

## NOVA Series

# NOVA 30-50-B10 P50 WK

Inrunner BLDC motor with closed housing



### Overview

The NOVA 30 Water-Cooled ("WK") is from our family of super rugged inrunner BLDC motors and has been specifically designed for the most demanding applications.

### Features

- Super robust housing for mission critical applications
- Best power-to-weight-to-robustness ratio in its class
- Position and temperature sensors included in standard



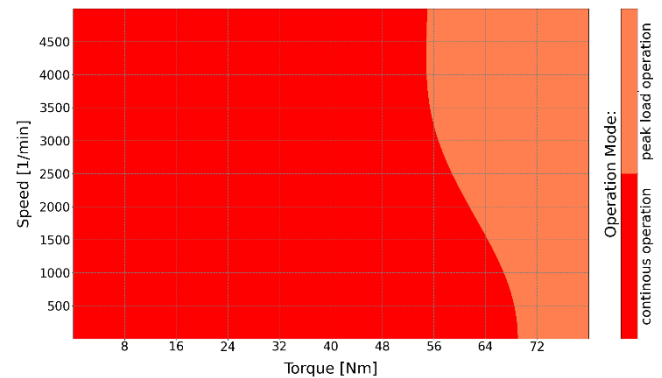
### Specifications

Peak output power	30	kW
Peak torque <sup>1</sup>	80	Nm
Max. speed	5,000	rpm
Voltage range	100-350	V
Speed constant (kV)	15	rpm/V
Diameter (ex. water inlet)	197	mm
Length	93	mm
Weight	6,300	g
Phase cable length	100	mm
Sensor cable length	400	mm
Protection class	IP53	
Mounting	Front	
Cooling	Water 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	50	
Number of windings	10	
Recommendations for water cooling	Flow of 7 liters-per-minute at max. 40°C inlet temp.; coolant pressure shall not exceed 2 bar/ 29 PSI.	

### Complementary Products

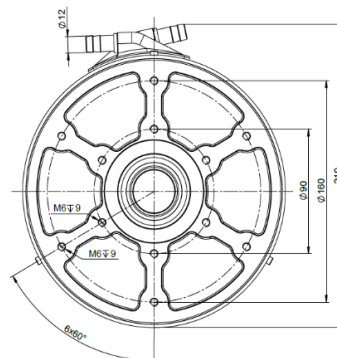
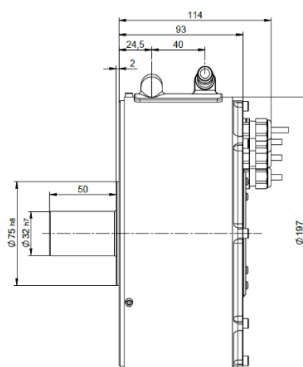
- Plettenberg ESCs: MST 140-200, MST 140-250 WK, MST 400-200 WK, MST 400-133
- Plettenberg gold connectors: GC6-00 / GC6-90

### Heatmap



#### Notes:

<sup>1</sup> With sensor-guided ESC



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