



UL 2277 WTTC 1000V torsion wind cable

WK 137-Torsion FT4

Wind-Turbine Nacelle Drip-Loop Torsion Power Cable

UL 2277 WTTC 1000 V / RHW-2 / CSA FT4 (–40 to +90 °C) wind-turbine drip-loop torsion



UL 2277 WTTC 1000 V & UL 44 RHW-2

CSA FT4 & IEC 60332-3-22

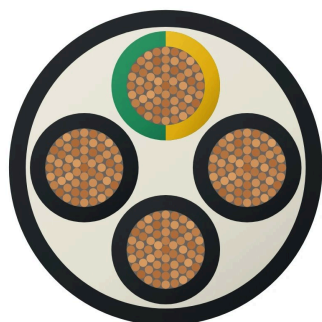
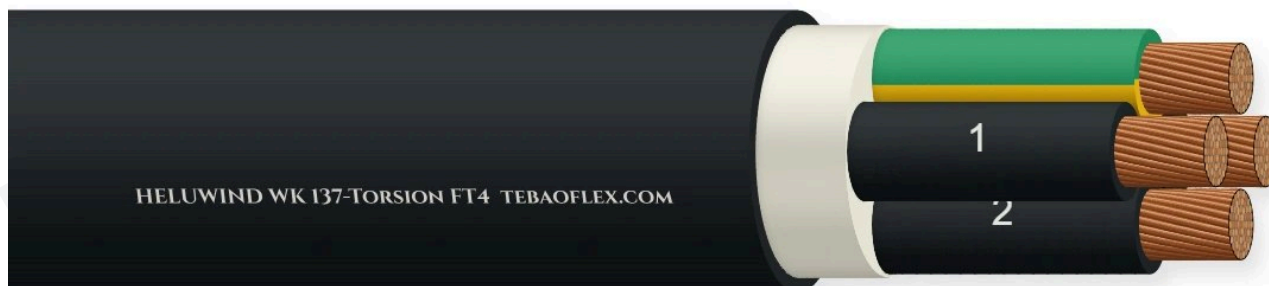
±100°/m Torsion down to –40 °C

Application

Dual-certified North American and European wind-turbine nacelle-to-tower drip-loop torsion power cable (HELUWIND WK 137-Torsion FT4) approved to UL 2277 (WTTC 1000 V), UL 44 (RHW-2), CSA FT4 and IEC 60332-3-22, tested for ±100°/m bi-directional yaw.

Typical uses: Onshore & Offshore Wind Turbine Nacelle Drip Loops, North American (UL/CSA) & Global Wind Generator Towers, DFIG & Full-Converter Stator/Rotor Power Drops, Yaw-Drive & Pitch-Control Power Distribution

Construction



Cross-section, not to scale

- 1 Torsion-compensated fine-stranded copper (Class 5 /
- 2 Low-friction torsion slip separator tape
- 3 Cross-linked EPR / HEPR dielectric (UL RHW-2)
- 4 Cross-linked CPE / Polychloroprene FT4 torsion jacket

Technical data

Typical values

Rated voltage	1,000 V (UL 2277 WTTC / CSA) · 600 V (UL 44 RHW-2) · 0.6/1 kV (IEC 60502-1)	Factory AC dielectric withstand test	3.5 kV AC rms for 5 minutes
Operating temperature range	−40 °C to +90 °C (torsion & fixed, wet or dry) · +250 °C short-circuit	Thermal cycling & overload stability	Verified thermal ageing and short-circuit withstand per standard
Torsion angle & endurance qualification	±100°/m (up to ±150°/m short-loop) over > 5,000 cycles down to −40 °C	Minimum bending radius	4 × OD (static tower ladder) · 6 × OD (dynamic nacelle drip loop)
Vertical tray flame retardance	CSA C22.2 No. 0.3 FT4, UL 1685 FT4 / IEEE 1202 & IEC 60332-3-22 Cat A	Oil, UV & cold-impact resistance	UL Oil Res I & II (+60/+75 °C), 720 h Sunlight Resistant & −40 °C Cold
Standards	cURus / cULus UL 2277 WTTC 1000V, UL 44 RHW-2, CSA FT4, CE & RoHS		

Sizes

11 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Metric / AWG	Rating	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	In air 30 °C A	Min. bend R mm
Single-Core 1000 V WTTC / RHW-2 Generator Drip-Loop Power Cables 9 sizes							
☐ WK 137-Torsion FT4 1×35 mm ² (2 AWG)	1×35 mm ² (2 AWG)	1000 V	14.2	336	465	198	85
☐ WK 137-Torsion FT4 1×50 mm ² (1/0 AWG)	1×50 mm ² (1/0 AWG)	1000 V	16.5	480	635	245	99
☐ WK 137-Torsion FT4 1×70 mm ² (2/0 AWG)	1×70 mm ² (2/0 AWG)	1000 V	18.6	672	855	305	112
☐ WK 137-Torsion FT4 1×95 mm ² (3/0 AWG)	1×95 mm ² (3/0 AWG)	1000 V	21.2	912	1,140	370	127
☐ WK 137-Torsion FT4 1×120 mm ² (4/0 AWG)	1×120 mm ² (4/0 AWG)	1000 V	23.4	1,152	1,410	430	140
☐ WK 137-Torsion FT4 1×150 mm ² (300 kcmil)	1×150 mm ² (300 kcmil)	1000 V	25.8	1,440	1,740	495	155
☐ WK 137-Torsion FT4 1×185 mm ² (350 kcmil)	1×185 mm ² (350 kcmil)	1000 V	28.2	1,776	2,110	565	169
☐ WK 137-Torsion FT4 1×240 mm ² (500 kcmil)	1×240 mm ² (500 kcmil)	1000 V	31.8	2,304	2,710	670	191
☐ WK 137-Torsion FT4 1×300 mm ² (600 kcmil)	1×300 mm ² (600 kcmil)	1000 V	35.0	2,880	3,340	770	210
Multi-Core 1000 V WTTC / FT4 Nacelle Auxiliary Power Cables 2 sizes							
☐ WK 137-Torsion FT4 4G25 mm ² (4×4 AWG)	4G25 mm ² (4×4 AWG)	1000 V	27.6	960	1,420	138	166
☐ WK 137-Torsion FT4 4G50 mm ² (4×1/0 AWG)	4G50 mm ² (4×1/0 AWG)	1000 V	35.8	1,920	2,680	205	215

– Additional sizes from 16 mm² (6 AWG) up to 500 mm² (1000 kcmil) and 3- to 37-core control cables are also manufactured.

Standards and approvals

- ✓ UL 2277 WTTC 1000 V & UL 44 RHW-2 Listed
- ✓ CSA C22.2 FT4 & IEC 60332-3-22 Cat A Flame Retardant
- ✓ -40 °C Cold Impact & ±100°/m Torsion Verified

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/wk-137-torsion-ft4-wind-turbine-nacelle-drip-loop-torsion-power-cable



Typical values for this cable type, based on UL 2277 (WTTC 1000 V) / UL 44 (RHW-2) / CSA FT4 / IEC 60332-3-22. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.