

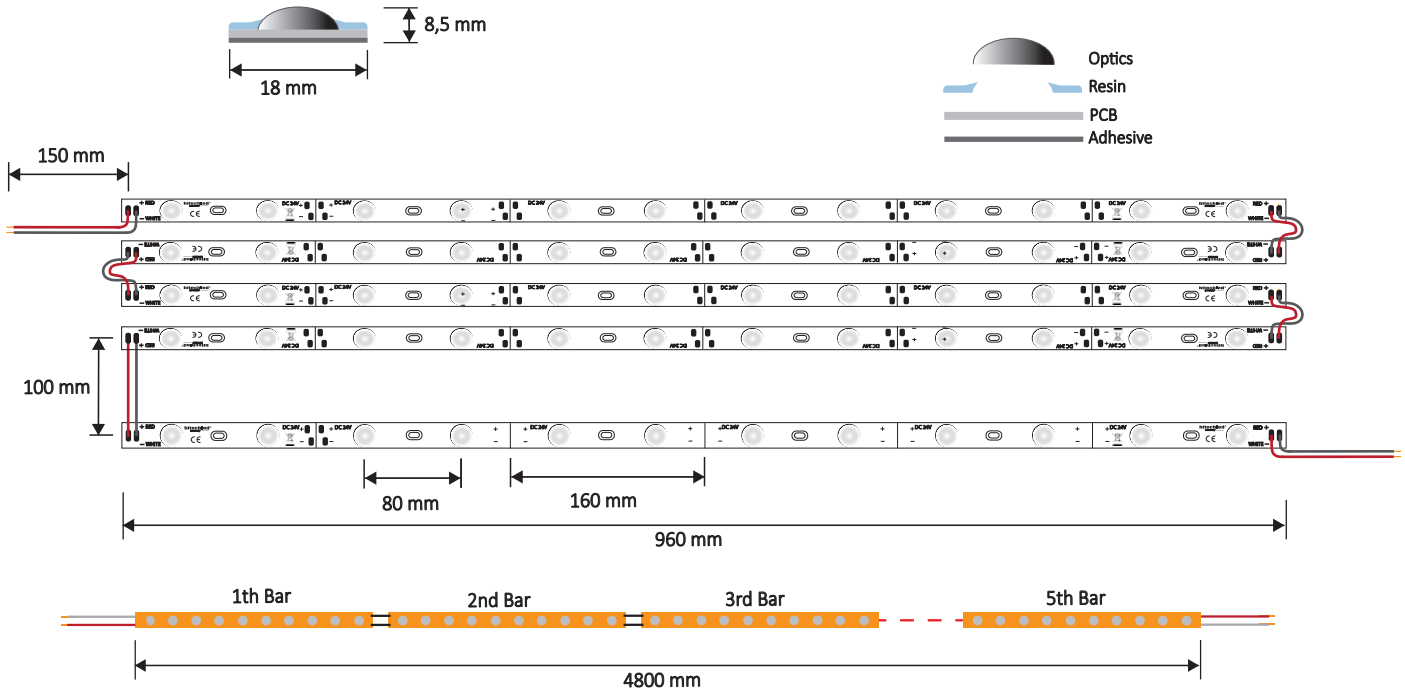
LED Linear Light kit

Model	Code	Color	Luminous Flux
HBK5-HE-12W24	HTL 000873	7000 k	930 Lm/Bar

Description

Kit of 5 HIGH EFFICIENCY LED bars FOR BRIGHT LIGHTING AND LOW CONSUMPTION, length 960 mm, already connected to each other to create a 4800 mm light thread, suitable for luminous contours, fascias, low thickness single-sided light boxes, exclusive optics with prisms and wide light emission angle, designed to allow a fast and stable application.

The entire surface of the bar is coated with silicone resin which guarantees excellent protection in humid environments.



Features

Nominal Voltage	DC 24 V
Consumption : W/Bar - W/Kit	6 W - 30 W
Max. voltage in case of polarity reversal	DC 25 V
Grade protection	IP 65
Operating temperature	-40 C° ~ +60 C°
Storage temperature	+5 C° ~ +40 C°
Storage relative humidity	RH < 60%
Insulation class (with SELV power supply)	Class III
Life span (temperature Tc = 75 °C)	70.000h (L70)
Prism optics	170°

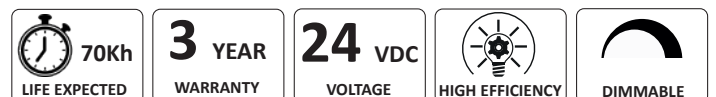
Handling and fixing

The 5-bar kits are packaged in anti-static bags.

Each individual bar is provided with adhesive for fixing that is present on the entire surface of the base. There are also fixing holes for screws in case of particular surfaces that do not allow the use of adhesive.

⚠ Warnings !!

- Isolate the ends of unused wires.
- Cutting bars, see paragraph "Cutting bars".
- Use 2.9 screws and not larger diameters.
- Clean and degrease the surface to ensure perfect adhesion the bar adhesive.
- Avoid excessively forcing/tensioning the connecting wires between the bars and the head wires.
- Curvature of the bar not less than a circle with radius 1 m.



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LOGO AND MOULURE LIGHTING APPLICATION EXAMPLE

The HBK5-HE-12 model LED bars are high efficiency luminaires > 150 lm/w and are designed for the backlighting of chanel and logos. Specific BATWING optics allow to spread the light homogeneously.

Illuminate the straight part of the moloure

Inside a channel up to 30 cm wide, it is sufficient to install a row of bars, positioning them centrally, one attached to the other. The flow projected by the special BATWING optics towards the sides of the channel is reflected, illuminating the front in a perfectly homogeneous way.

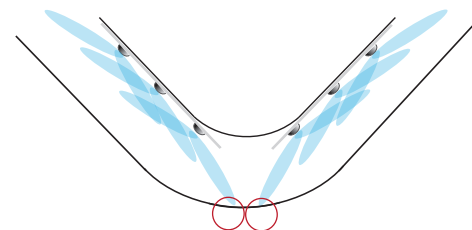


Chanel

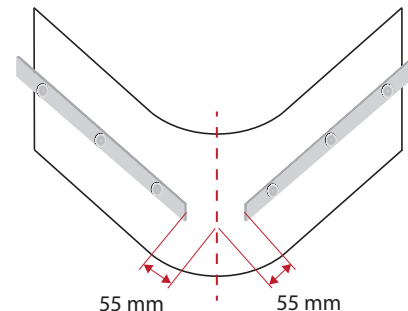
Illuminate the outer curve of the moulure

In the external curve of the moulure, where the 2 LED bars end, the wings of the light beam specially generated by the BATWING lenses, could project 2 light spots or shadow halos on the opal polycarbonate front, to avoid this it is necessary to position the bars at a specific distance.

Therefore it is necessary to observe some positioning precautions. Start positioning the LED bars of the shelter starting from the curves, then get 2 kits of 5 bars and position the 5th bar of the both kits on each side of the moulure, at 55 mm from the center of the curve.



Bars too close to the curve generate bright spots



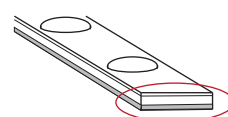
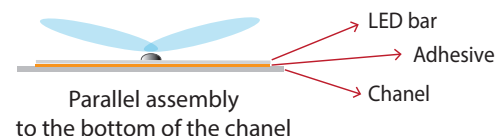
Positioning the bars centrally to the channel and at a distance from the centre of the curve of 55 mm

General assembly instructions

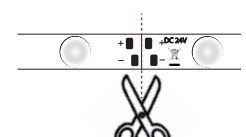
- The inside of the channel must be white to optimize light diffusion.
- The LED bars must be fixed to the bottom of the channel, the surface of which must be flat, not embossed and free of imperfections or nodules, allowing for positioning perfectly perpendicular to the front to be illuminated.
- To fix the LED bar, remove the protective film from the adhesive and press the bar against the surface, making sure to have previously cleaned it of dust and any oily or silicone residues.

Bar Cutting

- Use a sharp metal shear with a straight blade (not serrated).
- Cut the bar along the line between the pads.
- **Important!!** Sand the cut side with 500 fine sandpaper, acting with the sandpaper perpendicular to the bar.
- To reuse the cut bi-bar parts, you can tin wires on the appropriate pads, respecting the polarity. Remove the protective resin from the pads before tinning.
- It is recommended to seal the cut side and the used pads with neutral (non-acetic) silicone.



Sand the cut side with fine sandpaper

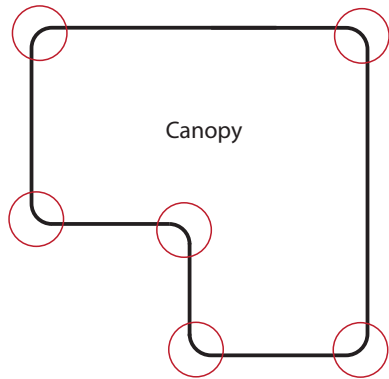


Cutting line

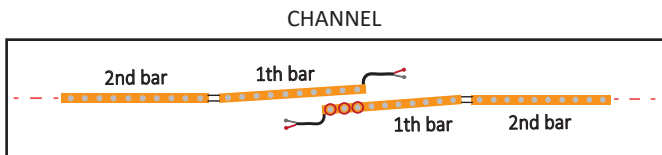
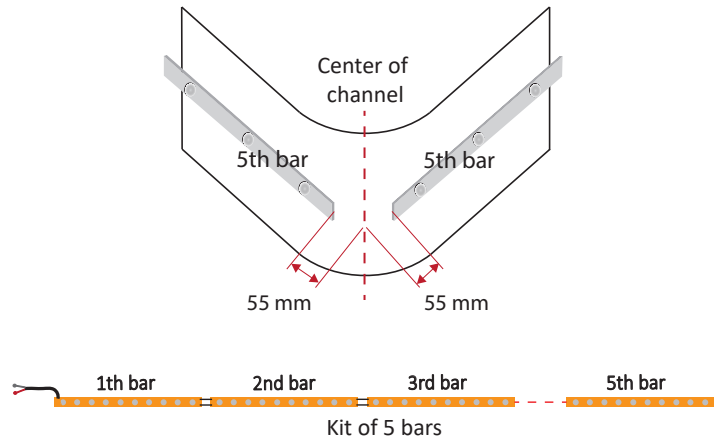
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How to proceed with the installation of LED bars on the channel around of perimeter of the canopy

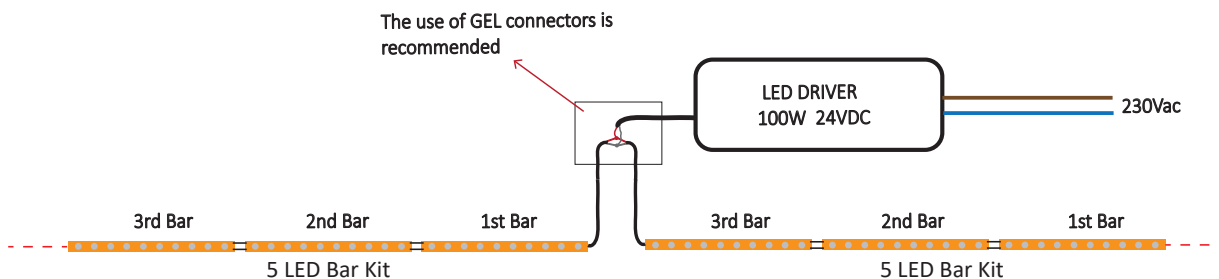
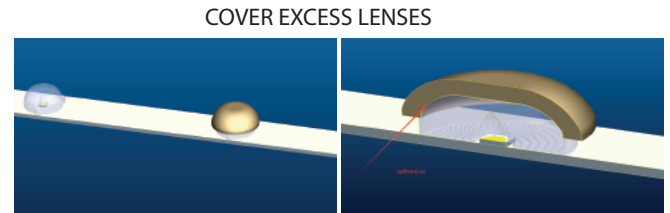
- Start applying the LED bars starting from the curves of the canopy first, then use 2 kits of 5 bars mod. HBK5-HE-12 for each curve and position the 5th bar of each kit on the 2 sides of the curve at 55 mm from the centre of the curve.
- Next, lay out the rest of the bars (4th to 1st bars) along the channel.



Start the application of the LED bars from the curves of the canopy.



At the point where the 2 kits overlap, leave the excess part of the bar safely parallel to the coinciding one. Mask the excess lenses to blind them, so as not to generate too much brightness in that area of channel

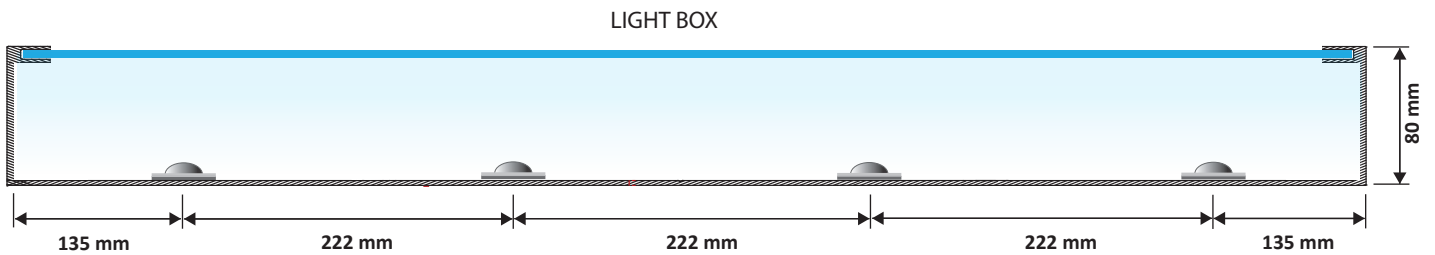


Power 10 bars (2 kits of 5 pcs) with a 100W - 12 VDC LED Driver

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How to proceed with the installation of LED bars on the light box

- Apply the HBK5-HE.12 LED bars respecting the distances as shown in the drawing below.



Conformity

This product complies with the following European directives:



EMC - Directive 2014/30/EU
EN 55015:2013/A1:2015
EN 61547:2009



Lighting Equipment Safety
EN 60598-2-20:2015 Used in conjunction with EN 60598-1:2015+A1:2018
EN 62031:2020. IEC TR 62778:2014



RoHS - Direttiva 2011/65/EU
IEC 62031



IP grade
IEC 60529:1989+A1:1999+A2:2013