LED FAN

Protechnic

PROTECHNIC LED FAN

Quality Focus

All Protechnic LED Fans utilize high-grade components to improve overall product longevity, reduce energy consumption and noise levels. Fluid Dynamic Bearings (FDB) are an integral part in achieving these goals.

FDB

Longer Life

Designed to be frictionless, FDB greatly increase product life to better align the LED fan MTBF with the LEDs useful life. This translates to more than 50,000 hours at 60C.

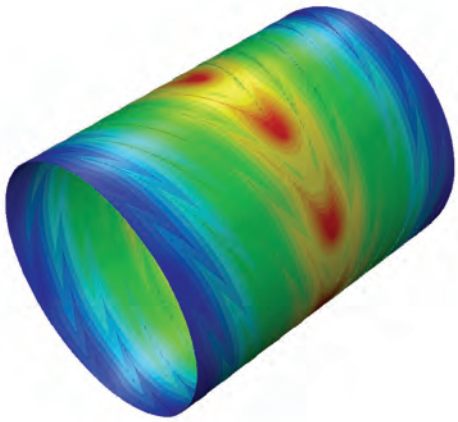
(Ex. Fluid Dynamic Bearing Cross Cut)

Low Noise

A lack of physical contact means that noise generation is reduced to inaudible levels (less than 20dB at 1500RPM)

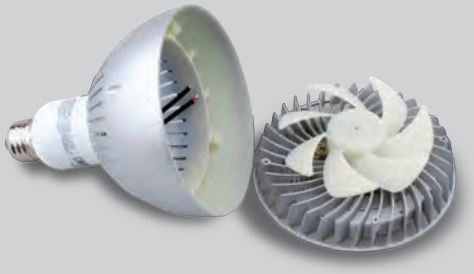
Bearing Design

Each aspect of a project and design is strictly controlled and measured to produce solutions that suit the specific needs of our customers. Leading-edge fluid dynamic simulation is employed to produce precise temperature and pressure readings within the bearing without the need for costly prototypes.



Protechnic Advantage

- Increase LED Lighting output performance by dramatically increasing heat dissipation
- Save on material cost and reduce total LED lighting fixture weight by 50% by utilizing our lighter and more effective fan and heatsink solution
- Increase ID freedom through smaller heatsink design requirements; enabling a focus on aesthetics over cumbersome cooling



Recommended Solutions

Lumen Range: up to 3000
Suggested Fan Size: 40mm or 60mm
Ideal Deployment: Spotlights (Par 30, Par 38)

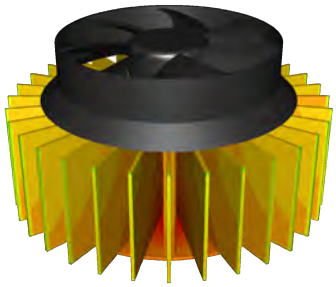
Lumen Range: 3000 to 9000
Suggested Fan Size: 92mm
Ideal Deployment: Commercial Lighting - Down Lights, Track Lighting

Lumen Range: 9000 or Greater
Suggested Fan Size: 125mm or 135mm
Ideal Deployment: Large Commercial Lighting (e.g. Warehouse Lighting) - HighBay

Engineering Support Services

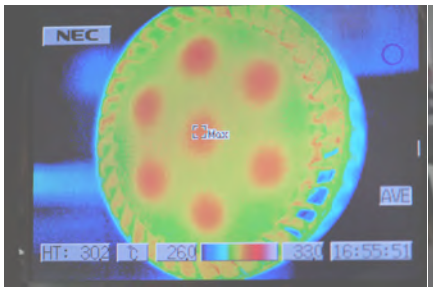
Simulation

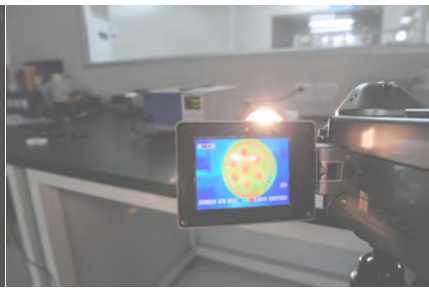
Scalable In-House Simulations with Dedicated Staff



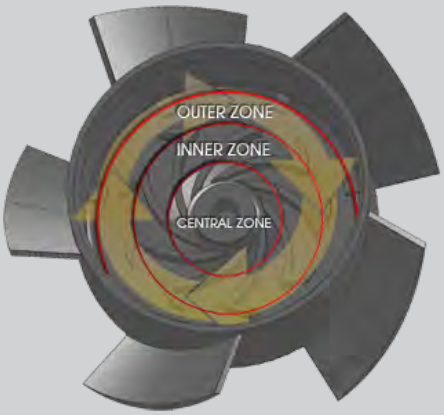
Testing & Verification

Our engineers utilize industrial grade thermal imaging cameras to test and verify the heat dissipation capabilities of your LED fan solution.





Dust Proof



Protechnic patented herribone seal design virtually eliminates the threat of dust and other solid particles from entering the bearing. This extends the operating life of the fan and contributes to a more stable cooling system within the LED housing.

These advantages are produced by:

- Creating a high pressure zone around the center which helps maintain ideal conditions in the lubricant oil
- The manner in which the pressure zones form helps produce a positive pressure bubble that repels unwanted dust and other solid particles away from the bearing and shaft