating matrix with fluoropolymer insulation, tinned copper braid, and a red chemical-proof fluoropolymer jacket.

Typical uses: Petrochemical & steam-purged process piping, Refinery transfer lines, valves & storage tanks, Chemical & food-process viscosity maintenance, Power plants & hazardous-area heat tracing

Construction





Cross-section, not to scale

1	Conductor	Dual nickel-plated copper bus wires embedded in conductive PTC self-regulating heating core · IEC 60079-30-1
2	Dielectric / core insulation	Self-regulating conductive PTC heating core + fluoropolymer inner jacket · IEC 60079-30-1
3	Metallic EMC screen	Protective tinned copper wire braid (ground-fault & mechanical shield) · EMC ≥ 85% shield
4	Outer sheath	Red chemical- & steam-purge-resistant fluoropolymer outer jacket · 250 °C Max Exposure

Technical data

Typical values

Rated voltage	230 V	Test voltage	2 kV AC
Conductor	Ni-Cu + PTC Core	Insulation	Self-regulating conductive PTC heating
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-60 °C to +250 °C
Temp. range (flexing)	-40 °C to +200 °C	Peak / short-circuit	+300 °C (short-term)
Min. bending radius	6 × OD (fixed)	Flame / fire rating	250 °C Max Exposure
Thermal / chemical	Self-Regulating PTC Matrix	Mechanical / special	Cut-to-Length on Site
Outer finish	Red chemical- & steam-purge-resistant		

Sizes

4 standard constructions

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

Output · Bus Size	Outer Ø ≈ mm	Max. R20 Ω/km	Metal index kg/km	Weight ≈ kg/km	Min. bend R 6×D mm
☐ 15 W/m · 2×1.23 mm² (230 V)	6.4	15.60	28	128	38
☐ 30 W/m · 2×1.23 mm² (230 V)	6.4	15.60	28	132	38
☐ 45 W/m · 2×1.23 mm² (230 V)	6.6	15.60	30	138	40
☐ 60 W/m · 2×1.23 mm² (230 V)	6.8	15.60	32	144	41

- Conductor DC resistance R20 at 20 °C per IEC 60079-30-1.
- For flat cable geometries, Outer Ø indicates nominal bending-plane thickness; minimum bending radius is 6 × nominal thickness.

Standards and approvals

- ✓ IEC 60079-30-1
- ✓ EN 62395-1
- ✓ ATEX / IECEx (ref.)
- ✓ 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/elsr-sh-250c-self-regulating-fluoropolymer-heating-cable

Typical values for this cable type, based on IEC 60079-30-1 · EN 62395-1 · ATEX / IECEx (ref.). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.