High-current water-cooled, furnace & shunt cables

AC Laminated Cu-Foil Lead

AC Laminated Copper-Foil Flexible Busbar Expansion Lead

Stacked 0.10–0.20 mm bare copper foil strips for ultra-high-current busbars

DIN 46433 | 1000 V · +150 °C | Bare Cu Shunt



Application

AC Laminated Cu-Foil Lead stacks dozens of precision-rolled 0.10–0.20 mm Cu-ETP bare copper foils into a compact flat flexible expansion connector for high-current generators, busducts, EV/BESS racks, and furnace 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	**Uninsulated outer weave / lay**	Uninsulated bare copper foil stack outer surface · DIN 46433

Technical data

Typical values

Rated voltage	1000 V	**Test voltage**	3 kV AC
Conductor	Bare Cu · Cl.6	**Core / dielectric**	Stacked uninsulated electrolytic bare
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	5 × OD	**Primary performance**	0.10–0.20 mm Cu-ETP Foils
Environment / duty	Press-Welded Terminal Ready	**Mechanical / special**	Compact High Ampacity
Outer finish	Uninsulated bare copper foil stack outer		

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 (W × H mm)	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 5×D mm
☐	1×50 mm² (25×2.0 mm)	2.0	0.386	455	529	10.0
☐	1×100 mm² (40×2.5 mm)	2.5	0.192	910	1,052	12.0
☐	1×150 mm² (50×3.0 mm)	3.0	0.129	1,365	1,576	15.0
☐	1×240 mm² (60×4.0 mm)	4.0	0.080	2,184	2,518	20.0
☐	1×400 mm² (80×5.0 mm)	5.0	0.049	3,640	4,192	25.0
☐	1×630 mm² (100×6.3 mm)	6.3	0.029	5,733	6,599	32.0
☐	1×1000 mm² (100×10.0 mm)	10.0	0.019	9,100	10,471	50.0

- Conductor DC resistance R20 at 20 °C per IEC 60228 Class 6.
- For flat braided shunts and foils, Outer Ø indicates nominal thickness in the bending plane.

Standards and approvals

- DIN 46433
- EN 13602 Cu-ETP
- IEC 61439 (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/ac-laminated-copper-foil-flexible-busbar-shunt

Typical values for this cable type, based on DIN 46433 · EN 13602 Cu-ETP · IEC 61439 (ref.). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.