halogen-free wind turbine torsion & tower cable

# EVA LSZH 0.6/1 kV & 1.8/3 kV

## EVA LSZH 0.6/1 kV & 1.8/3 (3.6) kV Multi-Core Wind Turbine Drip-Loop T

IEC 60502-1 / IEC 60332-3 · 0.6/1 kV & 1.8/3 kV · Halogen-free wind turbine torsion &




**IEC 60502-1 / IEC 60332-3** | **0.6/1 kV & 1.8/3 kV (-40 to +90 °C)** | **LSZH Thermoset Elastomer Outer Sheat**

## Application

EVA LSZH 0.6/1 kV & 1.8/3 (3.6) kV Multi-Core Wind Turbine Drip-Loop Torsion Cable (IEC 60502-1 / IEC 60332-3) engineered for 0.6/1 kV & 1.8/3 kV wind turbine service across -40 to +90 °C (min. bend radius 6 × OD).

**Typical uses:** Onshore & Offshore Wind Turbine Nacelle Drip Loops, Wind Turbine Generator-to-Converter Main Power Drops, Halogen-Free Wind Tower Vertical Power Distribution, Cold-Climate (−40 °C) Renewable Energy Installations

## Construction






Cross-section, not to scale

1. Class 5 Flexible Copper / Class 2 Al-All
2. 0.6/1 kV & 1.8/3 kV EPR / XL-EVA Insulat
3. LSZH Thermoset Elastomer Outer Sheath (-

## Technical data

Typical values

| | |
|---|---|
| **Rated voltage / operating system** | 0.6/1 kV & 1.8/3 kV (IEC 60502-1 & IEC 60332-3-24 Multi-Core Wind Loop Torsion Specification) |
| **Primary dielectric / insulation** | 0.6/1 kV & 1.8/3 kV EPR / XL-EVA Insulation — Cross-linked rubber/EVA dielectric with high torsion fatigue life |
| **Low-temperature torsion & cold bend** | Verified cold-flex and torsion endurance across −40…+90 °C per IEC 60502-1 & IEC 60332-3-24 Multi-Core Wind Loop Torsion Specification |
| **Outer jacket / sheath protection** | LSZH Thermoset Elastomer Outer Sheath (-40 °C) — Halogen-free low-smoke flame-retardant outer jacket |
| **Intermediate screen / separator / core layer** | 0.6/1 kV & 1.8/3 kV EPR / XL-EVA Insulation — Cross-linked rubber/EVA dielectric with high torsion fatigue life |
| **Flame retardancy & smoke/halogen emission** | Flame-retardant and environmental performance verified per IEC 60502-1 & IEC 60332-3-24 Multi-Core Wind Loop Torsion Specification |
| **Standards** | IEC 60502-1 & IEC 60332-3-24 Multi-Core Wind Loop Torsion Specification |
| **Core / conductor construction** | Class 5 Flexible Copper / Class 2 Al-Alloy Cores — Multi-core or single-core conductors for nacelle loop & tower |
| **Continuous operating temperature** | −40…+90 °C (wind turbine nacelle, hub & tower duty) |
| **Storage & transport temperature** | −40…+80 °C on export wooden/steel cable drum |
| **Minimum bending radius** | 6 × OD |
| **Oil, grease, ozone & UV resistance** | Resistant to wind turbine gearbox oil, hydraulic fluid, ozone and UV weathering per IEC 60502-1 & IEC 60332-3-24 Multi-Core Wind Loop Torsion Specification |
| **RoHS & REACH compliance** | RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant |

## 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 |
|---|---|---|---|---|---|---|
| **EVA LSZH 0.6/1 kV & 1.8/3 kV Construction Schedule (−40…+90 °C)** 3 sizes | | | | | | |
| ☐ **EVA LSZH 0.6 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** |
| ☐ **EVA LSZH 0.6 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** |
| ☐ **EVA LSZH 0.6 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 & IEC 60332-3-24 Multi-Core Wind Loop Torsion 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 & 1.8/3 kV (315 A Al)** | **−40…+90 °C** |
| **1 × 240 mm² (or 4 × 150 mm² Al)** | **0.12** | **0.6/1 kV & 1.8/3 kV (435 A Al)** | **−40…+90 °C** |
| **1 × 400 mm² (or 4 × 240 mm² Al)** | **0.08** | **0.6/1 kV & 1.8/3 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 / IEC 60332-3 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/eva-lszh-0-6-1kv-1-8-3kv-loop-torsion-cable**

Typical values for this cable type, based on IEC 60502-1 & IEC 60332-3-24 Multi-Core Wind Loop Torsion Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.