wind turbine drip-loop, tray & pitch control cable

Slip-Ring & Pitch Control 600V–2kV

600 V / 1,000 V / 2,000 V (-50 °C to +90 °C) Foil + TCWB Shielded TSE/

IEC 60502-1 / UL 1000V/2000V · 600 V / 1,000 V / 2,000 V · Wind turbine drip-loop,



IEC 60502-1 / UL 1000V/2000V | **600 V / 1,000 V / 2,000 V (-50 to +9** | **TSE / Polyurethane (PUR) Outer Jacke**

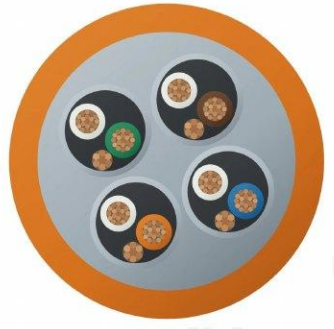
Application

600 V / 1,000 V / 2,000 V (-50 °C to +90 °C) Foil + TCWB Shielded TSE/PUR Wind Hub Slip-Ring & Pitch Encoder Cable (IEC 60502-1 / UL 1000V/2000V, 600 V / 1,000 V / 2,000 V, -50 to +90 °C, min. bend radius 5 × 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. Ultra-Fine Tinned Copper Conductors / Pa
2. EPR / TPE Low-Temperature Dielectric
3. Individual Foil & Tinned Copper Braid Sh
4. TSE / Polyurethane (PUR) Outer Jacket (-

Technical data

Typical values

Rated voltage / operating system	600 V / 1,000 V / 2,000 V (IEC 60502-1 & UL AWM 600 V/1,000 V/2,000 V Hub Slip-Ring & Pitch Servo Specification)	**Core / conductor construction**	Ultra-Fine Tinned Copper Conductors / Pairs — Bunch-stranded tinned copper cores for slip-ring & pitch encoders
Primary dielectric / insulation	EPR / TPE Low-Temperature Dielectric — Flexible elastomeric insulation rated 600 V, 1,000 V and 2,000 V	**Continuous operating temperature**	−50…+90 °C (wind turbine nacelle, hub & tower duty)
Low-temperature torsion & cold bend	Verified cold-flex and torsion endurance across −50…+90 °C per IEC 60502-1 & UL AWM 600 V/1,000 V/2,000 V Hub Slip-Ring & Pitch Servo Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	TSE / Polyurethane (PUR) Outer Jacket (-50 °C) — High-flexibility cold- and oil-resistant outer sheath	**Minimum bending radius**	5 × OD
Intermediate screen / separator / core layer	Individual Foil & Tinned Copper Braid Shield — High-noise-immunity EMC shielding for pitch servo drives	**Oil, grease, ozone & UV resistance**	Resistant to wind turbine gearbox oil, hydraulic fluid, ozone and UV weathering per IEC 60502-1 & UL AWM 600 V/1,000 V/2,000 V Hub Slip-Ring & Pitch Servo Specification
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per IEC 60502-1 & UL AWM 600 V/1,000 V/2,000 V Hub Slip-Ring & Pitch Servo Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60502-1 & UL AWM 600 V/1,000 V/2,000 V Hub Slip-Ring & Pitch Servo 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
Slip-Ring & Pitch Control 600V–2kV Construction Schedule (−50…+90 °C) 3 sizes						
☐ **Slip-Ring 4×2×0.75 mm²**	**4 × 2 × 0.75 mm² Screened Pairs**	**Ultra-fine Class 6 SnCu + Foil/TCWB**	**11.8**	**210**	**1.8**	**60**
☐ **Slip-Ring 4×2×1.0 mm²**	**4 × 2 × 1.0 mm² Screened Pairs**	**Ultra-fine Class 6 SnCu + Foil/TCWB**	**13.2**	**265**	**2.4**	**70**
☐ **Slip-Ring 8×2×1.0 + 4G2.5**	**8 × 2 × 1.0 + 4G2.5 mm² Hybrid**	**Ultra-fine Class 6 SnCu + Foil/TCWB**	**18.4**	**520**	**4.8**	**95**

– Custom conductor cross-sections, core counts, pre-lugged tower kits and drum lengths available per IEC 60502-1 & UL AWM 600 V/1,000 V/2,000 V Hub Slip-Ring & Pitch Servo Specification.

Electrical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance	Operating temp.
4 × 2 × 0.75 mm² Screened Pairs	**26.00**	**600 V / 1,000 V / 2,000 V (Encoder/Pitch)**	**−50…+90 °C**
4 × 2 × 1.0 mm² Screened Pairs	**19.50**	**600 V / 1,000 V / 2,000 V (Slip-Ring)**	**−50…+90 °C**
8 × 2 × 1.0 + 4G2.5 mm² Hybrid	**19.50**	**600 V / 1,000 V / 2,000 V (Hub Composite)**	**−50…+90 °C**

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

Standards and approvals

- IEC 60502-1 / UL 1000V/2000V 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/slip-ring-pitch-control-elastomer-cable-1kv

Typical values for this cable type, based on IEC 60502-1 & UL AWM 600 V/1,000 V/2,000 V Hub Slip-Ring & Pitch Servo Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.