wind turbine tower, DLO & blade grounding power cable

AL/EPR/XLEVA 0.6/1 kV Tower

AL/EPR/XLEVA 0.6/1 kV (150–400 mm²) EN 60228 Class 2 Aluminum EPR / Cr

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 +90 °C) | XL-EVA Cross-Linked LSZH Outer Jacke

Application

AL/EPR/XLEVA 0.6/1 kV (150–400 mm²) EN 60228 Class 2 Aluminum EPR / Cross-Linked EVA LSZH Wind Tower Cable (IEC 60502-1 / EN 60228) engineered for 0.6/1 kV wind turbine service across -40 to +90 °C (min. bend radius 8 × 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. EN 60228 Class 2 Stranded Aluminum (150-
2. 90 °C EPR Elastomeric Core Insulation
3. XL-EVA Cross-Linked LSZH Outer Jacket (-

Technical data

Typical values

Rated voltage / operating system	0.6/1 kV (IEC 60502-1 & EN 60228 AL/EPR/XLEVA (-40 to +90 °C) Aluminum Wind Tower Specification)	**Core / conductor construction**	EN 60228 Class 2 Stranded Aluminum (150-400 mm²) — Circular stranded aluminum conductor for main tower power drops
Primary dielectric / insulation	90 °C EPR Elastomeric Core Insulation — Flexible ethylene-propylene rubber simplifying cold-weather installation	**Continuous operating temperature**	−40…+90 °C (wind turbine nacelle, hub & tower duty)
Low-temperature torsion & cold bend	Verified cold-flex and torsion endurance across −40…+90 °C per IEC 60502-1 & EN 60228 AL/EPR/XLEVA (-40 to +90 °C) Aluminum Wind Tower Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	XL-EVA Cross-Linked LSZH Outer Jacket (-40 °C) — Low-smoke zero-halogen cross-linked EVA outer sheath	**Minimum bending radius**	8 × OD
Intermediate screen / separator / core layer	90 °C EPR Elastomeric Core Insulation — Flexible ethylene-propylene rubber simplifying cold-weather installation	**Oil, grease, ozone & UV resistance**	Resistant to wind turbine gearbox oil, hydraulic fluid, ozone and UV weathering per IEC 60502-1 & EN 60228 AL/EPR/XLEVA (-40 to +90 °C) Aluminum Wind Tower Specification
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per IEC 60502-1 & EN 60228 AL/EPR/XLEVA (-40 to +90 °C) Aluminum Wind Tower Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60502-1 & EN 60228 AL/EPR/XLEVA (-40 to +90 °C) Aluminum Wind 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
AL/EPR/XLEVA 0.6/1 kV Tower Construction Schedule (−40…+90 °C) 3 sizes						
☐ AL/EPR/XLEVA 0.6/1 kV 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
☐ AL/EPR/XLEVA 0.6/1 kV 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
☐ AL/EPR/XLEVA 0.6/1 kV 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 AL/EPR/XLEVA (-40 to +90 °C) Aluminum Wind 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…+90 °C
1 × 240 mm² (or 4 × 150 mm² Al)	0.12	0.6/1 kV (435 A Al)	−40…+90 °C
1 × 400 mm² (or 4 × 240 mm² Al)	0.08	0.6/1 kV (590 A Al)	−40…+90 °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/al-epr-xleva-0-6-1kv-aluminum-lszh-tower-cable

Typical values for this cable type, based on IEC 60502-1 & EN 60228 AL/EPR/XLEVA (-40 to +90 °C) Aluminum Wind 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.