

CONTACT

Market information
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Halogenfree, shielded control cables LiHCH

STANDARDS

Product Nexans specification

Application

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

Product characteristics

- Suitable for torsion up to $\pm 150^\circ/\text{m}$ (from -20°C up to 50°C)
- Vibration resistant
- Low smoke according to IEC 61034-2
- Flame retardant according to IEC 60332-1
- 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



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



Gases corrosivity
IEC 60754-2



Fire retardant
IEC 60332-1-2



Oil resistance
EN 60811-2-1



Smoke density
IEC 61034-2



U.V resistance
IEC 60068-2-5



Max. conductor
temp. in service
- °C



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

CHARACTERISTICS

Construction characteristics

| | |
|--------------------|-------------------------------------|
| Construction type | 12 x 1.5 |
| Conductor material | Bare copper class 5 |
| Insulation | Halogen free compound |
| Insulation colour | Black numbered |
| Screen | Tinned copper braid, coverage ≥ 80% |
| Outer sheath | Halogen free compound |
| Sheath colour | Black - RAL 9005 |

Dimensional characteristics

| | |
|--------------------------------|---------------------|
| Number of cores | 12 |
| Conductor cross-section | 1.5 mm ² |
| Conductor diameter (mm) | |
| Insulation sheath thickness | - mm |
| Nominal outer sheath thickness | - mm |
| Diameter over braid | 10.4 mm |
| Minimum cable diameter | - mm |
| Maximum cable diameter | - mm |
| Nominal diameter | 13 inches |
| Approximate weight | - kg/km |
| Copper content | 294 kg/km |

Electrical characteristics

| | |
|---|-------------|
| Max. DC resistance of the conductor at 20°C | 13.3 Ohm/km |
| Max. Electrical Resistance AC 60Hz 70°C | - Ohm/km |
| Max. Electrical Resistance AC 60Hz 90°C | - Ohm/km |
| Inductive reactance | - Ohm/km |
| Insulation resistance at 20°C | 100 MOhm.km |
| Operating capacitances | - mF/km |
| Permissible short circuit current | - kA |
| Rated Voltage U ₀ /U (U _m) | 300/500 V |
| Test voltage | 1500 V |
| Transfer impedance | 10 |
| Permissible current rating in open air | - A |

Mechanical characteristics

| | |
|--------------------------|---------------------|
| Torsion stress | 100 °/m |
| Maximum tensile strength | - N/mm ² |

Usage characteristics

| | |
|---------------------------------------|---------------|
| Gases corrosivity | IEC 60754-2 |
| Fire retardant | IEC 60332-1-2 |
| Oil resistance | EN 60811-2-1 |
| Smoke density | IEC 61034-2 |
| U.V resistance | IEC 60068-2-5 |
| Ozone resistance | EN 60811-2-1 |
| Max. conductor temperature in service | - °C |

Usage characteristics

| | |
|--|---------------|
| Short-circuit max. conductor temperature | - °C |
| Ambient installation temperature | - °C |
| Ambient dynamic operating temperature, range | -30 ... 80 °C |
| Ambient static operating temperature, range | -40 ... 80 °C |
| Minimum bending radius, occasionally moving | 8 (xD) |
| Minimum bending radius, fixed installation | 4 (xD) |