

### CONTACT

Market information  
 industryprojects.business@lynxegroup.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**

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

**Dimensional characteristics**

Conductor diameter (mm)	-
Insulation sheath thickness	- mm
Diameter over braid	- mm
Nominal outer sheath thickness	- mm
Minimum cable diameter	- mm
Maximum cable diameter	- mm

**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
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

## Usage characteristics

Minimum bending radius, occasionally moving	6 (xD)
Minimum bending radius, fixed installation	4 (xD)

## PRODUCT LIST

Construction type	Nom. outer diam. [mm]
2 x 0.50	5.7
2 x 1.0	6.3
2 x 1.5	7.1
2 x 2 x 0.25	6.3
2 x 2 x 0.25	13.4
2 x 2.5	7.8
3 G 1.0	6.6
3 G 1.5	7.4
3 G 2.5	8.5
3 x 0.25	4.6
3 x 0.75	6.4
3 x 1.0	6.6
3 x 1.5	7.4
3 x 2 x 0.50	8.8
4 G 1.0	7.2
4 G 1.5	8.2
4 x 1.0	7.2
4 x 2 x 0.50	9.3
4 x 2.5	9.4
4x0,25	5.0
5 G 1.5	9.6
5 x 0.75	7.5
5 x 1.0	8.4
5 x 1.0	12.1
6 x 0.25	6.0
7 G 1.0	8.5
7 G 1.5	10.1
7 G 2.5	11.2
7 x 1.0	8.5
7 x 1.5	10.1
12 G 1.0	11.3
12 G 1.5	13.0
12 x 0.25	7.6
12 x 1.0	11.3
15 G 1.5	13.7
15 G 2.5	19.8
15 x 0.50	10.4
18 G 1.5	15.1
25 x 0.50	13.7
32 x 0.25	11.3
32 x 0.25	12.0

Construction type	Nom. outer diam. [mm]
32 x 1.0	17.7
50 x 0.50	-
50x1,0	22.4

**PRODUCT LIST**

Reference	Country Ref.	Name	Construction type	Nominal outer diameter [mm]
☎	-	LiHCH 3x0.25	3 x 0.25	4.6
☎	-	LiHCH 4x0.25	4x0,25	5.0
☎	-	LiHCH 6x0.25	6 x 0.25	6.0
☎	-	LiHCH 12x0.25	12 x 0.25	7.6
☎	-	LiHCH 32x0.25	32 x 0.25	11.3
☎	-	LiHCH (TP) 2x2x0.25	2 x 2 x 0.25	6.3
☎	-	LiHCH 15x0.50	15 x 0.50	10.4
☎	-	LiHCH 25x0.50	25 x 0.50	13.7
☎	-	LiHCH 50x0.50	50 x 0.50	-
☎	-	LiHCH (TP) 3x2x0.50	3 x 2 x 0.50	8.8
☎	-	LiHCH (TP) 4x2x0.50	4 x 2 x 0.50	9.3
☎	-	LiHCH 5x0.75	5 x 0.75	7.5
☎	-	LiHCH 36x0.25	32 x 0.25	12.0
☎	-	LiHCH (TP) 19x2x0.25	2 x 2 x 0.25	13.4
☎	-	LiHCH 2x0.50	2 x 0.50	5.7
☎	-	LiHCH 3x0.75	3 x 0.75	6.4
☎	-	LiHCH 2x1.0	2 x 1.0	6.3
☎	-	LiHCH 3x1.0	3 x 1.0	6.6
☎	-	LiHCH 3G1.0	3 G 1.0	6.6
☎	-	LiHCH 4x1.0	4 x 1.0	7.2
☎	-	LiHCH 4G1.0	4 G 1.0	7.2
☎	-	LiHCH 5x1.0	5 x 1.0	8.4
☎	-	LiHCH 7x1.0	7 x 1.0	8.5
☎	-	LiHCH 7G1.0	7 G 1.0	8.5
☎	-	LiHCH 12x1.0	12 x 1.0	11.3
☎	-	LiHCH 12G1.0	12 G 1.0	11.3
☎	-	LiHCH 32x1.0	32 x 1.0	17.7
☎	-	LiHCH 50x1.0	50x1,0	22.4
☎	-	LiHCH 5x2x1.0	5 x 1.0	12.1
☎	-	LiHCH 2x1.5	2 x 1.5	7.1
☎	-	LiHCH 3x1.5	3 x 1.5	7.4
☎	-	LiHCH 3G1.5	3 G 1.5	7.4
☎	-	LiHCH 4G1.5	4 G 1.5	8.2

☎ = Make to order, ☒ = In stock,

Reference	Country Ref.	Name	Construction type	Nominal outer diameter [mm]
☞	-	LiHCH 5G1.5	5 G 1.5	9.6
☞	-	LiHCH 7x1.5	7 x 1.5	10.1
☞	-	LiHCH 7G1.5	7 G 1.5	10.1
☞	-	LiHCH 12G1.5	12 G 1.5	13.0
☞	-	LiHCH 15G1.5	15 G 1.5	13.7
☞	-	LiHCH 18G1.5	18 G 1.5	15.1
☞	-	LiHCH 2x2.5	2 x 2.5	7.8
☞	-	LiHCH 3G2.5	3 G 2.5	8.5
☞	-	LiHCH 4x2.5	4 x 2.5	9.4
☞	-	LiHCH 7G2.5	7 G 2.5	11.2
☞	-	LiHCH 15G2.5	15 G 2.5	19.8

☞ = Make to order, ☒ = In stock,

## 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