

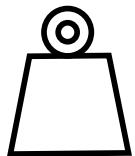
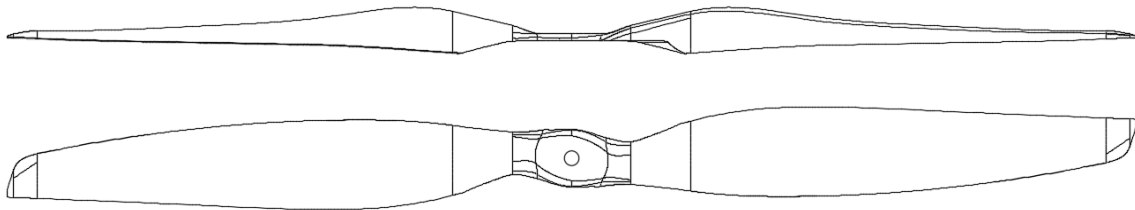


# 70x24 2B MC

PN:27002400, 27002401

## Product sheet

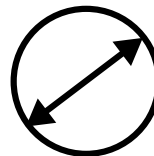
Rev.: 00  
2024-04-30



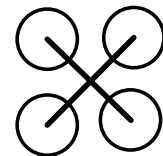
1130 g  
Mass



186.1 kgf  
Max Thrust



70.0"  
Diameter



Multicopter

Engine type:	Electric
Folding/Fixed	Fixed
Rotational direction:	Counter-clockwise and Clockwise available
Weight [g]:	1130 ± 5.0%
Moment of inertia [kgm <sup>2</sup> ]:	2.98e-01
Center hole [mm]:	∅ 12
Max drilling diameter [mm]:	84
Mounting:	link to possible patterns
Limit RPM (0.7 Mach at blade tip)	2500
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:  $I = \frac{1}{12} \cdot mass \cdot diameter^2$

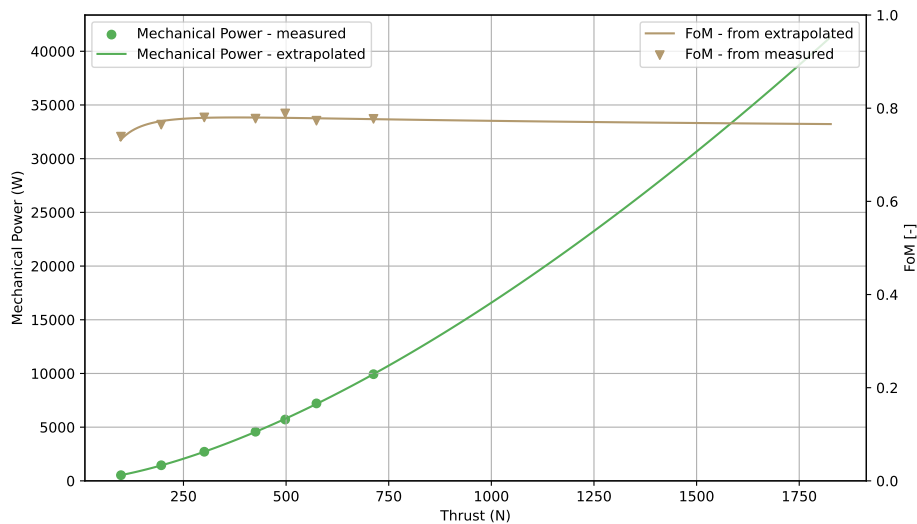
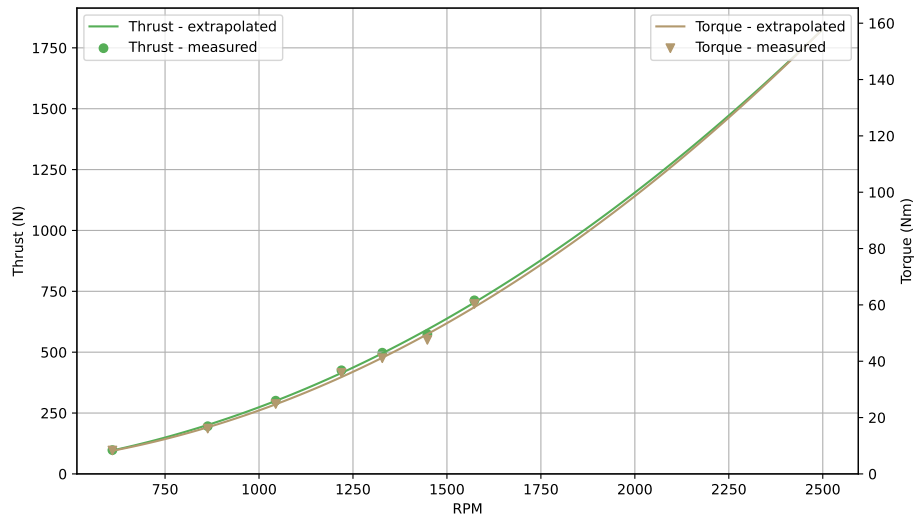


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## Measured data

Static test result



$$\begin{aligned} \text{Thrust (RPM)} &= 0.000307051 \cdot \text{RPM}^2 + -0.03936 \cdot \text{RPM} + 6.17368 \\ \text{Torque (RPM)} &= 2.83112e-05 \cdot \text{RPM}^2 + -0.00886 \cdot \text{RPM} + 3.08689 \\ \text{Mechanical power (RPM)} &= 4.56081e-06 \cdot \text{RPM}^3 + -0.00612 \cdot \text{RPM}^2 + 5.65273 \cdot \text{RPM} + -1706.76707 \end{aligned}$$

Formulas used to calculate FOM:

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

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

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