High-current water-cooled, furnace & shunt cables

EAF Anti-Chafing Bumper Cable

EAF Anti-Chafing Bumper Water-Cooled Furnace Cable

Reinforced bumper-ribbed water-cooled EAF cable resisting phase-to-phase rub

IEC 60228 Class 6 | 1000 V · +95 °C | Water-Cooled HC

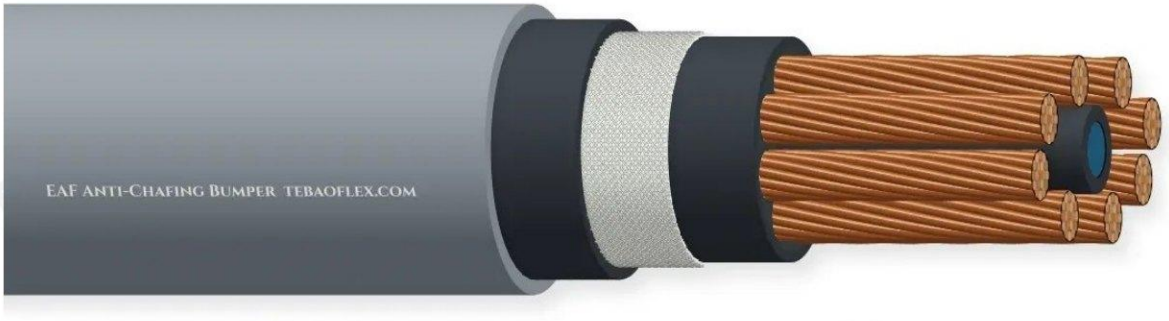


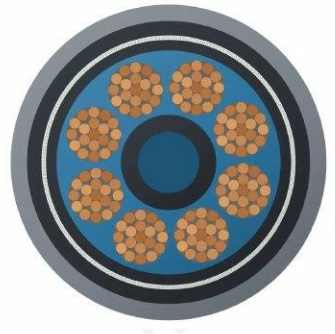
Application

EAF Anti-Chafing Bumper adds thick vulcanized grey rubber bumper ribs over a water-cooled bare copper EAF hose to prevent mechanical chafing when parallel high-current phase cables whip during furnace arcing.

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**	Pressurized water-cooled EPDM core + multi-rope bare copper conductor · IEC 60228 Class 6
3	**Strength / pressure reinforcement**	Dual textile pressure braids + molded anti-chafing outer bumper layer · IEC 60228 Class 6
4	**Outer sheath / hose**	Grey abrasion- & impact-resistant vulcanized bumper rubber outer sheath

Technical data

Typical values

Rated voltage	1000 V	**Test voltage**	4 kV AC
Conductor	Bare Cu · Cl.6	**Core / dielectric**	Pressurized water-cooled EPDM core +
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	**Temp. range (fixed)**	-25 °C to +95 °C
Temp. range (flexing)	-20 °C to +85 °C	**Peak / short-circuit**	+160 °C (5 s)
Min. bending radius	9 × OD	**Primary performance**	Anti-Chafing Bumper Ribs
Environment / duty	Electromagnetic Whip Proof	**Mechanical / special**	High-Pressure EPDM Core
Outer finish	Grey abrasion- & impact-resistant		

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 9×D mm
☐ 1×300 mm²	61.2	0.064	2,880	6,959	551
☐ 1×400 mm²	67.0	0.049	3,840	8,915	603
☐ 1×500 mm²	72.1	0.038	4,800	10,847	649
☐ 1×630 mm²	78.0	0.029	6,048	13,332	702
☐ 1×800 mm²	84.8	0.024	7,680	16,544	763
☐ 1×1000 mm²	92.0	0.019	9,600	20,302	828
☐ 1×1200 mm²	98.5	0.016	11,520	24,035	886

- Conductor DC resistance R20 at 20 °C per IEC 60228 Class 6.
- Minimum bending radius calculated at 9 × nominal outer diameter (OD). Custom terminations available on request.

Standards and approvals

- IEC 60228 Class 6
- DIN VDE 0250 (ref.)
- EN 50363-2-1
- 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-anti-chafing-bumper-water-cooled-furnace-cable

Typical values for this cable type, based on IEC 60228 Class 6 · DIN VDE 0250 (ref.) · EN 50363-2-1. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.