

NOVA Series



NOVA 4-50-B8 P20 LW

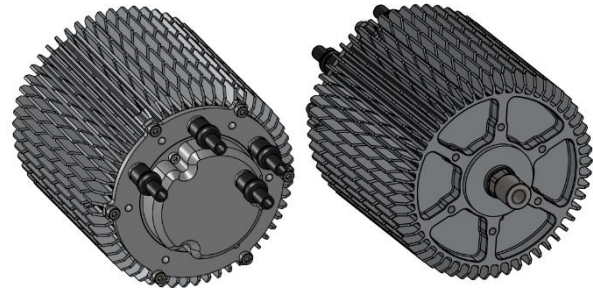
Inrunner BLDC motor with closed housing

Overview

The NOVA 4 Light-Weight ("LW") is from our family of super rugged inrunner BLDC motors and has been specifically designed for the most demanding applications, including uncrewed systems and aerospace.

Features

- Super robust housing for mission critical applications in the harshest environments
- Best power-to-weight-to-robustness ratio in its class
- Position and temperature sensors included in standard
- Optimized shaft for Plettenberg propeller coupling



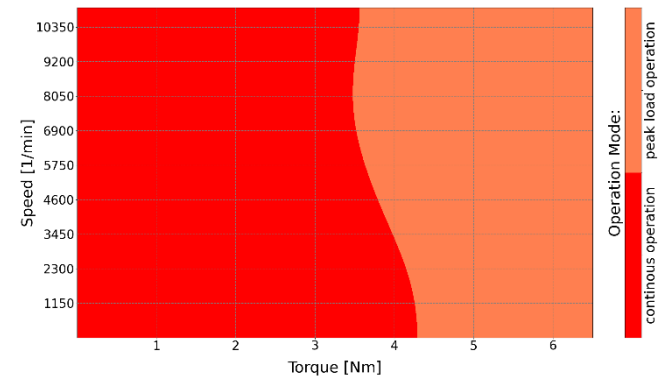
Specifications

| | | |
|--|---|-------|
| Peak output power | 4 | kW |
| Peak torque ¹ | 6.5 | Nm |
| Max. speed | 11,000 | rpm |
| Voltage range | 20-60 | V |
| Speed constant (kV) | 165 | rpm/V |
| Diameter | 79 | mm |
| Length | 81 | mm |
| Weight | 970 | g |
| Phase cable length | 100 | mm |
| Sensor cable length | 400 | mm |
| Protection class | IP54 | |
| Mounting | Front & back | |
| Cooling | Air cooled | |
| Ambient Temperature range | -20 to +60 | °C |
| Max. temperature of stator (as measured by sensor) | +100 | °C |
| Position sensor types | Hall effect sensor with UVW-commutation signals | |
| Temperature sensor | NTC 47 kΩ | |
| Number of poles | 20 | |
| Number of windings | 8 | |
| Peak thrust | 19 kg with 24x8.1" | |

Complementary Products

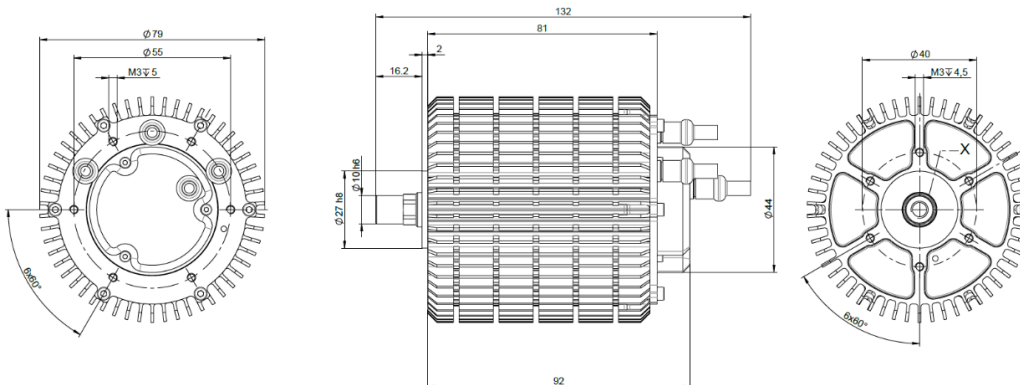
- Plettenberg propeller coupling: PC LW 6K 10mm
- Plettenberg ESCs: MST 60-80, MST 60-130
- Plettenberg gold connectors: GC6-00 / GC6-90

Heatmap



Notes:

¹ With sensor-guided ESC



Plettenberg Elektromotoren GmbH & Co. KG
Rostocker Straße 30
34225 Baunatal, Germany

T: +49 (0) 56 01 97 96-0

www.plettenbergmotors.com / sales@plettenbergmotors.com

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