wind turbine tower, DLO & blade grounding power cable

DLO 2000V / 1kV WTTC

DLO 2,000 V (UL 44 RHH/RHW-2) & 1,000 V (UL 2277 WTTC) EPDM/CPE Wind T

UL 2277 WTTC / UL 44 RHW-2 · 2,000 V / 1,000 V · Wind turbine tower, dlo & blade



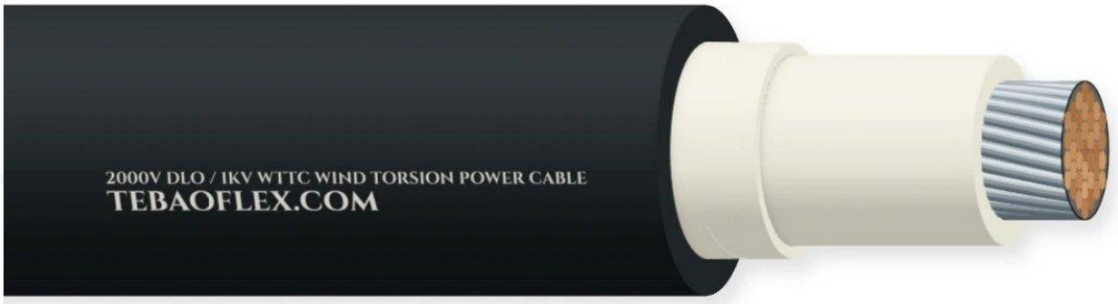
UL 2277 WTTC / UL 44 RHW-2 | **2,000 V / 1,000 V (-40 to +90 °C)** | **Heavy-Duty Cold-Resistant CPE Jacket**

Application

DLO 2,000 V (UL 44 RHH/RHW-2) & 1,000 V (UL 2277 WTTC) EPDM/CPE Wind Turbine Torsion Power Cable (UL 2277 WTTC / UL 44 RHW-2) engineered for 2,000 V / 1,000 V wind turbine service across -40 to +90 °C (min. bend radius 6 × 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. High-Flex Tinned/Bare Copper (14 AWG-111
2. 2000V DLO / 1kV WTTC EPDM/EPR Insulation
3. Heavy-Duty Cold-Resistant CPE Jacket (-4

Technical data

Typical values

Rated voltage / operating system	2,000 V / 1,000 V (UL 2277 Type WTTC (1,000 V) & UL 44 RHH/RHW-2 (2,000 V) Wind Torsion Specification)
Primary dielectric / insulation	2000V DLO / 1kV WTTC EPDM/EPR Insulation — High-dielectric thermoset rubber passing UL 2277 & UL 44
Low-temperature torsion & cold bend	Verified cold-flex and torsion endurance across −40…+90 °C per UL 2277 Type WTTC (1,000 V) & UL 44 RHH/RHW-2 (2,000 V) Wind Torsion Specification
Outer jacket / sheath protection	Heavy-Duty Cold-Resistant CPE Jacket (-40 °C) — Abrasion- and oil-resistant CPE sheath tested to 10,000 torsion cycles
Intermediate screen / separator / core layer	2000V DLO / 1kV WTTC EPDM/EPR Insulation — High-dielectric thermoset rubber passing UL 2277 & UL 44
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per UL 2277 Type WTTC (1,000 V) & UL 44 RHH/RHW-2 (2,000 V) Wind Torsion Specification
Standards	UL 2277 Type WTTC (1,000 V) & UL 44 RHH/RHW-2 (2,000 V) Wind Torsion Specification
Core / conductor construction	High-Flex Tinned/Bare Copper (14 AWG-1111 kcmil) — Rope-lay finely stranded copper conductor for wind drip loops
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 UL 2277 Type WTTC (1,000 V) & UL 44 RHH/RHW-2 (2,000 V) Wind 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
DLO 2000V / 1kV WTTC Construction Schedule (−40…+90 °C) 3 sizes						
☐ **DLO 2000V 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
☐ **DLO 2000V 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
☐ **DLO 2000V 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 UL 2277 Type WTTC (1,000 V) & UL 44 RHH/RHW-2 (2,000 V) Wind Torsion 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	2,000 V / 1,000 V (320 A Cu)	−40…+90 °C
1 × 185 mm² (or 4G50 mm² / 373 kcmil)	0.11	2,000 V / 1,000 V (495 A Cu)	−40…+90 °C
1 × 300 mm² (or 1×535/777 kcmil)	0.06	2,000 V / 1,000 V (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

- UL 2277 WTTC / UL 44 RHW-2 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/2000v-dlo-1kv-wttc-wind-torsion-power-cable

Typical values for this cable type, based on UL 2277 Type WTTC (1,000 V) & UL 44 RHH/RHW-2 (2,000 V) Wind 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.