High-current water-cooled, furnace & shunt cables

EAF Wear-Indicator Hose Cable

EAF Water-Cooled Cable with Dual-Layer Wear-Indicator Hose

Electric arc furnace water-cooled cable with contrasting abrasion-alert hose



DIN VDE 0250 (ref.) | 1000 V · +95 °C | Water-Cooled HC

Application

EAF Wear-Indicator Hose pairs high-current Class 6 bare copper ropes and internal water cooling with a dual-colour EPDM outer hose that reveals a bright inner indicator layer before molten-zone abrasion reaches pressure braids.

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**	Central water-cooled bare copper rope bundle + contrasting warning inner rubber · DIN VDE 0250 (ref.)
3	**Strength / pressure reinforcement**	Dual synthetic/aramid pressure reinforcement braids · DIN VDE 0250 (ref.)
4	**Outer sheath / hose**	Black heavy-duty EPDM rubber outer hose with high-contrast wear-indicator sub-layer

Technical data

Typical values

Rated voltage	1000 V	**Test voltage**	4 kV AC
Conductor	Bare Cu · Cl.6	**Core / dielectric**	Central water-cooled bare copper rope
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**	Visual Wear-Alert Layer
Environment / duty	Arc-Furnace Slag Resistant	**Mechanical / special**	High-Pressure Water Hose
Outer finish	Black heavy-duty 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

- DIN VDE 0250 (ref.)
- IEC 60228 Class 6
- 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-wear-indicator-hose-water-cooled-furnace-cable

Typical values for this cable type, based on DIN VDE 0250 (ref.) · IEC 60228 Class 6 · 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.