

SynJet® ZFlow 75 Spotlight Coolers Heat Sink and Fixture Attachment

Overview

This app note covers the mechanical mounting of a SynJet ZFlow 75 Cooler to compatible heatsinks and details of assembly to the fixture housing. It includes more detail on the screw sizes, torque specs, and additional tips for fastening to the product.

Details

The SynJet ZFlow75 Cooler is attached to the respective 31W, 34W or 38W Heat Sink using 4 screws, size M3 x 8mm long. Tighten to a torque value of 0.45 N-M (4 inch-lbs) +/-10%.

Additional recommendation: For applications where the installed light fixture will be subjected to significant handling, adjustment, or vibration that might cause the screws to loosen, apply a small amount of Loctite 222MS to the screw threads.

Mechanical – SynJet Cooling Solution

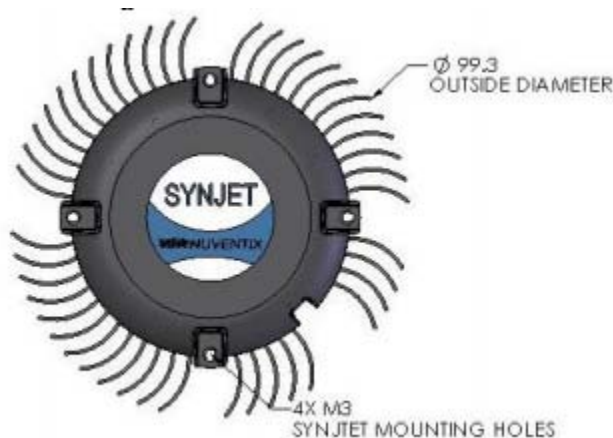


Fig. 1 - Spotlight Cooler 38W

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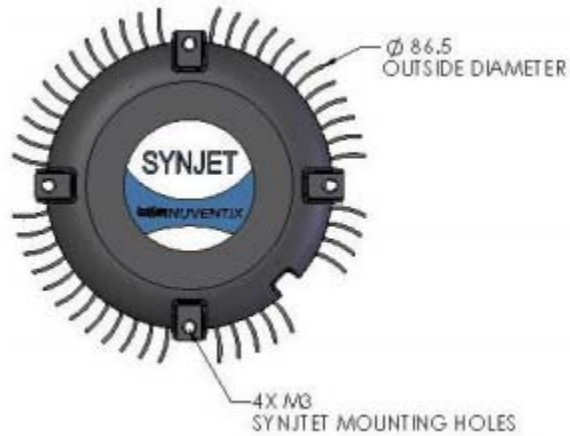


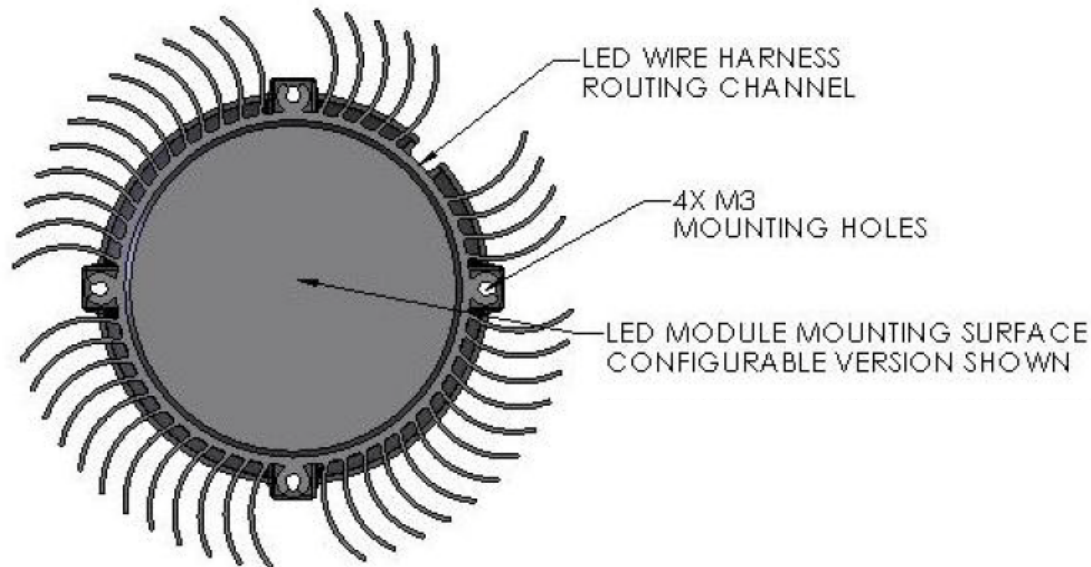
Fig. 2 – Spotlight Cooler 34W



Fig. 3 – Spotlight Cooler 31W

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Heatsink Attachment to Light Fixture Assembly



The “4 X M3 Mounting Holes” noted in the drawing above are used to attach the Heat Sink to the Light Fixture Assembly. They are at the opposite end of the Heat Sink from the screw holes used to attach the SynJet Cooler. The recommended torque is the same as above, and the Loctite 222M comment above may also be applicable.

Notes:

1. Loctite 222M holds the screw and prevents vibration, etc. from possibly causing it to back out/loosen. It is still flexible enough so the screw can be removed if needed, and replaced without damage.
2. The three heat sinks (31W, 34W, & 38W) have four missing fins that instead have metal ribs forming the screw holes. The actual screw holes have a wall around 75-80% of their circumference ...shaped like a “C”. The torque recommendation for mounting attachment is 0.45 N-M (4 inch-lbs) +/- 10%.