

ORBIT Series

ORBIT 15-30-B6 P20

Outrunner BLDC motor

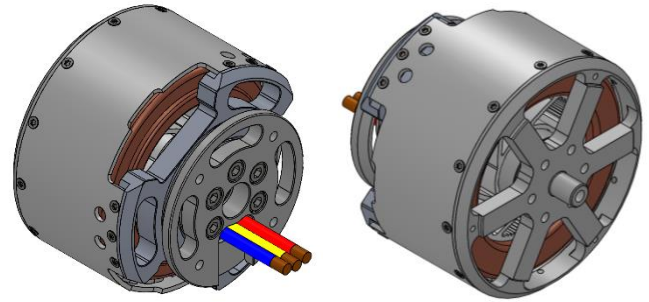


Overview

The ORBIT 15 is from our family of weight optimized rugged outrunner BLDC motors and has been specifically designed for mission critical applications, including uncrewed systems and aerospace.

Features

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



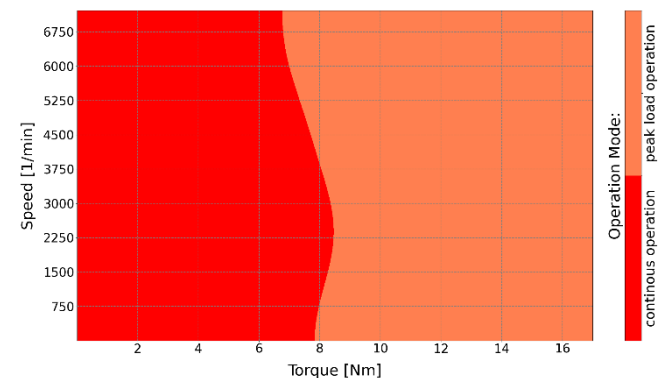
Specifications

Part number	03-049.030.00-000-042
Peak output power	9 kW
Peak torque (max. 5s)	17 Nm
Max. speed	7,000 rpm
Voltage range	15-36 V
Speed constant (kV)	185 rpm/V
Diameter	103 mm
Length	74.5 mm
Weight	1,590 g
Phase cable length	100 mm
Recommended phase cable extension	7 mm ² AWG
Mounting	Back
Direction of rotation	Both
Cooling	Air cooled
Ambient temperature range	-20 to +60 °C
Number of poles	20
Number of windings	6
Peak thrust	40 kg with 32x10.6" prop

Complementary Products

- Sensorless third party ESCs (e.g. Hargrave/APD or Allocortech)

Heatmap



Options & Customization

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

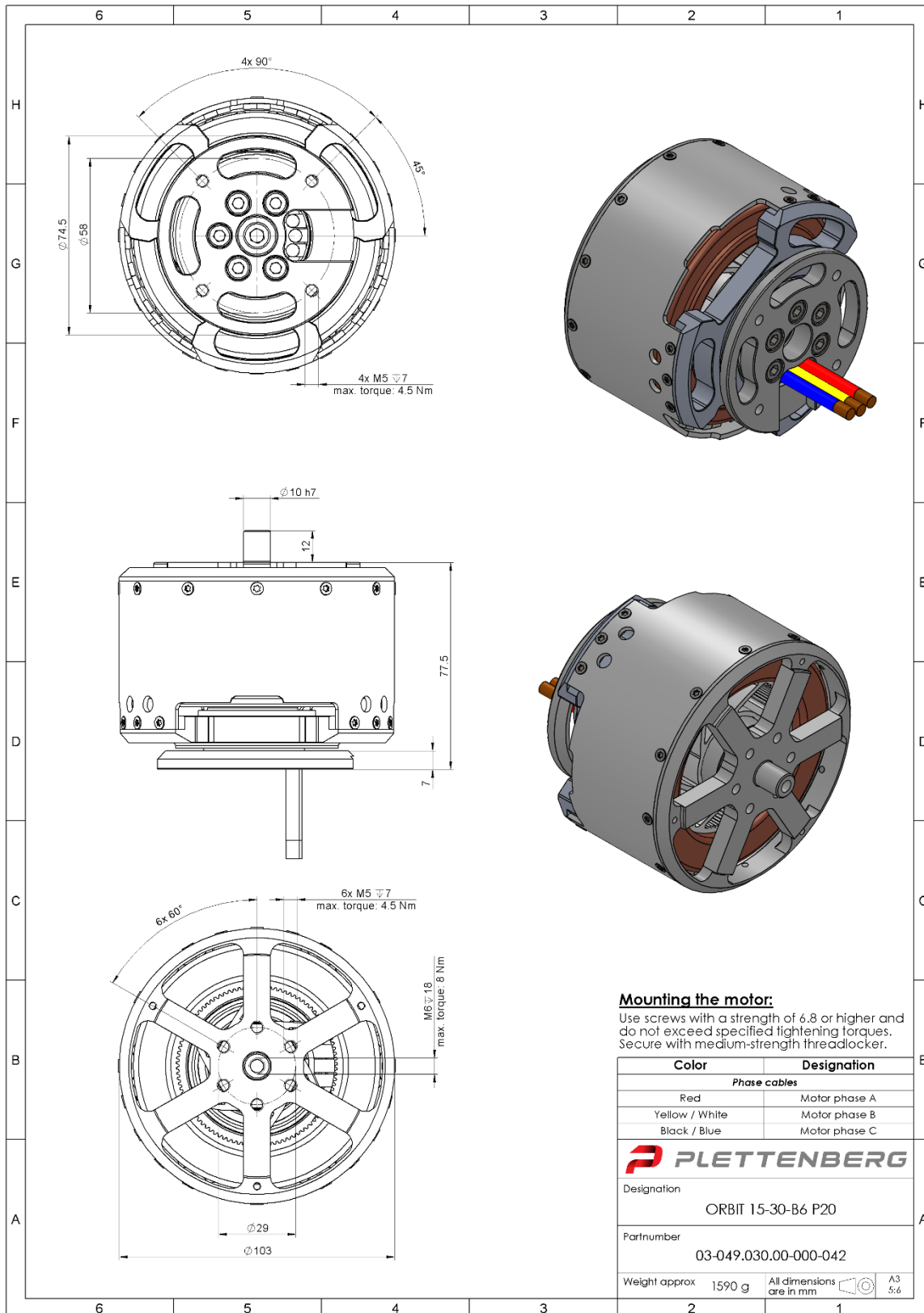
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Mounting the motor:

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

PLETTENBERG	
Designation	ORBIT 15-30-B6 P20
Partnumber	03-049.030.00-000-042
Weight approx	1590 g
All dimensions are in mm	A3 5:6

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