

FrigoDynamics® HB HPK-Fin™ 170 Hybrid Heat Exchanger for CoB LEDs ≤ 130W³



The HB HPK-Fin™ solution is a Hybrid heat exchanger allowing high levels of power dissipation with zero power consumption. The unit has a unique, patented design utilizing the chimney effect thus maximizing performance. Ideal for installations with high ceilings, typically found in warehouses, factories, large retail stores and athletic facilities.

- Passive, no CO2 emissions
- Light weight
- Compact
- Zero noise levels
- No lifetime issues
- No operating cost
- Works in any orientation
- Easy installation



Please Note:
Registered German
Utility Model
DBGM protected
PCT Patent Application

Specifications

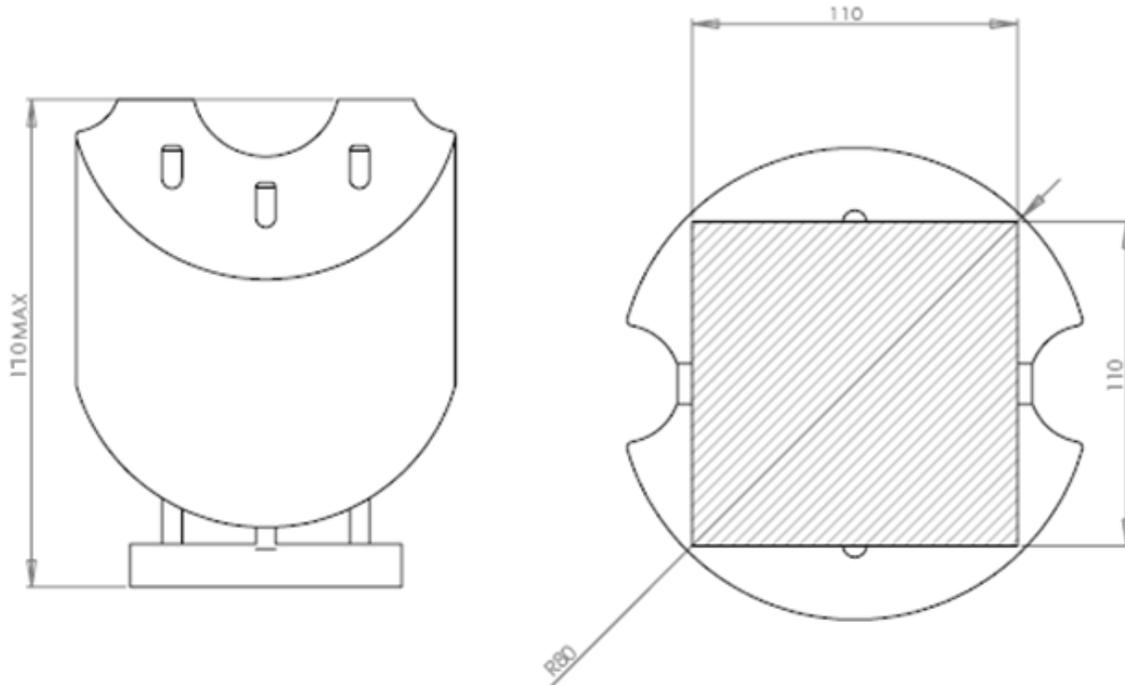
	Value	Conditions
Thermal Resistance (Tc)	0.53 °C/W ^{1,2}	Measured between LED Tc/Ts - ambient
Thermal Resistance (Hs)	0.43 °C/W ¹	Measured between LED mounting base and ambient
Design power	130W ³	Electrical Load (assuming 72% Pth)
Storage Temperature	-40°C to 100°C	Air temperature surrounding the unit
Surface finish	Black	Anodized
Weight	750g (~1.65 lbs)	Complete unit
Regulatory Compliance	RoHS	No further compliance necessary for passive devices

¹ Thermal resistance is measured in free air without airflow obstructions and in a horizontal orientation.

² This value is impacted by the thermal interface material used, especially with smaller heat sources.

³ Design power is based on 50 °C temperature difference between maximum Tc (Ts) on LED module and ambient temperature.

Dimensions (~ mm)



3D envelope CAD file available upon request and endorsement of FrigoDynamics NDA

Product Guide

Part Number	Description	Specifics
HB0900-HPK03-170AN	Blank Surface	
HB0916-HPK03-170AN	LED pattern , wire through holes	Bridgelux VERO™ 29, Citizen CLL052, CLU54
HB0919-HPK03-170AN	LED pattern , wire through holes	Tridonic STARK FLE
HB0920-HPK03-170AN	LED pattern , wire through holes	Bridgelux VERO™ 18/29
HB0925-HPK03-170AN	LED pattern , wire through holes	Citizen CLL042/CLL052/CLU54
HB0926-HPK03-170AN	LED pattern , wire, Corners 4x M3/ 8-8	Citizen CLL052/CLU54, Ledil Stella
HB0930-HPK03-170AN	LED pattern , wire, Corners 4x M3/ 8-8	Bridgelux VERO™ 29, Ledil Stella

Please [contact](#) us, should you have specific requirements not covered in this data sheet.

Disclaimer

Information given by FrigoDynamics® is believed to be accurate and reliable. However, since every potential application and the environment our solutions operate in cannot be anticipated, FrigoDynamics® does not guarantee suitability in all circumstances. Thermal performance may vary depending on the enclosure, the operating orientation and natural airflow. FrigoDynamics® shall not be liable for incidental or consequential damages of any kind.