wind turbine tower, DLO & blade grounding power cable

0.6/1 kV 1C AL +120 °C EBXL-XLPE/HF-PO

0.6/1 kV Single-Core (16–630 mm²) Class 2 Aluminum +120 °C High-Ampaci

IEC 60502-1 / EN 60228 · 0.6/1 kV · Wind turbine tower, dlo & blade grounding power cable



IEC 60502-1 / EN 60228 | 0.6/1 kV (-40 to +120 °C) | HF-PO Low-Smoke Zero-Halogen Outer S

Application

0.6/1 kV Single-Core (16–630 mm²) Class 2 Aluminum +120 °C High-Ampacity EBXL-XLPE / HF-PO LSZH Wind Tower Cable (IEC 60502-1 / EN 60228) engineered for 0.6/1 kV wind turbine service across -40 to +120 °C (min. bend radius 10 × OD).

Typical uses: Wind Turbine Tower Vertical Power Feeders (Cu & Al), North American UL 2277 WTTC & 2 kV DLO Wind Turbines, IEC 61400-24 Wind Blade Lightning Down-Conductors, Nacelle Converter Busbars & Transformer Interconnects

Construction





Cross-section, not to scale

1. Class 2 Stranded Aluminum Conductor (16-
2. +120 °C EBXL-XLPE Primary Insulation
3. HF-PO Low-Smoke Zero-Halogen Outer Sheat

Technical data

Typical values

Rated voltage / operating system	0.6/1 kV (IEC 60502-1 & EN 60228 +120 °C EBXL-XLPE/HF-PO Single-Core Aluminum Tower Specification)	**Core / conductor construction**	Class 2 Stranded Aluminum Conductor (16-630 mm²) — Circular compacted stranded aluminum for vertical tower runs
Primary dielectric / insulation	+120 °C EBXL-XLPE Primary Insulation — Electron-beam cross-linked polyethylene with high current rating	**Continuous operating temperature**	−40…+120 °C (wind turbine nacelle, hub & tower duty)
Low-temperature torsion & cold bend	Verified cold-flex and torsion endurance across −40…+120 °C per IEC 60502-1 & EN 60228 +120 °C EBXL-XLPE/HF-PO Single-Core Aluminum Tower Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	HF-PO Low-Smoke Zero-Halogen Outer Sheath — Halogen-free flame-retardant polyolefin jacket	**Minimum bending radius**	10 × OD
Intermediate screen / separator / core layer	+120 °C EBXL-XLPE Primary Insulation — Electron-beam cross-linked polyethylene with high current rating	**Oil, grease, ozone & UV resistance**	Resistant to wind turbine gearbox oil, hydraulic fluid, ozone and UV weathering per IEC 60502-1 & EN 60228 +120 °C EBXL-XLPE/HF-PO Single-Core Aluminum Tower Specification
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per IEC 60502-1 & EN 60228 +120 °C EBXL-XLPE/HF-PO Single-Core Aluminum Tower Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60502-1 & EN 60228 +120 °C EBXL-XLPE/HF-PO Single-Core Aluminum Tower Specification		

Sizes

3 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Configuration	Core / stranding	Outer Ø ≈ mm	Net weight ≈ kg/km	Max. pulling kN ≈	Min. bend R mm
0.6/1 kV 1C AL +120 °C EBXL-XLPE/HF-PO Construction Schedule (−40…+120 °C) 3 sizes						
☐ 0.6/1 kV 1C AL +120 °C 1×150 / 4×95 Al	1 × 150 mm² (or 4 × 95 mm² Al)	Class 2 Compacted Al / Class 5 AA8000	23.5	640	10.5	190
☐ 0.6/1 kV 1C AL +120 °C 1×240 / 4×150 Al	1 × 240 mm² (or 4 × 150 mm² Al)	Class 2 Compacted Al / Class 5 AA8000	28.4	980	16.8	230
☐ 0.6/1 kV 1C AL +120 °C 1×400 / 4×240 Al	1 × 400 mm² (or 4 × 240 mm² Al)	Class 2 Compacted Al / Class 5 AA8000	35.8	1,590	28.0	290

– Custom conductor cross-sections, core counts, pre-lugged tower kits and drum lengths available per IEC 60502-1 & EN 60228 +120 °C EBXL-XLPE/HF-PO Single-Core Aluminum Tower Specification.

Electrical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance	Operating temp.
1 × 150 mm² (or 4 × 95 mm² Al)	0.21	0.6/1 kV (315 A Al)	−40…+120 °C
1 × 240 mm² (or 4 × 150 mm² Al)	0.12	0.6/1 kV (435 A Al)	−40…+120 °C
1 × 400 mm² (or 4 × 240 mm² Al)	0.08	0.6/1 kV (590 A Al)	−40…+120 °C

– Every production length undergoes routine conductor DC resistance, AC high-voltage spark/dielectric and dimensional verification.

Standards and approvals

- IEC 60502-1 / EN 60228 Compliant
- 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/0-6-1kv-1c-al-ebxl-xlpe-hf-po-wind-tower-cable

Typical values for this cable type, based on IEC 60502-1 & EN 60228 +120 °C EBXL-XLPE/HF-PO Single-Core Aluminum Tower Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.