

CONTACT

Market information
industryprojects.business@lynx
ogroup.com

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 | 5 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 | 5 |
| Conductor cross-section | 1 mm ² |
| 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 | 8.4 mm |
| Approximate weight | 111 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 ² |
| Torsion stress | 150 °/m |
| Maximum tensile strength | - N/mm ² |

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 mm²

n: number of conductors

yy: section of conductor

Meter marking