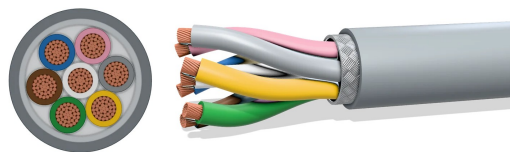


Application

LiHCH is a flexible, screened multicore data and signal cable with fine-stranded bare copper conductors, halogen-free core insulation, an overall braid of tinned copper wires and a grey halogen-free (LSZH) outer sheath. In the event of fire the halogen-free materials develop little smoke and no corrosive gases, which makes the cable suitable for locations where people and sensitive equipment must be protected, such as public buildings, data centres and control rooms. The braid screen limits the influence of external electrical interference on the transmitted signal. The cable is intended for the transmission of low-voltage data, measuring and control signals in dry and damp indoor locations, for fixed installation or occasional flexing without tensile load; it is not intended for outdoor use, direct burial or power distribution.



CONSTRUCTION

Conductor	Fine-stranded bare copper (class 5 acc. to IEC 60228 from 0.5 mm ²).
Insulation	Halogen-free (LSZH) compound.
Screen	Braid of tinned copper wires over the stranded cores, optical coverage approx. 70 %.
Sheath	Halogen-free (LSZH) compound, grey.
Core identification	Colour code acc. to DIN 47100.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage	250 V (not for power applications).
Test voltage	1200 V (core/core).
Standard	Manufacturer specification based on DIN VDE 0812; conductor class 5 acc. to IEC 60228 (from 0.5 mm ²); core colours acc. to DIN 47100.
Flame-retardant	Acc. to IEC/EN 60332-1-2.
Halogen-free	Acc. to IEC/EN 60754-1 and IEC/EN 60754-2 (no corrosive gases).
Max. conductor temperature	+70 °C.
Permitted outer cable temperature, fixed	-30 °C to +70 °C.
Permitted outer cable temperature, moved	-5 °C to +70 °C.
Min. bending radius, fixed	10 × outer diameter.
Min. bending radius, moved	15 × outer diameter.
Reaction to fire (CPR)	Flexible connection cable, outside the scope of EN 50575 when used for connecting mobile equipment (halogen-free).

DIMENSIONS & TECHNICAL DATA

Cores × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 0.14	138	4.1	22
3 × 0.14	138	4.3	25
4 × 0.14	138	4.5	28
5 × 0.14	138	4.8	32
6 × 0.14	138	5.1	35
7 × 0.14	138	5.2	39
8 × 0.14	138	6	41
10 × 0.14	138	6.4	56
12 × 0.14	138	6.8	74
16 × 0.14	138	7.2	90
25 × 0.14	138	9.4	135
2 × 0.25	79	4.7	24
3 × 0.25	79	4.9	29
4 × 0.25	79	5.2	35
5 × 0.25	79	5.8	41
6 × 0.25	79	6.2	49
7 × 0.25	79	6.3	51
8 × 0.25	79	7.3	58
10 × 0.25	79	7.7	81
12 × 0.25	79	7.9	117
16 × 0.25	79	8.6	124
18 × 0.25	79	9	126
25 × 0.25	79	10.9	161
2 × 0.34	57	5.1	30
3 × 0.34	57	5.3	33
4 × 0.34	57	5.9	59
5 × 0.34	57	6.4	56
6 × 0.34	57	7	59
7 × 0.34	57	7.1	75
8 × 0.34	57	8	84
10 × 0.34	57	8.9	106
12 × 0.34	57	9.1	133
16 × 0.34	57	9.6	160
25 × 0.34	57	12.5	232
2 × 0.5	39	5.8	38
3 × 0.5	39	6.1	47
4 × 0.5	39	6.5	62
5 × 0.5	39	7.2	76
6 × 0.5	39	7.8	84
7 × 0.5	39	7.9	86
8 × 0.5	39	8.9	135
10 × 0.5	39	9.5	129
12 × 0.5	39	9.8	148
18 × 0.5	39	11.7	210
25 × 0.5	39	13.9	319

Cores × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 0.75	26	6.2	45
3 × 0.75	26	6.5	60
4 × 0.75	26	7.2	92
5 × 0.75	26	7.8	97
7 × 0.75	26	8.5	120
10 × 0.75	26	10.7	169
12 × 0.75	26	11.1	196
18 × 0.75	26	12.7	327
25 × 0.75	26	15.5	454
2 × 1	19.5	6.5	72
3 × 1	19.5	7	90
4 × 1	19.5	7.5	109
5 × 1	19.5	8.2	126
7 × 1	19.5	8.8	171
2 × 1.5	13.3	7.7	90
3 × 1.5	13.3	8.1	115
4 × 1.5	13.3	8.7	153
5 × 1.5	13.3	9.5	176
7 × 1.5	13.3	10.7	220

Outer diameters and weights are the nominal manufacturer values of the leading reference source and the conductor resistance is the nominal value at 20 °C for the conductor size; all values are indicative and non-binding.