

High-current water-cooled, furnace & shunt cables

WC Tin-Plated 3000 V Cable

WC Tin-Plated 3,000 V Water-Cooled HV Induction Cable

High-voltage 3,000 V water-cooled tinned copper induction & plasma cable

IEC 60228 Class 6 | 3000 V · +90 °C | Water-Cooled HC

Application

WC Tin-Plated 3,000 V pairs corrosion-resistant Class 6 tinned copper stranding and internal deionized-water cooling inside a heavy-wall 3,000 V dielectric EPDM rubber hose for HV induction heaters and plasma torches.

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 tinned annealed copper · IEC 60228 Class 6
2	**Cooling core / primary dielectric**	Heavy-wall high-dielectric EPDM water-cooling jacket around tinned copper · IEC 60228 Class 6
3	**Strength / pressure reinforcement**	Insulating high-dielectric synthetic reinforcement braid · IEC 60228 Class 6
4	**Outer sheath / hose**	Black ozone- & corona-resistant reinforced EPDM rubber outer hose · 3,000 V HV Dielectric Wall

Technical data

Typical values

Rated voltage	3000 V	**Test voltage**	10 kV AC
Conductor	Tinned Cu · Cl.6	**Core / dielectric**	Heavy-wall high-dielectric EPDM
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	**Temp. range (fixed)**	-25 °C to +90 °C
Temp. range (flexing)	-20 °C to +80 °C	**Peak / short-circuit**	+160 °C (5 s)
Min. bending radius	10 × OD	**Primary performance**	3,000 V HV Dielectric Wall
Environment / duty	Tinned Cu Corrosion Proof	**Mechanical / special**	10 kV Routine AC Test
Outer finish	Black ozone- & corona-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 10×D mm
☐	1×120 mm²	47.6	0.166	1,152	3,336	476
☐	1×150 mm²	50.3	0.133	1,440	3,953	503
☐	1×185 mm²	53.2	0.109	1,776	4,666	532
☐	1×240 mm²	57.3	0.082	2,304	5,774	573
☐	1×300 mm²	61.2	0.066	2,880	6,959	612
☐	1×400 mm²	67.0	0.050	3,840	8,915	670
☐	1×500 mm²	72.1	0.040	4,800	10,847	721

- 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
- IEC 60502 (ref.)
- DIN VDE 0250 (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/wc-tin-plated-3000v-water-cooled-hv-induction-cable

Typical values for this cable type, based on IEC 60228 Class 6 · IEC 60502 (ref.) · DIN VDE 0250 (ref.). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.