High-current water-cooled, furnace & shunt cables

EAF Swivel-End Sleeved Cable

EAF Swivel-End & Anti-Abrasion Sleeved Water-Cooled Cable

Torsion-relieved sleeved water-cooled EAF electrode arm feeder cable



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

Application

EAF Swivel-End Sleeved integrates fine-stranded bare copper ropes inside a water-cooled rubber core and sacrificial outer anti-abrasion sleeve built for swivel-terminal electric arc furnace mast articulation.

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 bare copper rope assembly + pressurized EPDM inner hose · IEC 60228 Class 6
3	**Strength / pressure reinforcement**	High-tensile textile pressure braid + anti-chafing outer sleeve · IEC 60228 Class 6
4	**Outer sheath / hose**	Black heavy-wall EPDM rubber outer hose with protective anti-abrasion sleeve

Technical data

Typical values

Rated voltage	1000 V	Test voltage	4 kV AC
Conductor	Bare Cu · Cl.6	Core / dielectric	Water-cooled bare copper rope assembly +
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	8 × OD	Primary performance	Swivel-End Torsion Relief
Environment / duty	Sacrificial Wear Sleeve	Mechanical / special	Continuous EAF Duty
Outer finish	Black heavy-wall EPDM rubber outer hose		

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 8×D mm
☐	1×300 mm²	55.2	0.064	2,880	6,456	442
☐	1×400 mm²	61.0	0.049	3,840	8,362	488
☐	1×500 mm²	66.1	0.038	4,800	10,250	529
☐	1×630 mm²	72.0	0.029	6,048	12,684	576
☐	1×800 mm²	78.8	0.024	7,680	15,837	630
☐	1×1000 mm²	86.0	0.019	9,600	19,533	688
☐	1×1200 mm²	92.5	0.016	11,520	23,210	740

- Conductor DC resistance R20 at 20 °C per IEC 60228 Class 6.
- Minimum bending radius calculated at 8 × nominal outer diameter (OD). Custom terminations available on request.

Standards and approvals

- IEC 60228 Class 6
- DIN VDE 0250 (ref.)
- ISO 1403 Hose
- 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-swivel-end-sleeved-water-cooled-furnace-cable

Typical values for this cable type, based on IEC 60228 Class 6 · DIN VDE 0250 (ref.) · ISO 1403 Hose. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.