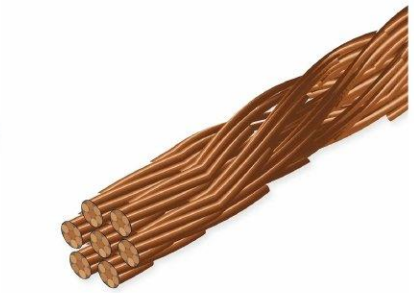
High-current water-cooled, furnace & shunt cables

AC Bare-Cu Rope 120-700

AC Bare Copper Flexible Rope 120–700 mm² Uninsulated Lead



Uninsulated extra-flexible Class 6 bare copper rope for busbars & earthing

DIN 46438 | 1000 V · +150 °C | Bare Cu Shunt

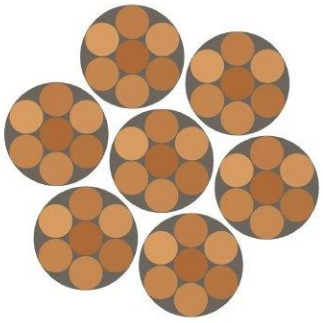
Application

AC Bare Cu Rope 120–700 is a 7×7 extra-flexible uninsulated electrolytic bare copper rope conductor designed for maximum natural air-cooling convection on transformer expansion joints, furnace shunts, and heavy earthing.

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	Uninsulated outer weave / lay	Uninsulated bare electrolytic copper rope outer lay · DIN 46438

Technical data

Typical values

Rated voltage	1000 V	Test voltage	3 kV AC
Conductor	Bare Cu · Cl.6	Core / dielectric	Uninsulated 7×7 rope-lay electrolytic
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-60 °C to +150 °C
Temp. range (flexing)	-60 °C to +150 °C	Peak / short-circuit	+160 °C (5 s)
Min. bending radius	6 × OD	Primary performance	99.95% Electrolytic Cu-ETP
Environment / duty	Max Air Convection Cooling	Mechanical / special	Ultra-Flex Rope-Lay
Outer finish	Uninsulated bare electrolytic copper rope		

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 6×D mm
☐ 1×120 mm²	15.3	0.161	1,152	1,331	92
☐ 1×150 mm²	17.1	0.129	1,440	1,662	103
☐ 1×185 mm²	19.0	0.106	1,776	2,048	114
☐ 1×240 mm²	21.7	0.080	2,304	2,656	130
☐ 1×300 mm²	24.2	0.064	2,880	3,318	145
☐ 1×400 mm²	28.0	0.049	3,840	4,422	168
☐ 1×500 mm²	31.3	0.038	4,800	5,526	188
☐ 1×700 mm²	37.0	0.027	6,720	7,734	222

- Conductor DC resistance R20 at 20 °C per IEC 60228 Class 6.
- Minimum bending radius calculated at 6 × nominal outer diameter (OD). Custom terminations available on request.

Standards and approvals

- DIN 46438
- IEC 60228 Class 6
- EN 13602 Cu-ETP
- 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/ac-bare-copper-flexible-rope-120-700mm2-shunt

Typical values for this cable type, based on DIN 46438 · IEC 60228 Class 6 · EN 13602 Cu-ETP. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.