High-current water-cooled, furnace & shunt cables

WC Hollow-Core 10kHz Litz

WC Hollow-Core 10 kHz Litz Water-Cooled Induction Cable

Enamel-insulated Litz wire water-cooled cable for 10 kHz HF induction heating



IEC 60317 (Litz) | 1000 V · +90 °C | Water-Cooled HC

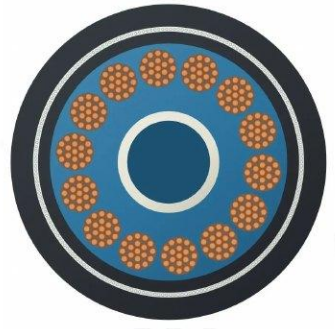
Application

WC Hollow-Core 10 kHz Litz braids individually insulated fine bare copper Litz strands around a hollow water-cooling core inside a reinforced EPDM hose to slash skin-effect and proximity losses at up to 10 kHz.

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**	Individually enamel-insulated copper Litz strands + central coolant hose · IEC 60317 (Litz)
3	**Strength / pressure reinforcement**	Non-magnetic textile pressure reinforcement braid · IEC 60317 (Litz)
4	**Outer sheath / hose**	Black reinforced non-conductive EPDM rubber outer hose · Up to 10 kHz Low Skin Loss

Technical data

Typical values

Rated voltage	1000 V	**Test voltage**	4 kV AC
Conductor	Bare Cu · Cl.6	**Core / dielectric**	Individually enamel-insulated copper Litz
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	8 × OD	**Primary performance**	Up to 10 kHz Low Skin Loss
Environment / duty	Insulated Copper Litz Core	**Mechanical / special**	Hollow Water-Cooled Bore
Outer finish	Black reinforced non-conductive EPDM		

Sizes

6 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
☐ 1×95 mm²	39.0	0.206	912	2,445	312
☐ 1×150 mm²	44.3	0.129	1,440	3,544	354
☐ 1×240 mm²	51.3	0.080	2,304	5,305	410
☐ 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

- 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 60317 (Litz)
- ✓ IEC 60228 Class 6
- ✓ 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-hollow-core-10khz-litz-water-cooled-induction-cable

Typical values for this cable type, based on IEC 60317 (Litz) · IEC 60228 Class 6 · 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.