

ORBIT Series

ORBIT 15-37-B6 P20

Outrunner BLDC motor

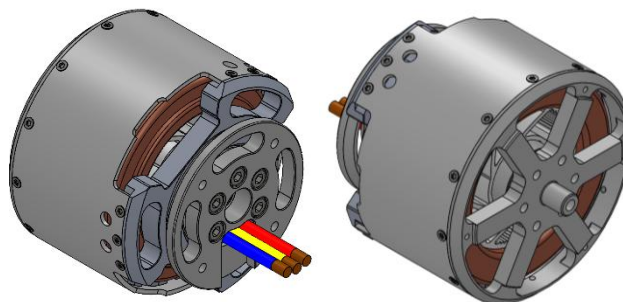


Overview

The ORBIT 15 is from our family of weight optimized outrunner BLDC motors and has been designed for a wide range of mission critical applications.

Features

- Ultra-light housing for weight sensitive applications
- Increased robustness through three bearing design, adding additional support to housing
- Useful for applications with high torque requirements
- Designed for use with sensorless ESCs



Specifications

Part number	03-049.037.00-000-033	
Peak output power	11	kW
Peak torque (max. 5s)	21	Nm
Max. speed	7,000	rpm
Voltage range	20-45	V
Speed constant (kV)	153	rpm/V
Diameter	103	mm
Length	84.5	mm
Weight	1,900	g
Phase cable length	100	mm
Recommended phase cable extension	7	AWG
Mounting	Back	
Cooling	Air cooled	
Direction of rotation	Both	
Ambient temperature range	-20 to +60	°C
Max. temperature ⁽¹⁾		
Winding	120	°C
Rotor	120	°C
Number of poles	20	
Number of windings	6	
Phase resistance ⁽²⁾	10	mΩ
Phase inductance ⁽²⁾	17	μH
Peak thrust	44 kg with 36x12" prop	

Heatmap



Note: Assuming 25°C ambient temperature and 10 m/s airflow at MSL.

Options & Customization

- Custom winding/kV versions
- MTBF/S report
- Mechanical customization or frameless kits
- Propeller study
- Corrosion protection version
- Position and temperature sensors

Notes:

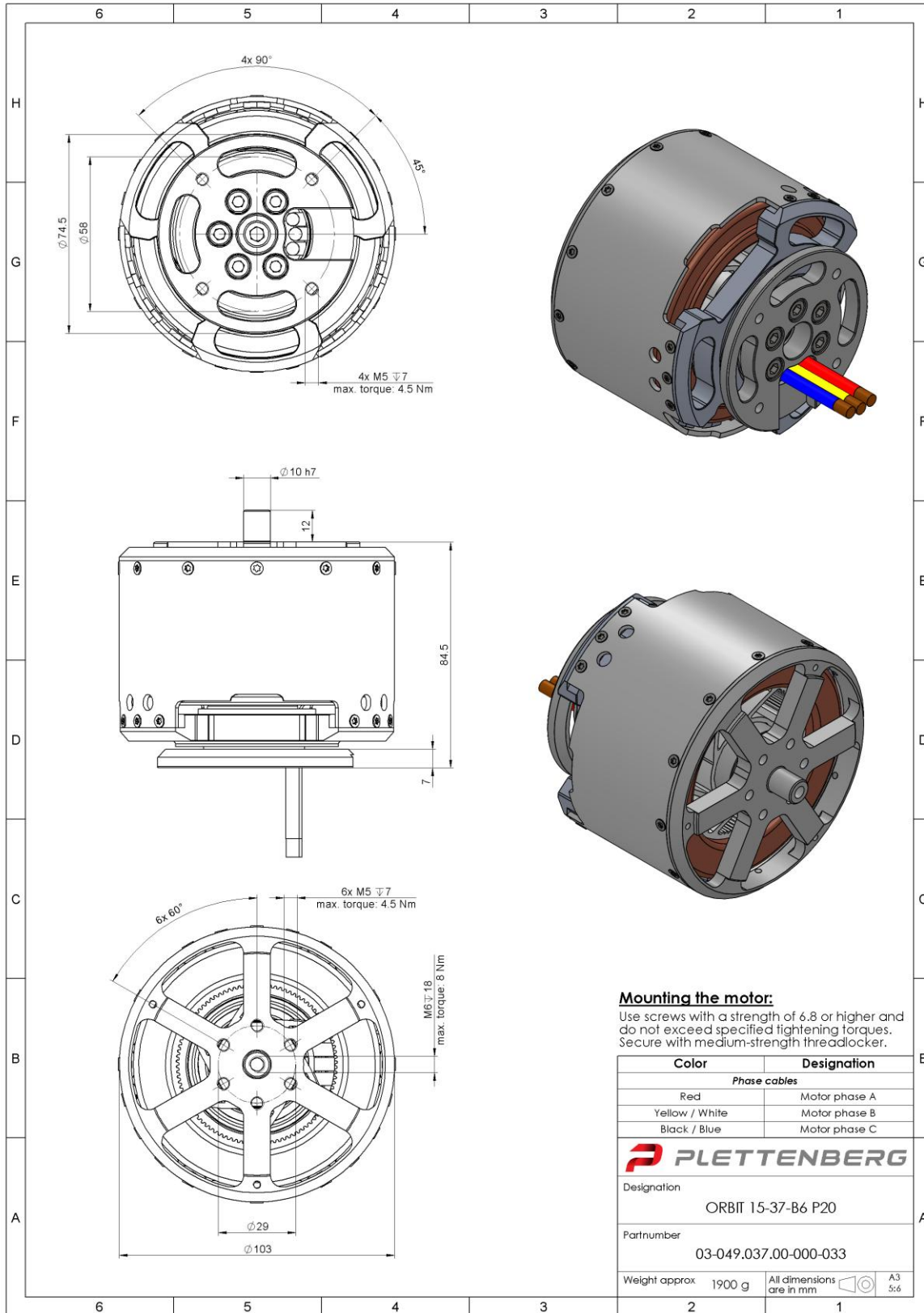
- (1) Absolute maximum continuous temperature levels, which must not be exceeded
- (2) Phase-to-phase value

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Mounting the motor:

Use screws with a strength of 6.8 or higher and do not exceed specified tightening torques. Secure with medium-strength threadlocker.

Color	Designation
<i>Phase cables</i>	
Red	Motor phase A
Yellow / White	Motor phase B
Black / Blue	Motor phase C

Designation	
ORBIT 15-37-B6 P20	
Partnumber	
03-049.037.00-000-033	
Weight approx	1900 g
All dimensions are in mm	A3 5:6

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