

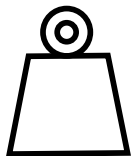
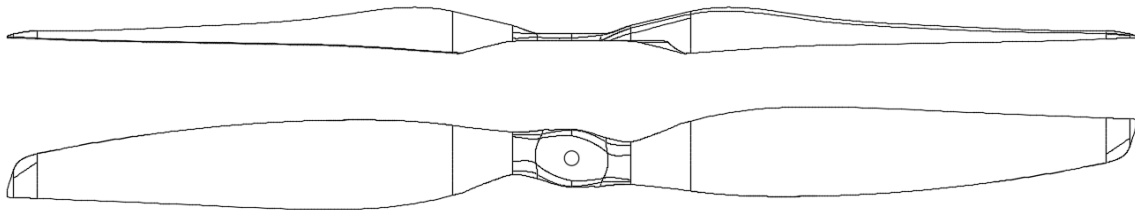


22x7.4 2B MC

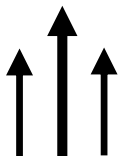
PN:2220742, 2220743

Product sheet

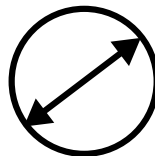
Rev.: 00
2024-04-30



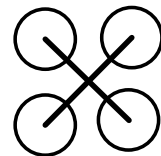
46 g
Mass



18.1 kgf
Max Thrust



22.0"
Diameter



Multicopter

Engine type:	Electric
Folding/Fixed	Fixed
Rotational direction:	Counter-clockwise and Clockwise available
Weight [g]:	46 ± 6.0%
Moment of inertia [kgm ²]:	1.20e-03
Center hole [mm]:	∅ 6
Max drilling diameter [mm]:	46
Mounting:	link to possible patterns
Limit RPM (0.7 Mach at blade tip)	8200
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: $I = \frac{1}{12} \cdot mass \cdot diameter^2$

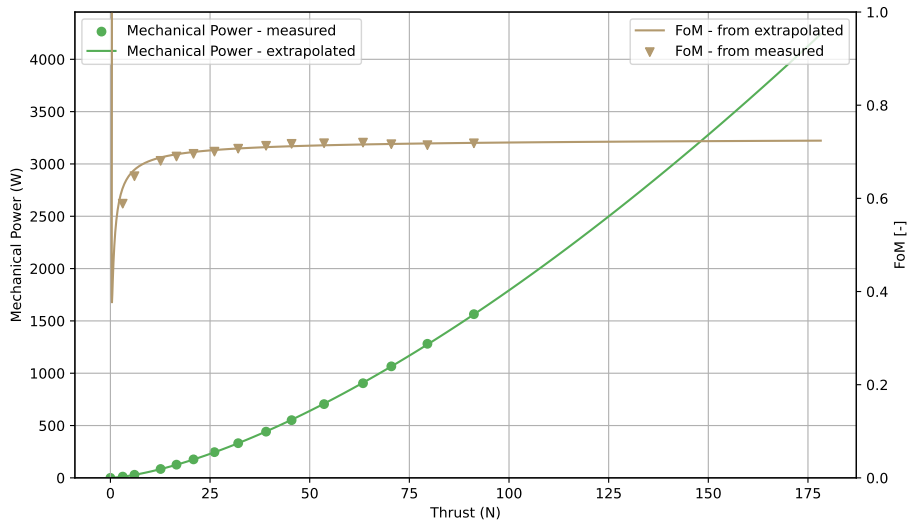
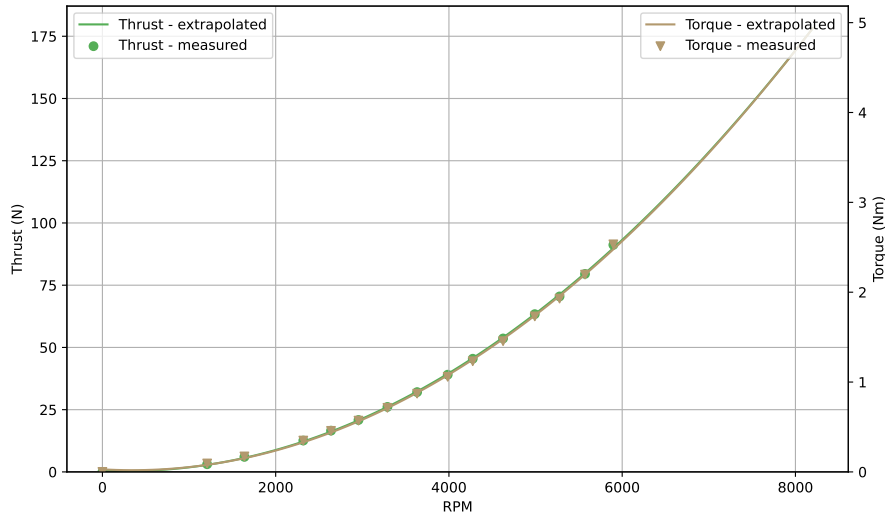


22x7.4 2B MC

PN:2220742, 2220743

Measured data

Static test result



$$\text{Thrust (RPM)} = 2.82913e - 06 \cdot \text{RPM}^2 + -0.00153 \cdot \text{RPM} + 0.5428$$

$$\text{Torque (RPM)} = 7.97091e - 08 \cdot \text{RPM}^2 + -5.49689e - 05 \cdot \text{RPM} + 0.02859$$

$$\text{Mechanical power (RPM)} = 9.95305e - 09 \cdot \text{RPM}^3 + -1.89723e - 05 \cdot \text{RPM}^2 + 0.02893 \cdot \text{RPM} + -4.56571$$

Formulas used to calculate FOM:

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

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

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