High-current water-cooled, furnace & shunt cables

WC Center-Channel 95-500 Cable

WC Center-Channel 95–500 mm² Water-Cooled Power Cable

95–500 mm² flexible copper ropes around a central water-cooling core hose



IEC 60228 Class 6 | 1000 V · +90 °C | Water-Cooled HC

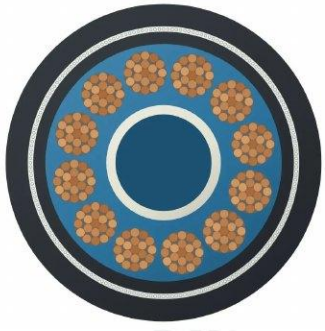
Application

WC Center-Channel 95–500 arranges fine-stranded bare copper ropes symmetrically around an open central water channel inside a reinforced black EPDM hose for induction furnaces, resistance welders, and heavy rectifiers.

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 open-bore coolant channel with bare copper rope layer · IEC 60228 Class 6
3	**Strength / pressure reinforcement**	Synthetic textile pressure-retaining reinforcement braid · IEC 60228 Class 6
4	**Outer sheath / hose**	Black braided-textile reinforced EPDM rubber outer hose

Technical data

Typical values

Rated voltage	1000 V	**Test voltage**	3.5 kV AC
Conductor	Bare Cu · Cl.6	**Core / dielectric**	Central open-bore coolant channel with
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**	Direct Center Water Cooling
Environment / duty	Zero-Leak Pressure Hose	**Mechanical / special**	High Flex Fatigue Life
Outer finish	Black braided-textile reinforced EPDM		

Sizes

8 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
☐ 1×120 mm²	41.6	0.161	1,152	2,951	333
☐ 1×150 mm²	44.3	0.129	1,440	3,544	354
☐ 1×185 mm²	47.2	0.106	1,776	4,233	378
☐ 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 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/wc-center-channel-95-500mm2-water-cooled-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.