

LED Chain

The **hansen LED Chain** is a highly flexible light source primarily designed for the illumination of solid acrylic letters for illuminated advertising purposes.

The **LED Chain** is designed to be embedded in a groove milled into the acrylic letters. The groove is usually filled with transparent artificial resin by the customer. Note that the compatibility of the LEDs with the filling compound must be tested in advance.

The LED Chain consist of multiple LEDs connected in series. Each LED is provided with an anti-parallel protective diode mounted on the same printed circuit board. The chain requires special constant-current converters for operation.

LED spacing, overall length, brightness and light colour of the LED Chain can be specified by the customer.

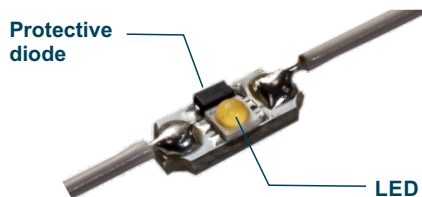
General data:	
Type of connection	Series connection
Power supply unit	hansen converter type C.../...
LED current	25 mA for white, blue and green 50 mA for red, yellow and amber
Wattage (per LED)	0.08 W (w,b,l,g) 0.11 W (r,y,o)
LED radiation angle	120°
LED spacing	20, 25, 30 or 40 mm
Degree of protection	IP00 (a higher degree (IP65) can be achieved with a suitable filling compound)
Class of protection	II (to be ensured by installation)
Ambient temperature range	-25 °C to +65 °C
Residual luminous flux	70% after 50,000 operating hours
Certification	CE, RoHS
Circuit board dimensions	11.9 x 5.2 x 3.7 mm (L x W x H)
Circuit board material	FR 4 epoxy resin, 1.5 mm
Connecting wire	0.8 mm YV equipment wire

Photometric data of the LEDs:	
White 2,700 K	8.7 lm
White 3,000 K	8.7 lm
White 4,000 K	9.6 lm
White 5,000 K	9.6 lm
White 6,500 K	9.6 lm
Red (612–624 nm)	6.4 lm
Yellow (583–592 nm)	5.9 lm
Amber (600–609 nm)	6.4 lm

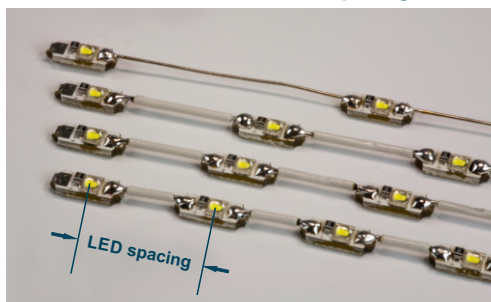
Note: Tolerance of the photometric data: +/- 10%

All values refer to an ambient temperature of +25 °C.

LED circuit board with components



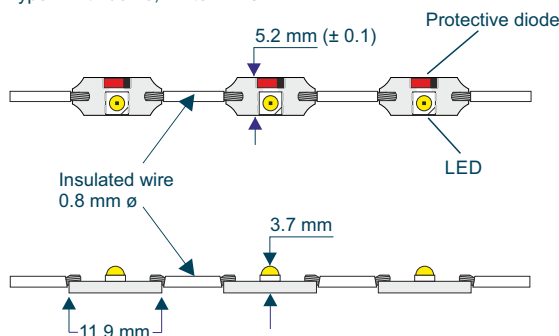
LED Chains with different LED spacings



Can be specified by the customer: 20, 25, 30 or 40 mm

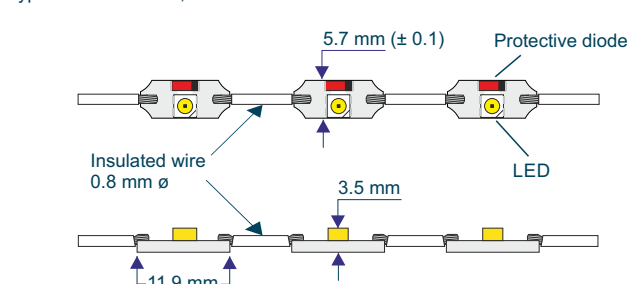
Dimensions

Type 1 with dome, white LEDs

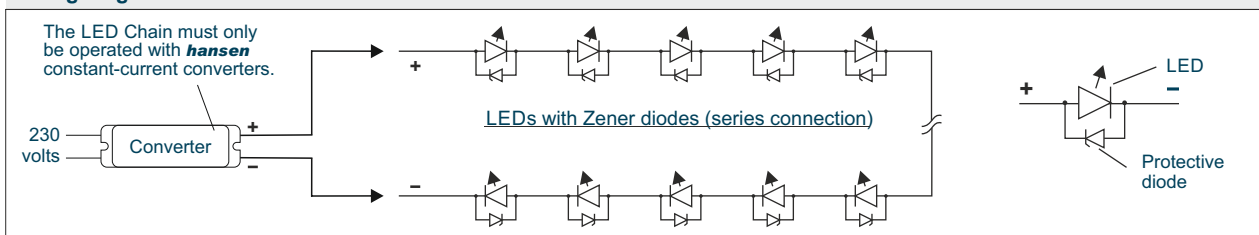


Dimensions

Type 2 without dome, white and colored LEDs



Wiring diagram:



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