wind turbine drip-loop, tray & pitch control cable

RT 114 / RT 116 Torsion & De-Icing

RT 114 / RT 116 300/500 V – 0.6/1 kV (UL 600 V) Class 6 PUR/SCEM Wind

DIN VDE 0285 / IEC 60502-1 · 300/500 V – 0.6/1 kV · Wind turbine drip-loop, tray &



DIN VDE 0285 / IEC 60502-1 | **300/500 V – 0.6/1 kV (-50 to +90 °C)** | **PUR / SCEM Cold-Resistant Jacket (-5**

Application

RT 114 / RT 116 300/500 V – 0.6/1 kV (UL 600 V) Class 6 PUR/SCEM Wind Torsion & Blade Trace-Heating Cable (DIN VDE 0285 / IEC 60502-1) engineered for 300/500 V – 0.6/1 kV wind turbine service across -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. Class 6 Extra-Fine Bare Copper (2–40 Cor
2. Special TPE / Cross-Linked Elastomer Ins
3. PUR / SCEM Cold-Resistant Jacket (-50 °C

Technical data

Typical values

Rated voltage / operating system	300/500 V – 0.6/1 kV (DIN VDE 0285 & UL 600 V RT 114 / RT 116 (-50 °C, ±150°/m) Wind Torsion & De-Icing Specification)	**Core / conductor construction**	Class 6 Extra-Fine Bare Copper (2–40 Cores) — Ultra-flexible Class 6 copper conductors for continuous torsion
Primary dielectric / insulation	Special TPE / Cross-Linked Elastomer Insulation — Rated 300/500 V, 600 V and 0.6/1 KV for control & trace heating	**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 DIN VDE 0285 & UL 600 V RT 114 / RT 116 (-50 °C, ±150°/m) Wind Torsion & De-Icing Specification	**Storage & transport temperature**	−40...+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	PUR / SCEM Cold-Resistant Jacket (-50 °C) — Oil- and abrasion-resistant outer sheath rated ±150°/m torsion	**Minimum bending radius**	5 × OD
Intermediate screen / separator / core layer	Special TPE / Cross-Linked Elastomer Insulation — Rated 300/500 V, 600 V and 0.6/1 KV for control & trace heating	**Oil, grease, ozone & UV resistance**	Resistant to wind turbine gearbox oil, hydraulic fluid, ozone and UV weathering per DIN VDE 0285 & UL 600 V RT 114 / RT 116 (-50 °C, ±150°/m) Wind Torsion & De-Icing Specification
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per DIN VDE 0285 & UL 600 V RT 114 / RT 116 (-50 °C, ±150°/m) Wind Torsion & De-Icing Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	DIN VDE 0285 & UL 600 V RT 114 / RT 116 (-50 °C, ±150°/m) Wind Torsion & De-Icing 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
RT 114 / RT 116 Torsion & De-Icing Construction Schedule (−50...+90 °C) 3 sizes						
☐ **RT 114 7G1.5 mm²**	**7G1.5 mm² (or 7C × 16 AWG)**	**IEC 60228 Class 5/6 / Class K Cu**	**11.4**	**215**	**2.4**	**70**
☐ **RT 114 12G1.5 mm²**	**12G1.5 mm² (or 12C × 16 AWG)**	**IEC 60228 Class 5/6 / Class K Cu**	**14.8**	**345**	**4.1**	**90**
☐ **RT 114 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 DIN VDE 0285 & UL 600 V RT 114 / RT 116 (-50 °C, ±150°/m) Wind Torsion & De-Icing 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**	**300/500 V – 0.6/1 kV (18 A)**	**−50...+90 °C**
12G1.5 mm² (or 12C × 16 AWG)	**13.30**	**300/500 V – 0.6/1 kV (16 A)**	**−50...+90 °C**
18G2.5 mm² (or 18C × 14 AWG)	**7.98**	**300/500 V – 0.6/1 kV (24 A)**	**−50...+90 °C**

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

Standards and approvals

- DIN VDE 0285 / 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/rt-114-rt-116-torsion-trace-heating-wind-cable

Typical values for this cable type, based on DIN VDE 0285 & UL 600 V RT 114 / RT 116 (-50 °C, ±150°/m) Wind Torsion & De-Icing Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.