wind turbine drip-loop, tray & pitch control cable

1.0 kV Class-K EBXL-XLPE ATC-Braided

1.0 kV (600/1,000 V) ASTM Class K +125 °C EBXL-XLPE ATC-Braided Wind T

ASTM B172 Class K / IEC 60502-1 · 600 / 1,000 V · Wind turbine drip-loop, tray & pitch



ASTM B172 Class K / IEC 60502-1 | **600 / 1,000 V (-40 to +125 °C)** | **-40 °C to +125 °C Cross-Linked Elast**

Application

1.0 kV (600/1,000 V) ASTM Class K +125 °C EBXL-XLPE ATC-Braided Wind Turbine Torsion Control Cable (ASTM B172 Class K / IEC 60502-1) engineered for 600 / 1,000 V wind turbine service across -40 to +125 °C (min. bend radius 6 × OD).

Typical uses: Wind Turbine Rotor Hub Pitch Control & Slip-Rings, Nacelle-to-Tower Multi-Core Drip-Loop Control Bundles, UL 2277 WTTC / TC-ER Nacelle & Tower Cable Trays, Blade De-Icing, Trace Heating & Aviation Obstruction Lights

Construction





Cross-section, not to scale

1. ASTM Class K Fine Stranded Copper (2-37
2. +125 °C EBXL-XLPE Core Insulation
3. ATC Tinned Copper Wire Braid EMC Shield
4. -40 °C to +125 °C Cross-Linked Elastomer

Technical data

Typical values

Rated voltage / operating system	600 / 1,000 V (ASTM B172 Class K & IEC 60502-1 +125 °C EBXL-XLPE ATC-Braided Wind Specification)	**Core / conductor construction**	ASTM Class K Fine Stranded Copper (2-37 Cores) — Extra-flexible 30 AWG stranded copper conductors (0.5–16 mm²)
Primary dielectric / insulation	+125 °C EBXL-XLPE Core Insulation — Electron-beam cross-linked polyethylene numbered insulation	**Continuous operating temperature**	−40…+125 °C (wind turbine nacelle, hub & tower duty)
Low-temperature torsion & cold bend	Verified cold-flex and torsion endurance across −40…+125 °C per ASTM B172 Class K & IEC 60502-1 +125 °C EBXL-XLPE ATC-Braided Wind Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	-40 °C to +125 °C Cross-Linked Elastomer Jacket — Wide-temperature torsion-resistant outer sheath	**Minimum bending radius**	6 × OD
Intermediate screen / separator / core layer	ATC Tinned Copper Wire Braid EMC Shield — High-coverage annealed tinned copper braid screen	**Oil, grease, ozone & UV resistance**	Resistant to wind turbine gearbox oil, hydraulic fluid, ozone and UV weathering per ASTM B172 Class K & IEC 60502-1 +125 °C EBXL-XLPE ATC-Braided Wind Specification
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per ASTM B172 Class K & IEC 60502-1 +125 °C EBXL-XLPE ATC-Braided Wind Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ASTM B172 Class K & IEC 60502-1 +125 °C EBXL-XLPE ATC-Braided Wind 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
1.0 kV Class-K EBXL-XLPE ATC-Braided Construction Schedule (−40…+125 °C) 3 sizes						
☐ 1.0 kV Class-K EBXL-XLPE ATC-Braided 7G1.5 mm²	7G1.5 mm² (or 7C × 16 AWG)	IEC 60228 Class 5/6 / Class K Cu	11.4	215	2.4	70
☐ 1.0 kV Class-K EBXL-XLPE ATC-Braided 12G1.5 mm²	12G1.5 mm² (or 12C × 16 AWG)	IEC 60228 Class 5/6 / Class K Cu	14.8	345	4.1	90
☐ 1.0 kV Class-K EBXL-XLPE ATC-Braided 18G2.5 mm²	18G2.5 mm² (or 18C × 14 AWG)	IEC 60228 Class 5/6 / Class K Cu	19.6	680	9.8	120

– Custom conductor cross-sections, core counts, pre-lugged tower kits and drum lengths available per ASTM B172 Class K & IEC 60502-1 +125 °C EBXL-XLPE ATC-Braided Wind Specification.

Electrical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance	Operating temp.
7G1.5 mm² (or 7C × 16 AWG)	13.30	600 / 1,000 V (18 A)	−40…+125 °C
12G1.5 mm² (or 12C × 16 AWG)	13.30	600 / 1,000 V (16 A)	−40…+125 °C
18G2.5 mm² (or 18C × 14 AWG)	7.98	600 / 1,000 V (24 A)	−40…+125 °C

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

Standards and approvals

- ASTM B172 Class K / 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/1-0kv-class-k-ebxl-xlpe-atc-braided-torsion-cable

Typical values for this cable type, based on ASTM B172 Class K & IEC 60502-1 +125 °C EBXL-XLPE ATC-Braided Wind Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.