High-current water-cooled, furnace & shunt cables

Silicone HC 3.6/6 kV Cable

Silicone HC 3.6/6 kV 180 °C MV High-Current Flexible Cable

Medium-voltage 3.6/6 kV 180 °C red-oxide flexible silicone single-core cable



DIN VDE 0250 | 3.6/6 kV · +180 °C | Air-Cooled HC

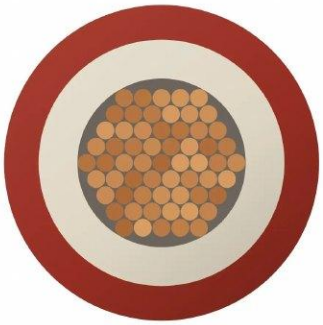
Application

Silicone HC 3.6/6 kV combines Class 6 bare copper (50–400 mm²) with heavy-wall medium-voltage 3.6/6 kV red-oxide 180 °C halogen-free silicone insulation for MV induction furnaces, test labs, and traction transformers.

Typical uses: Power transformers, switchgear & busduct joints, Resistance welding guns & heavy fabrication shops, BESS battery racks, EV test benches & rectifiers, Steel mills, foundries & high-current power bays

Construction





Cross-section, not to scale

1	**Conductor**	IEC 60228 Class 6 extra-flexible bare annealed copper · IEC 60228 Class 6
2	**Heavy-wall extruded insulation**	Heavy-wall red-oxide 3.6/6 kV corona-resistant silicone rubber · DIN VDE 0250

Technical data

Typical values

Rated voltage	3.6/6 kV	Test voltage	11 kV AC
Conductor	Bare Cu · Cl.6	Core / dielectric	Heavy-wall red-oxide 3.6/6 kV
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-60 °C to +180 °C
Temp. range (flexing)	-35 °C to +180 °C	Peak / short-circuit	+250 °C (short-term)
Min. bending radius	10 × OD	Primary performance	3.6/6 kV Medium Voltage
Environment / duty	11 kV AC Routine Test	Mechanical / special	180 °C Halogen-Free Silicone
Outer finish	Red-oxide 3.6/6 kV halogen-free 180 °C		

Sizes

9 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
☐ 1×50 mm²	22.9	0.386	480	974	229
☐ 1×70 mm²	24.7	0.272	672	1,284	247
☐ 1×95 mm²	26.6	0.206	912	1,664	266
☐ 1×120 mm²	28.3	0.161	1,152	2,041	283
☐ 1×150 mm²	30.1	0.129	1,440	2,490	301
☐ 1×185 mm²	32.0	0.106	1,776	3,010	320
☐ 1×240 mm²	34.7	0.080	2,304	3,824	347
☐ 1×300 mm²	37.2	0.064	2,880	4,701	372
☐ 1×400 mm²	41.0	0.049	3,840	6,161	410

- 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

- DIN VDE 0250
- IEC 60502-2 (ref.)
- IEC 60228 Class 6
- 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/silicone-hc-3-6-6kv-180c-mv-high-current-cable

Typical values for this cable type, based on DIN VDE 0250 · IEC 60502-2 (ref.) · IEC 60228 Class 6. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.