



Torsion resistant, PUR, screened control cables

## STANDARDS

Product Nexans specification

### Application

Control cable WINDLINK® Control C-PUR was specifically designed for wind turbines. These cable is used where cold flexibility and torsion resistance are required. It is therefore a suitable connection for electrical equipments in harsh environments.

### Product characteristics

- Suitable for torsion up to  $\pm 100^\circ/m$
- Vibration resistant
- Flame retardant according to IEC 60332-1-2
- Oil resistant according to EN 60811-2-1
- Halogen free according to IEC 60754
- Ozone resistant according to EN 60811-2-1 clause 8
- UV resistant according to IEC 60068-2-5 (only with black outer sheath)

## CONTACT

Market information  
[industryprojects.business@lynxeogroup.com](mailto:industryprojects.business@lynxeogroup.com)

### Design

#### Conductor

Bare copper stranded according to IEC 60228 cl. 6

#### Insulation

Polyolefine compound

Core indication according to DIN VDE 0293

JZ/OZ: black numbered with/without green-yellow ground wire from 3 conductors

#### Assembly

Center: filler

Conductors twisted in layers + talc + non woven tape

(TP) Conductors twisted in pairs + Polyester tape + Al/polyester tape (Alu outside)

#### Inner sheath

Polyurethane compound + non woven tape

(TP) without inner sheath

#### Screen

Tinned copper braid, coverage  $85 \pm 5\%$  + non woven tape

#### Sheath

Polyurethane compound, matt surface, colour black Ral 9005 or grey Ral 7001



Rated Voltage  $U_0/U$   
(Um)  
300/500 V



Ambient dynamic operating temperature, range  
-30 ... 80 °C



Ambient static op. temp  
-40 ... 80 °C



Gases corrosivity  
-



Fire resistant  
-



Oil resistance  
-



RoHS compliant  
Yes



U.V resistance  
-

**CHARACTERISTICS****Construction characteristics**

Construction type	18 G 1.0
Conductor material	-
Insulation	-
Lay Up	-
Insulation colour	-
Screen	-
Inner sheath	-
Outer sheath	-

**Dimensional characteristics**

Conductor diameter (mm)	-
Number of cores	18
Conductor cross-section	1 mm <sup>2</sup>
Insulation sheath thickness	- mm
Inner sheath thickness	- mm
Nominal outer diameter	16.0 mm
Copper content	242 kg/km
Nominal outer sheath thickness	- mm
Minimum cable diameter	- mm
Maximum cable diameter	- mm
Approximate weight	433 kg/km

**Electrical characteristics**

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	300/500 V
Resistance of inner conductor (DC)	- Ohm/km
Max. Electrical Resistance AC 60Hz 70°C	- Ohm/km
Max. Electrical Resistance AC 60Hz 90°C	- Ohm/km
Test voltage	3000 V
Inductive reactance	- Ohm/km
Operating capacitances	- mF/km
Permissible short circuit current	- kA
Operating voltage - range	- kV
Maximum operating voltage	-
Transfer impedance	-

**Mechanical characteristics**

Mechanical stress	15 N/mm <sup>2</sup>
Tensile strength	- N
Maximum tensile load	- N
Torsion stress	- °/m

**Usage characteristics**

Ambient dynamic operating temperature, range	-30 ... 80 °C
Ambient static operating temperature, range	-40 ... 80 °C
Gases corrosivity	-
Minimum bending radius, occasionally moving	15 (xD)

**Usage characteristics**

Fire resistant	-
Minimum bending radius, fixed installation	6 (xD)
Oil resistance	-
RoHS compliant	Yes
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

**SELLING AND DELIVERY INFORMATION**

Marking e.g.

NEXANS INTERCOND - Week/Year of production - WINDLINK Control C-PUR - 300/500V n x/G yy mm<sup>2</sup> shielded twist control cable

n: number of conductors

x/G: without/with Yellow/Green conductor

yy: section of conductor

Meter marking