High-current water-cooled, furnace & shunt cables

EAF Heat-Shield 500°C Cable

EAF 500 °C Heat-Shielded Water-Cooled Furnace Cable

Silicone/fibreglass radiant-heat-shielded water-cooled EAF feeder cable

IEC 60228 Class 6 | 1000 V · +500 °C | Water-Cooled HC

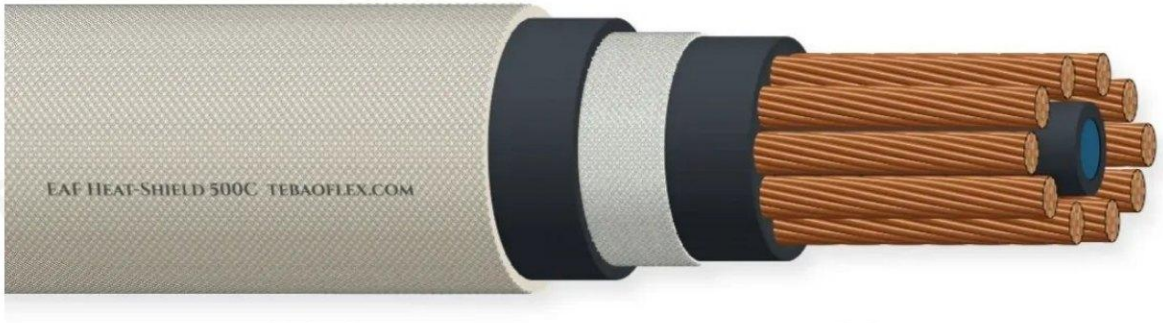


Application

EAF Heat-Shield 500 °C wraps a water-cooled multi-rope bare copper EAF hose inside a radiant-heat-reflecting fibreglass and thermal barrier jacket for direct exposure near electric arc furnace roofs and molten metal.

Typical uses: Electric arc (EAF) & submerged arc (SAF) steelworks, Medium- & high-frequency induction melting foundries, Automotive robotic spot- & seam-welding lines, Heavy DC rectifiers & metallurgical bus feeders

Construction





Cross-section, not to scale

1	**Conductor**	IEC 60228 Class 6 extra-flexible bare annealed copper · IEC 60228 Class 6
2	**Cooling core / primary dielectric**	Water-cooled EPDM hose + thermal-insulating fibreglass barrier layer · IEC 60228 Class 6
3	**Strength / pressure reinforcement**	Fibreglass thermal-barrier wrap + pressure reinforcement braid · IEC 60228 Class 6
4	**Outer sheath / hose**	Black high-temperature heat-shielded rubber & fibreglass composite outer hose · 500 °C Radiant Heat Shield

Technical data

Typical values

Rated voltage	1000 V	**Test voltage**	4 kV AC
Conductor	Bare Cu · Cl.6	**Core / dielectric**	Water-cooled EPDM hose +
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	**Temp. range (fixed)**	-25 °C to +500 °C
Temp. range (flexing)	-20 °C to +250 °C	**Peak / short-circuit**	+600 °C (short-term)
Min. bending radius	10 × OD	**Primary performance**	500 °C Radiant Heat Shield
Environment / duty	Molten Slag Splash Proof	**Mechanical / special**	Internal Water Cooling
Outer finish	Black high-temperature heat-shielded		

Sizes

7 standard constructions

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

Cross-section mm²	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 10×D mm
☐ **1×300 mm²**	**61.2**	**0.064**	**2,880**	**6,959**	**612**
☐ **1×400 mm²**	**67.0**	**0.049**	**3,840**	**8,915**	**670**
☐ **1×500 mm²**	**72.1**	**0.038**	**4,800**	**10,847**	**721**
☐ **1×630 mm²**	**78.0**	**0.029**	**6,048**	**13,332**	**780**
☐ **1×800 mm²**	**84.8**	**0.024**	**7,680**	**16,544**	**848**
☐ **1×1000 mm²**	**92.0**	**0.019**	**9,600**	**20,302**	**920**
☐ **1×1200 mm²**	**98.5**	**0.016**	**11,520**	**24,035**	**985**

- Conductor DC resistance R20 at 20 °C per IEC 60228 Class 6.
- Minimum bending radius calculated at 10 × nominal outer diameter (OD). Custom terminations available on request.

Standards and approvals

- IEC 60228 Class 6
- DIN VDE 0250 (ref.)
- EN 13501 Thermal (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/eaf-heat-shield-500c-water-cooled-furnace-cable

Typical values for this cable type, based on IEC 60228 Class 6 · DIN VDE 0250 (ref.) · EN 13501 Thermal (ref.). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.