

CONTACT

Market information
industryprojects.business@lynxe
ogroup.com

**Control cables
UL Type WTTC & TC**

UL Subject 2277 & UL Standard 1277

STANDARDS

Product UL 1277; UL 2277

Application

Nexans Wind Turbine Tray Cable WINDLINK® LV-UL WTTC was specifically designed to withstand extreme conditions encountered in wind turbine applications.

Product characteristics

- Flame-retardant acc. to CSA FT4 (Vertical Tray)
- Oil-resistant acc. to UL OIL RES I
- UV resistant
- Suitable for torsional applications in wind turbines

Approvals

- UL MTW
- UL TC-ER 90°C 600V
- UL WTTC 90°C 1000V
- UL DP-1
- UL AWM 600V

CHARACTERISTICS

Construction characteristics

Construction type	5 G 10
Conductor material	Soft annealed copper
Insulation	PVC compound
Individual sheath	Nylon jacketing compound
Insulation colour	Black w. number + yellow/green
Outer sheath	Special PVC compound
Sheath colour	Black - RAL 9005

Dimensional characteristics

Conductor diameter (mm)	-
Number of cores	5
Conductor cross-section	10 mm ²
Insulation sheath thickness	0.76 mm
Conductor cross-section (AWG/KCMIL)	8
Inner sheath thickness	- mm
Nominal outer diameter	20.7 mm
Nominal outer sheath thickness	- mm
Copper content	- kg/km
Maximum cable diameter	- mm
Minimum cable diameter	- mm
Approximate weight	- kg/km

Electrical characteristics

Nominal resistance of the conductor	1.91 Ohm/km
Max. Electrical Resistance AC 60Hz 70°C	- Ohm/km
Max. Electrical Resistance AC 60Hz 90°C	- Ohm/km
Test voltage	2500 V
Inductive reactance	- Ohm/km
Insulation resistance at 20°C	20 MOhm.km
Nominal Voltage	1000 V
Operating capacitances	- mF/km
Permissible short circuit current	- kA
Operating voltage - range	- kV
Maximum operating voltage	-
Transfer impedance	-

Mechanical characteristics

Tensile strength	- N
Maximum tensile load	- N
Torsion stress	100 °/m
Carrying capacity	- kg
Frequent torsion	-
Torsion +/- 180°	-

Usage characteristics

Ambient dynamic operating temperature, range	-5 ... 90 °C
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Usage characteristics

Ambient static operating temperature, range	-40 ... 90 °C
Gases corrosivity	-
Minimum bending radius, occasionally moving	8 (xD)
Minimum bending radius, fixed installation	4 (xD)
Flame retardant	UL 1581 SEC. 1160 AND CSA FT4
Oil resistance	Oil resistance I
U.V resistance	-
Ozone resistance	-
Max. conductor temperature in service	- °C
Short-circuit max. conductor temperature	- °C
Installation temperature, range	- °C
Operating temperature, range	- °C

WORKING VOLTAGE

- UL AWM 600V
- UL TC-ER / MTW 600V
- UL WTTC 1000V

SELLING AND DELIVERY INFORMATION

Marking

E219385 - CE - Week/Year of production - TYPE WTTC / THHN or THWN 90°C 1000V or MTW 90°C 600 V - n x/G yy
mm²/AWG size

n: number of conductors

x/G: without/with Yellow/Green conductor

yy: section of conductor

Meter marking