wind turbine drip-loop, tray & pitch control cable

2-NORM TRAY-CY 0.6/1 kV & WTTC 1000V

2-NORM TRAY-CY IEC 0.6/1 kV & UL Type WTTC 1,000 V Tinned-Copper Braid

UL 2277 WTTC / IEC 60502-1 · 0.6/1 kV / 1,000 V · Wind turbine drip-loop, tray & pitch



UL 2277 WTTC / IEC 60502-1 | **0.6/1 kV / 1,000 V (-40 to +90 °C)**

Oil & UV-Resistant Special PVC Outer

Application

2-NORM TRAY-CY IEC 0.6/1 kV & UL Type WTTC 1,000 V Tinned-Copper Braid Shielded Wind Tray Cable (UL 2277 WTTC / IEC 60502-1) engineered for 0.6/1 kV / 1,000 V wind turbine service across -40 to +90 °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. Class 5 Flexible Bare Copper (3-25 Cores
2. PVC / Nylon Composite Core Insulation
3. Tinned Copper Wire Braid Shield (CY)
4. Oil & UV-Resistant Special PVC Outer She

Technical data

Typical values

Rated voltage / operating system	0.6/1 kV / 1,000 V (UL Subject 2277 WTTC 1,000 V / UL 1277 TC-ER & IEC 60502-1 Shielded Tray Specification)	**Core / conductor construction**	Class 5 Flexible Bare Copper (3-25 Cores) — Stranded plain copper conductors (0.5 mm² to 16 mm²)
Primary dielectric / insulation	PVC / Nylon Composite Core Insulation — Dual-rated IEC 0.6/1 kV & UL WTTC 1,000 V numbered cores	**Continuous operating temperature**	−40…+90 °C (wind turbine nacelle, hub & tower duty)
Low-temperature torsion & cold bend	Verified cold-flex and torsion endurance across −40…+90 °C per UL Subject 2277 WTTC 1,000 V / UL 1277 TC-ER & IEC 60502-1 Shielded Tray Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	Oil & UV-Resistant Special PVC Outer Sheath — Flame-retardant tray-rated PVC jacket	**Minimum bending radius**	6 × OD
Intermediate screen / separator / core layer	Tinned Copper Wire Braid Shield (CY) — High-coverage tinned copper braid for EMC protection in nacelles	**Oil, grease, ozone & UV resistance**	Resistant to wind turbine gearbox oil, hydraulic fluid, ozone and UV weathering per UL Subject 2277 WTTC 1,000 V / UL 1277 TC-ER & IEC 60502-1 Shielded Tray Specification
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per UL Subject 2277 WTTC 1,000 V / UL 1277 TC-ER & IEC 60502-1 Shielded Tray Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	UL Subject 2277 WTTC 1,000 V / UL 1277 TC-ER & IEC 60502-1 Shielded Tray 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
2-NORM TRAY-CY 0.6/1 kV & WTTC 1000V Construction Schedule (−40…+90 °C) 3 sizes						
☐ **2-NORM TRAY-CY 0.6 7G1.5 mm²**	**7G1.5 mm² (or 7C × 16 AWG)**	**IEC 60228 Class 5/6 / Class K Cu**	**11.4**	**215**	**2.4**	**70**
☐ **2-NORM TRAY-CY 0.6 12G1.5 mm²**	**12G1.5 mm² (or 12C × 16 AWG)**	**IEC 60228 Class 5/6 / Class K Cu**	**14.8**	**345**	**4.1**	**90**
☐ **2-NORM TRAY-CY 0.6 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 UL Subject 2277 WTTC 1,000 V / UL 1277 TC-ER & IEC 60502-1 Shielded Tray 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**	**0.6/1 kV / 1,000 V (18 A)**	**−40…+90 °C**
12G1.5 mm² (or 12C × 16 AWG)	**13.30**	**0.6/1 kV / 1,000 V (16 A)**	**−40…+90 °C**
18G2.5 mm² (or 18C × 14 AWG)	**7.98**	**0.6/1 kV / 1,000 V (24 A)**	**−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 / 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/2-norm-tray-cy-0-6-1kv-wttc-1000v-shielded-cable

Typical values for this cable type, based on UL Subject 2277 WTTC 1,000 V / UL 1277 TC-ER & IEC 60502-1 Shielded Tray Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.