halogen-free wind turbine torsion & tower cable

EVA LSZH 1.8/3 kV Torsion

EVA LSZH 1.8/3 (3.6) kV 3GI3 EPR / 5GM5 HF-EVA Torsion-Resistant Wind

IEC 60502-1 / EN 50363 · 1.8/3 (3.6) kV · Halogen-free wind turbine torsion & tower cable



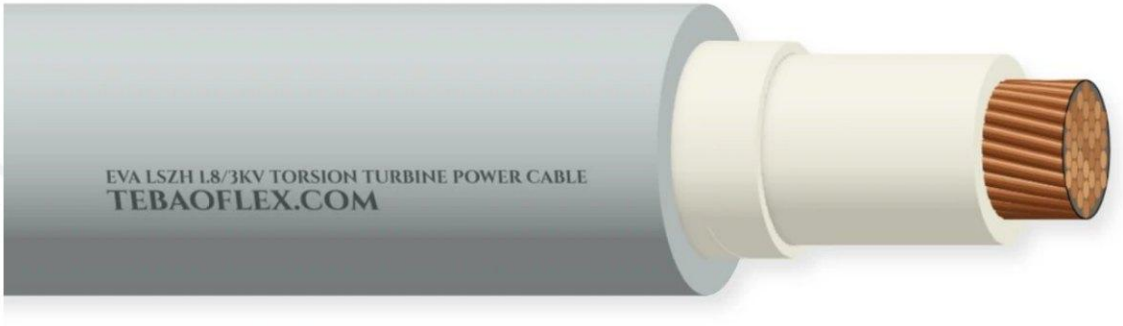
IEC 60502-1 / EN 50363 | **1.8/3 (3.6) kV (-40 to +90 °C)** | **5GM5 HF-EVA LSZH Outer Sheath (±100°**

Application

EVA LSZH 1.8/3 (3.6) kV 3GI3 EPR / 5GM5 HF-EVA Torsion-Resistant Wind Turbine Power Cable (IEC 60502-1 / EN 50363) engineered for 1.8/3 (3.6) kV wind turbine service across -40 to +90 °C (min. bend radius 5 × 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. EN 60228 Class 5 Bare Copper (25-400 mm²
2. 3GI3 Ethylene-Propylene Rubber (EPR) Ins
3. 5GM5 HF-EVA LSZH Outer Sheath (±100°/m)

Technical data

Typical values

Rated voltage / operating system	1.8/3 (3.6) kV (IEC 60502-1 & EN 50363-1/2-1 3GI3/5GM5 Wind Turbine Power Specification)
Primary dielectric / insulation	3GI3 Ethylene-Propylene Rubber (EPR) Insulation — 1.8/3 (3.6) kV cross-linked EPR primary dielectric
Low-temperature torsion & cold bend	Verified cold-flex and torsion endurance across −40…+90 °C per IEC 60502-1 & EN 50363-1/2-1 3GI3/5GM5 Wind Turbine Power Specification
Outer jacket / sheath protection	5GM5 HF-EVA LSZH Outer Sheath (±100°/m) — Halogen-free flame-retardant EVA elastomer jacket (-40 °C to +90 °C)
Intermediate screen / separator / core layer	3GI3 Ethylene-Propylene Rubber (EPR) Insulation — 1.8/3 (3.6) kV cross-linked EPR primary dielectric
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per IEC 60502-1 & EN 50363-1/2-1 3GI3/5GM5 Wind Turbine Power Specification
Standards	IEC 60502-1 & EN 50363-1/2-1 3GI3/5GM5 Wind Turbine Power Specification

Core / conductor construction	EN 60228 Class 5 Bare Copper (25-400 mm²) — Flexible stranded plain copper conductor for main power drop
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	5 × OD
Oil, grease, ozone & UV resistance	Resistant to wind turbine gearbox oil, hydraulic fluid, ozone and UV weathering per IEC 60502-1 & EN 50363-1/2-1 3GI3/5GM5 Wind Turbine Power 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 1.8/3 kV Torsion Construction Schedule (−40…+90 °C) 3 sizes						
☐ **EVA LSZH 1.8 1×95 / 4G25 Cu**	**1 × 95 mm² (or 4G25 mm² / 3/0 AWG)**	**IEC 60228 Class 5 Flexible Cu/SnCu**	**21.6**	**1,080**	**14.2**	**110**
☐ **EVA LSZH 1.8 1×185 / 4G50 Cu**	**1 × 185 mm² (or 4G50 mm² / 373 kcmil)**	**IEC 60228 Class 5 Flexible Cu/SnCu**	**27.8**	**1,960**	**27.5**	**140**
☐ **EVA LSZH 1.8 1×300 / 4G95 Cu**	**1 × 300 mm² (or 1×535/777 kcmil)**	**IEC 60228 Class 5 Flexible Cu/SnCu**	**34.6**	**3,120**	**45.0**	**175**

– Custom conductor cross-sections, core counts, pre-lugged tower kits and drum lengths available per IEC 60502-1 & EN 50363-1/2-1 3GI3/5GM5 Wind Turbine Power Specification.

Electrical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance	Operating temp.
1 × 95 mm² (or 4G25 mm² / 3/0 AWG)	**0.21**	**1.8/3 (3.6) kV (320 A Cu)**	**−40…+90 °C**
1 × 185 mm² (or 4G50 mm² / 373 kcmil)	**0.11**	**1.8/3 (3.6) kV (495 A Cu)**	**−40…+90 °C**
1 × 300 mm² (or 1×535/777 kcmil)	**0.06**	**1.8/3 (3.6) kV (680 A Cu)**	**−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 50363 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-1-8-3kv-torsion-turbine-power-cable

Typical values for this cable type, based on IEC 60502-1 & EN 50363-1/2-1 3GI3/5GM5 Wind Turbine Power Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.