

## ADVANCE Series

# ADVANCE 1-30-B12 P14

Inrunner BLDC motor with open housing

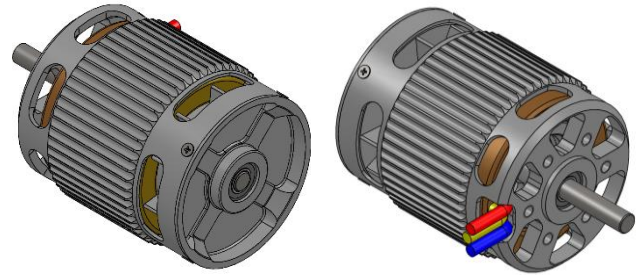


### Overview

The ADVANCE 1 is from our family of weight optimized inrunner BLDC motors and has been designed for a wide range of mission critical applications.

### Features

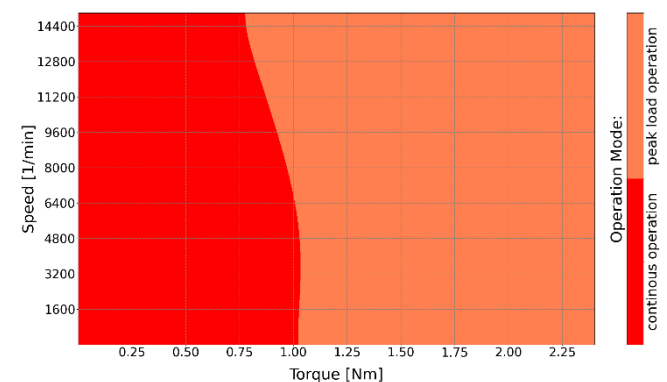
- Ultra-light housing for weight sensitive applications
- Integrated fan, providing superior cooling even in airflow constrained applications
- Designed for use with sensorless ESCs
- High torque density



### Specifications

Part number	02-045.030.00-000-021	
Peak output power	2	kW
Peak torque (max. 5s)	2.4	Nm
Max. speed	15,000	rpm
Voltage range	15-40	V
Speed constant (kV)	430	rpm/V
Diameter	55	mm
Length	64	mm
Weight	420	g
Phase cable length	100	mm
Recommended phase cable extension	2.5	mm <sup>2</sup>
	13	AWG
Protection class	IP20	
Mounting	Front	
Direction of rotation	Both	
Cooling	Air cooled	
Ambient temperature range	-20 to +60	°C
Max. temperature <sup>(1)</sup>		
Winding	120	°C
Rotor	120	°C
Number of poles	14	
Number of windings	12	
Phase resistance <sup>(2)</sup>	30	mΩ
Phase inductance <sup>(2)</sup>	22	μH
Peak thrust	10 kg with 18x6" prop	

### Heatmap



Note: Assuming 25°C ambient temperature at MSL.

### Options & Customization

- Custom winding/kV versions
- MTBF/S report
- Mechanical customization or frameless kits
- Propeller study
- Corrosion protection version
- Removal of integrated fan

#### Notes:

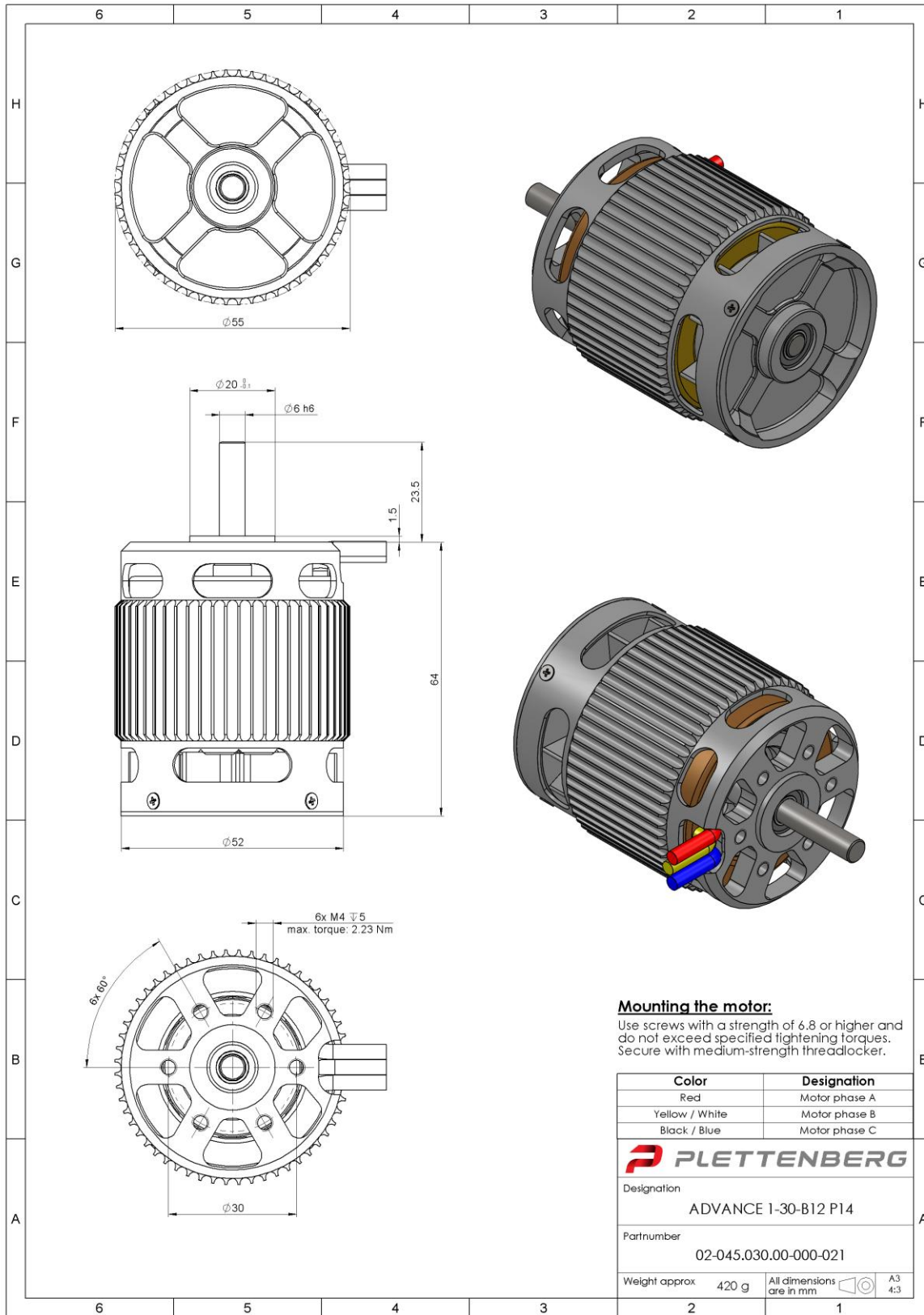
- (1) Absolute maximum continuous temperature levels, which must not be exceeded
- (2) Phase-to-phase value

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