

**CONTACT**

Market information  
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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  $\pm 150^\circ/m$  (from  $-20^\circ C$  up to  $50^\circ C$ )
- 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 Anx 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  | 4 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                | 4                 |
| 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         | 7.2 mm            |
| Approximate weight             | 95 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 impedace                           | 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