

### CONTACT

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Halogenfree, shielded data transmission cables LiHCH / LiHCH (TP)

### STANDARDS

Product Nexans specification

#### Application

The cable WINDLINK® Data LSOH shielded was specifically designed for wind turbines. These cable is used for data transmission where high flexibility, torsion- and oil-resistance are required. It is therefore a suitable connection for electrical panels and sensors.

#### Product characteristics

- Suitable for torsion up to  $\pm 150^\circ/\text{m}$  (from  $-20^\circ\text{C}$  up to  $50^\circ\text{C}$ )
- Vibration resistant
- Low smoke according to IEC 61034-2
- Flame retardant according to IEC 60332-1-2
- Oil resistant according to EN 60811-2-1 and special oils used in wind turbines
- Halogen free according to IEC 60754
- UV resistant according to IEC 60068-2-5
- Ozone resistant according to EN 60811-2-1 clause 8



Flame retardant  
IEC 60332-1-2



Gases corrosivity  
IEC 60754-1; IEC  
60754-2; EN  
50525-1 Annex C



Smoke density  
IEC 61034-2



Oil resistance  
IEC 60811-2-1



U.V resistance  
IEC 60068-2-5



Max. conductor  
temp. in service  
- °C



Operating temp.  
-40 ... 90 °C



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

## CHARACTERISTICS

## Construction characteristics

Construction type	12 x 1.0
Conductor material	Bare copper class 5
Insulation	Halogen free compound
Lay Up	Please request detailed data sheet
Insulation colour	DIN 47100
Screen	Tinned copper braid, coverage ≥ 65%
Outer sheath	Halogen free compound
Sheath colour	Black - RAL 9005

## Dimensional characteristics

Number of cores	12
Conductor cross-section	1 mm <sup>2</sup>
Conductor diameter (mm)	-
Insulation sheath thickness	- mm
Diameter over braid	- mm
Nominal outer sheath thickness	- mm
Minimum cable diameter	- mm
Maximum cable diameter	- mm
Nominal outer diameter	11.3 mm
Approximate weight	230 kg/km
Copper content	- kg/km

## Electrical characteristics

Max. DC resistance of the conductor at 20°C	- Ohm/km
Max. Electrical Resistance AC 60Hz 70°C	- Ohm/km
Max. Electrical Resistance AC 60Hz 90°C	- Ohm/km
Inductive reactance	- Ohm/km
Operating capacitances	- mF/km
Permissible short circuit current	- kA
Maximum operating voltage	-
Nominal Voltage	250 V
Test voltage	1500 V
Transfer impedance	25
Permissible current rating in open air	- A

## Mechanical characteristics

Mechanical stress	15 N/mm <sup>2</sup>
Torsion stress	150 °/m
Maximum tensile strength	- N/mm <sup>2</sup>

## Usage characteristics

Flame retardant	IEC 60332-1-2
Gases corrosivity	IEC 60754-1; IEC 60754-2; EN 50525-1 Anx C
Smoke density	IEC 61034-2
Oil resistance	IEC 60811-2-1
U.V resistance	IEC 60068-2-5

**Usage characteristics**

Ozone resistance	IEC 60811-100 & IEC 60811-403
Max. conductor temperature in service	- °C
Short-circuit max. conductor temperature	- °C
Ambient installation temperature	- °C
Operating temperature, range	-40 ... 90 °C
Ambient dynamic operating temperature, range	-30 ... 80 °C
Ambient static operating temperature, range	-40 ... 80 °C
Minimum bending radius, occasionally moving	6 (xD)
Minimum bending radius, fixed installation	4 (xD)

**SELLING AND DELIVERY INFORMATION**

Marking e.g.

NEXANS INTERCOND - Week/Year of production - WINDLINK LiHCH n x yy mm<sup>2</sup>

n: number of conductors

yy: section of conductor

Meter marking