halogen-free wind turbine torsion & tower cable

CU/EPR/HFEVA 0.6/1 kV

(Umax 1.2 kV) Unscreened LSZH Wind Turbine Drip

EN 50525-2-21 / IEC 60502-1 · 0.6/1 kV · Halogen-free wind turbine torsion & tower cable



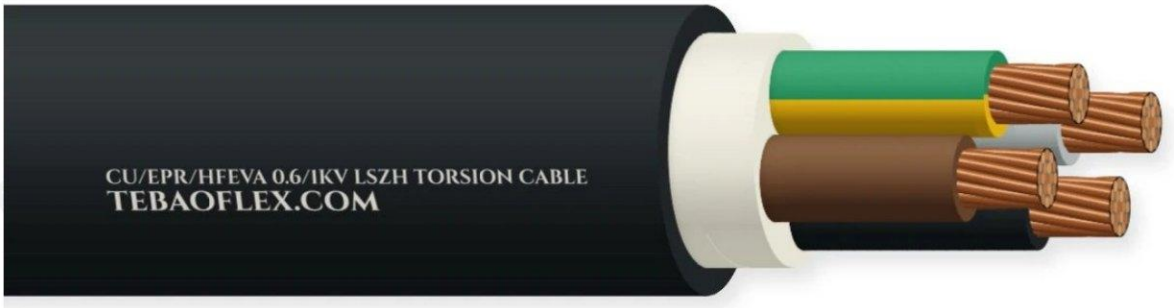
EN 50525-2-21 / IEC 60502-1 | 0.6/1 kV (-40 to +90 °C) | 5GM5 HF-EVA Halogen-Free Outer Sheat

Application

CU/EPR/HFEVA 0.6/1 kV (Umax 1.2 kV) Unscreened LSZH Wind Turbine Drip-Loop Torsion Cable (EN 50525-2-21 / IEC 60502-1) engineered for 0.6/1 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. Class 5 Flexible Bare Copper (3-5 Cores,
2. 3GI3 EPR Core Insulation (0.6/1 kV)
3. 5GM5 HF-EVA Halogen-Free Outer Sheath (±

Technical data

Typical values

Rated voltage / operating system	0.6/1 kV (EN 50525-2-21 / VDE 0207 3GI3/5GM5 Wind Drip-Loop Specification)
Primary dielectric / insulation	3GI3 EPR Core Insulation (0.6/1 kV) — Ethylene-propylene rubber coded Brown, Black, Grey, Green/Yellow
Low-temperature torsion & cold bend	Verified cold-flex and torsion endurance across −40…+90 °C per EN 50525-2-21 / VDE 0207 3GI3/5GM5 Wind Drip-Loop Specification
Outer jacket / sheath protection	5GM5 HF-EVA Halogen-Free Outer Sheath (±144°/m) — Low-smoke zero-halogen thermoset EVA jacket for yaw drip loops
Intermediate screen / separator / core layer	3GI3 EPR Core Insulation (0.6/1 kV) — Ethylene-propylene rubber coded Brown, Black, Grey, Green/Yellow
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per EN 50525-2-21 / VDE 0207 3GI3/5GM5 Wind Drip-Loop Specification
Standards	EN 50525-2-21 / VDE 0207 3GI3/5GM5 Wind Drip-Loop Specification
Core / conductor construction	Class 5 Flexible Bare Copper (3-5 Cores, 1.5-95 mm²) — EN 60228 Class 5 finely stranded plain copper conductors
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 EN 50525-2-21 / VDE 0207 3GI3/5GM5 Wind Drip-Loop 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
CU/EPR/HFEVA 0.6/1 kV Construction Schedule (−40…+90 °C) 3 sizes						
☐ CU/EPR/HFEVA 0.6/1 kV 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
☐ CU/EPR/HFEVA 0.6/1 kV 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
☐ CU/EPR/HFEVA 0.6/1 kV 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 EN 50525-2-21 / VDE 0207 3GI3/5GM5 Wind Drip-Loop 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	0.6/1 kV (320 A Cu)	−40…+90 °C
1 × 185 mm² (or 4G50 mm² / 373 kcmil)	0.11	0.6/1 kV (495 A Cu)	−40…+90 °C
1 × 300 mm² (or 1×535/777 kcmil)	0.06	0.6/1 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

- EN 50525-2-21 / IEC 60502-1 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/cu-epr-hfeva-0-6-1kv-lszh-torsion-cable

Typical values for this cable type, based on EN 50525-2-21 / VDE 0207 3GI3/5GM5 Wind Drip-Loop Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.