

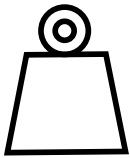
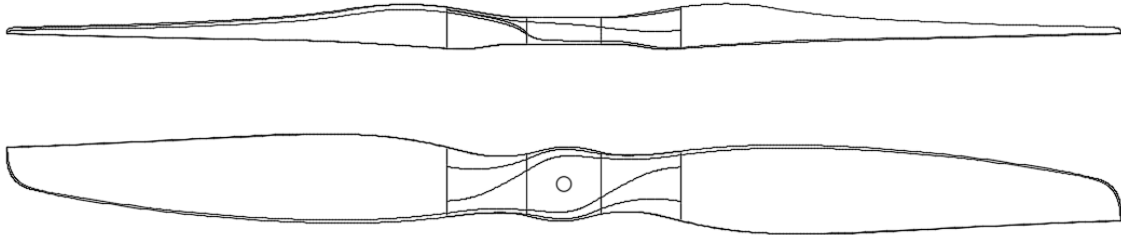


34x11.4 2B MC HD

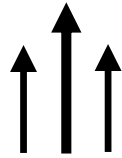
PN:23411400, 23411401

Product sheet

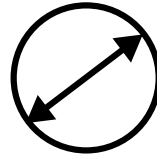
Rev.: 00
2024-04-30



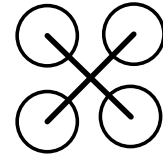
165 g
Mass



45.1 kgf
Max Thrust



34.0"
Diameter



Multicopter

Engine type:	Electric
Folding/Fixed	Fixed
Rotational direction:	Counter-clockwise and Clockwise available
Weight [g]:	165 ± 5.0%
Moment of inertia [kgm ²]:	1.03e-02
Center hole [mm]:	∅ 10
Max drilling diameter [mm]:	40
Mounting:	link to possible patterns
Limit RPM (0.7 Mach at blade tip)	5300
Working temperature [°C]	from -45°C to 65°C
Materials used:	carbon fiber, glass fiber, roving, polyurethane, epoxy
Tests performed:	balancing, visual Inspection, structural integrity (ATO)

Formula used to calculate moment of inertia: $I = \frac{1}{12} \cdot mass \cdot diameter^2$

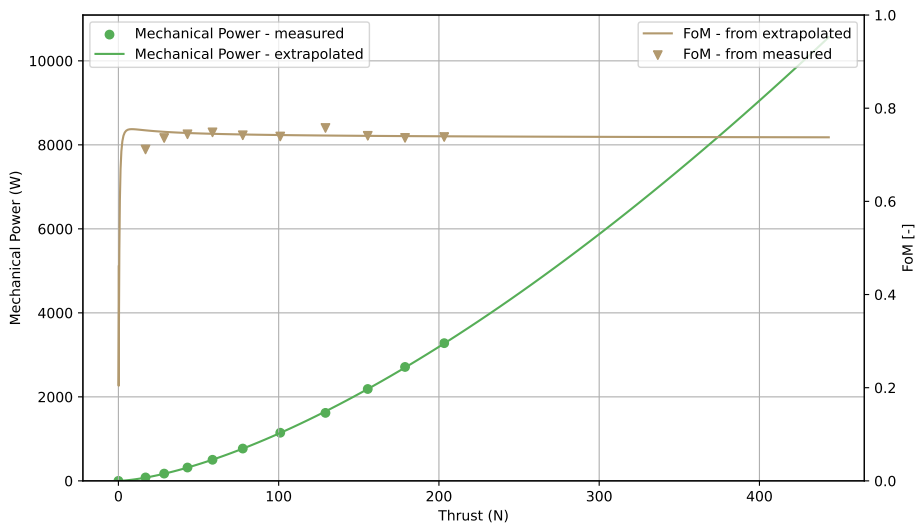
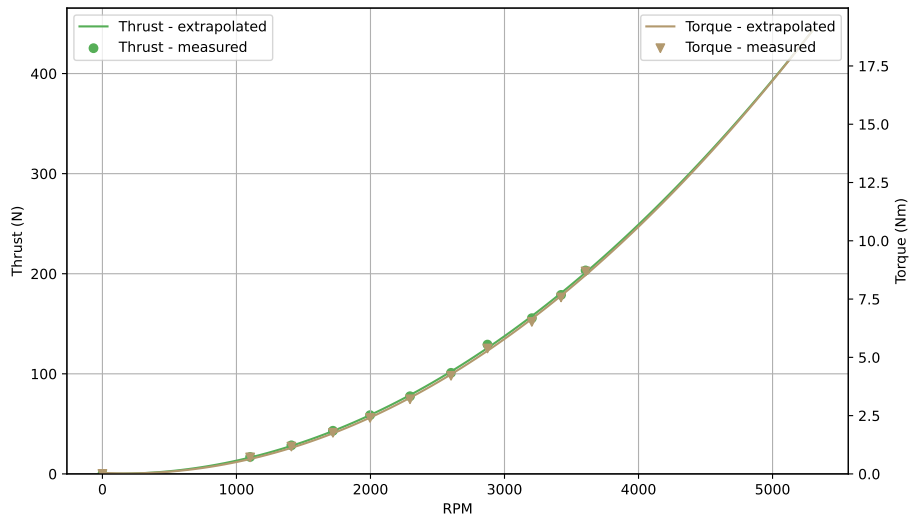


34x11.4 2B MC HD

PN:23411400, 23411401

Measured data

Static test result



$$\text{Thrust (RPM)} = 1.64403e - 05 \cdot \text{RPM}^2 + -0.00357 \cdot \text{RPM} + 0.36239$$

$$\text{Torque (RPM)} = 7.25138e - 07 \cdot \text{RPM}^2 + -0.000260911 \cdot \text{RPM} + 0.04492$$

$$\text{Mechanical power (RPM)} = 8.64146e - 08 \cdot \text{RPM}^3 + -8.05018e - 05 \cdot \text{RPM}^2 + 0.06686 \cdot \text{RPM} + -2.0489$$

Formulas used to calculate FOM:

$$C_T = \frac{T}{\rho \cdot RPS^2 \cdot D^4}$$

$$C_P = \frac{P_{mech}}{\rho \cdot RPS^3 \cdot D^5}$$

$$FOM = \sqrt{\frac{2}{\pi}} \frac{C_T^{\frac{3}{2}}}{C_P}$$