



LiHCH Multi-conductor

Multi-pair ,Low-Voltage Communication
and Control Cable; Shielded



IEC 60228 ; EN 50290-2-22 ; IEC 60332-1-2

RoHS , REACH & CE Directives



Ambient installation T°
C range
0 + 50 °C



Operating temp.
-20 + 60 °C



Storage temperature
range
-20 + 70 °C



Flame retardant
IEC 60332-1



Smoke density

Applications

LiHCH cables are multi-core halogen-free screened control cables suitable for use in industrial applications such as data transmission between electronic devices in computer systems or process control units with increased requirements for electromagnetic compatibility. Suitable for areas with a high density of people as well as high-value property that must be protected in the event of a fire . For use within public buildings, transport systems and industrial plants

LiHCH cables are used in data processing, measurement and control engineering, safety related systems and as electronics cable. Also they are used in computer systems, instrumentation systems, office equipment, balances - wherever screened, halogen-free, small diameter cables are needed.

LiHCH Construction:

Conductor material:	Class 5 Fine stranded bare copper
Insulation material:	Halogen free compound HI2
Core stranding	Cores twisted in layers, Wrapping by Polyester plastic foil
Screening	Braiding of tinned copper wires
Jacket / sheath material:	Halogen free outer jacket type HM2
Sheath colour:	Pebble gray (RAL 7032)

Core identification:

2 Core:	 White	 Brown						
3 Core:	 White	 Brown	 Green					
4 Core:	 White	 Brown	 Green	 Yellow				
5 Core:	 White	 Brown	 Green	 Yellow	 Grey			
6 Core:	 White	 Brown	 Green	 Yellow	 Grey	 Pink		

Larger sizes: 6 Core colours + following colours in addition

7 Core :	 Blue						
8 Core:	 Red						
10 Core:	 Black	 Violet					
12 Core:	 Grey/Pink	 Red/Blue					

Technical Data:

Mutual capacitance (core to core) Nom.	nF/km 120
(core to screen) Nom.	nF/km 160
Inductivity Nom.	Mh/km 0.50
Insulation resistance	GΩ x cm > 20
Peak operating voltage at 0.14 mm²	V 350 (not for power applications)
at ≥ 0.25 mm²	V 500 (not for power applications)
Test voltage at 0.14 mm²	V 1200
at ≥ 0.25 mm²	V 1500
Oil resistant	EN 50290-2-22 (TM54)
Temperature range (for flexible use)	-5°C to +70 °C
(for stationary use)	-40°C to +80 °C
Bending radius Ocassional movement)	15 x OD (overall diameter)
(Fixed installation)	6 x OD (overall diameter)
Other properties	Good UV resistance, chemical resistance & flexibility

LiHCH

Dimensions:

Cable Description	No. of Cores	Nominal Conductor Size (mm²)	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)

26 AWG (0.14 mm ²)				
2 x 0.14	2	0.14	3.9	20
3 x 0.14	3	0.14	4	22
4 x 0.14	4	0.14	4.2	26
5 x 0.14	5	0.14	4.6	30
6 x 0.14	6	0.14	4.9	34
7 x 0.14	7	0.14	5	37
8 x 0.14	8	0.14	6	43
10 x 0.14	10	0.14	6.5	51
12 x 0.14	12	0.14	6.7	56
24 AWG (0.25 mm ²)				
2 x 0.25	2	0.25	4.6	28
3 x 0.25	3	0.25	4.8	31
4 x 0.25	4	0.25	5.2	37
5 x 0.25	5	0.25	5.7	44
6 x 0.25	6	0.25	6.3	49
7 x 0.25	7	0.25	6.4	53
8 x 0.25	8	0.25	6.5	64
10 x 0.25	10	0.25	6.7	76
12 x 0.25	12	0.25	7	84
22 AWG (0.34 mm ²)				
2 x 0.34	2	0.34	4.8	31
3 x 0.34	3	0.34	5	36
4 x 0.34	4	0.34	5.4	43
5 x 0.34	5	0.34	5.9	56
6 x 0.34	6	0.34	6.6	63
7 x 0.34	7	0.34	6.8	70
8 x 0.34	8	0.34	7	82
10 x 0.34	10	0.34	7.5	94
12 x 0.34	12	0.34	8.1	102
20 AWG (0.5 mm ²)				
2 x 0.5	2	0.5	5.1	34
3 x 0.5	3	0.5	5.3	40
4 x 0.5	4	0.5	5.8	48
5 x 0.5	5	0.5	6.4	59
6 x 0.5	6	0.5	6.9	68
7 x 0.5	7	0.5	7.1	76
8 x 0.5	8	0.5	7.4	84
10 x 0.5	10	0.5	8.7	103
12 x 0.5	12	0.5	8.9	118
18 AWG (0.75 mm ²)				
2 x 0.75	2	0.75	5.6	41
3 x 0.75	3	0.75	5.9	51
4 x 0.75	4	0.75	6.4	63
5 x 0.75	5	0.75	7.0	74
6 x 0.75	6	0.75	7.6	86
7 x 0.75	7	0.75	7.8	96
8 x 0.75	8	0.75	8.2	107
10 x 0.75	10	0.75	9.6	132
12 x 0.75	12	0.75	9.9	152
17 AWG (1 mm ²)				
2 x 1	2	1	6.1	48
3 x 1	3	1	6.4	62
4 x 1	4	1	7.0	76
5 x 1	5	1	7.6	91
6 x 1	6	1	8.2	104

7 x 1	7	1	8.4	116
16 AWG (1.5 mm²)				
2 x 1.5	2	1.5	6.8	62
3 x 1.5	3	1.5	7.2	79
4 x 1.5	4	1.5	7.8	97
5 x 1.5	5	1.5	8.6	119
6 x 1.5	6	1.5	9.4	141
7 x 1.5	7	1.5	9.6	158
14 AWG (2.5 mm²)				
2 x 2.5	2	2.5	7.8	85
3 x 2.5	3	2.5	8.4	115
4 x 2.5	4	2.5	9.3	148
5 x 2.5	5	2.5	10.0	176
6 x 2.5	6	2.5	10.8	202



The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.