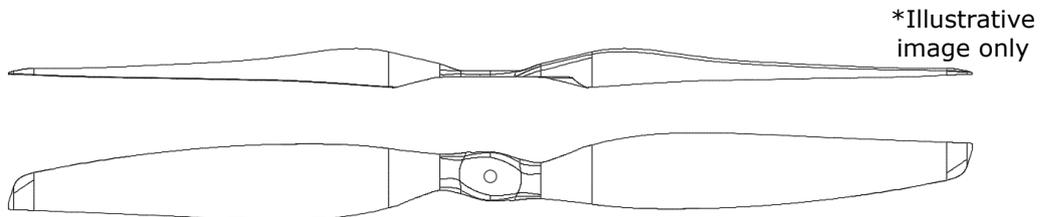


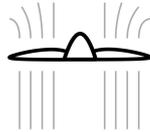
# PROPELLER

## 48x16.4 2B MC D-Box

PN: 24816404, 24816405



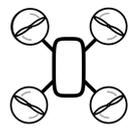
474 g  
Mass



89.2 kgf  
Max Thrust



48.0"  
Diameter



Multicopter

Engine/Motor type: Electric

Rotation direction: Counter-clockwise and Clockwise available (Direction Guide)

Mass [g]:  $474 \pm 10.0\%$

Moment of inertia [ $\text{kgm}^2$ ]<sup>1</sup>:  $5.87\text{e-}02$

Core diameter [mm]: 57 (Drilling guide)

Limit hover RPM<sup>2</sup>: 3700

Limit forward speed [m/s]: Not calculated

Working temperature [°C]: from -20°C to 60°C

Production method: Wet Layup

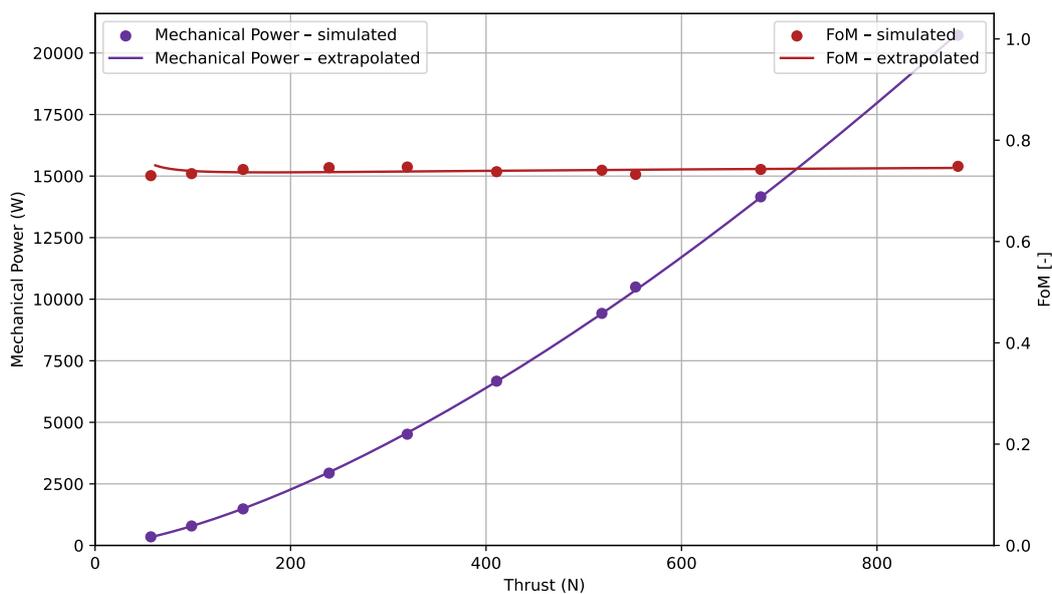
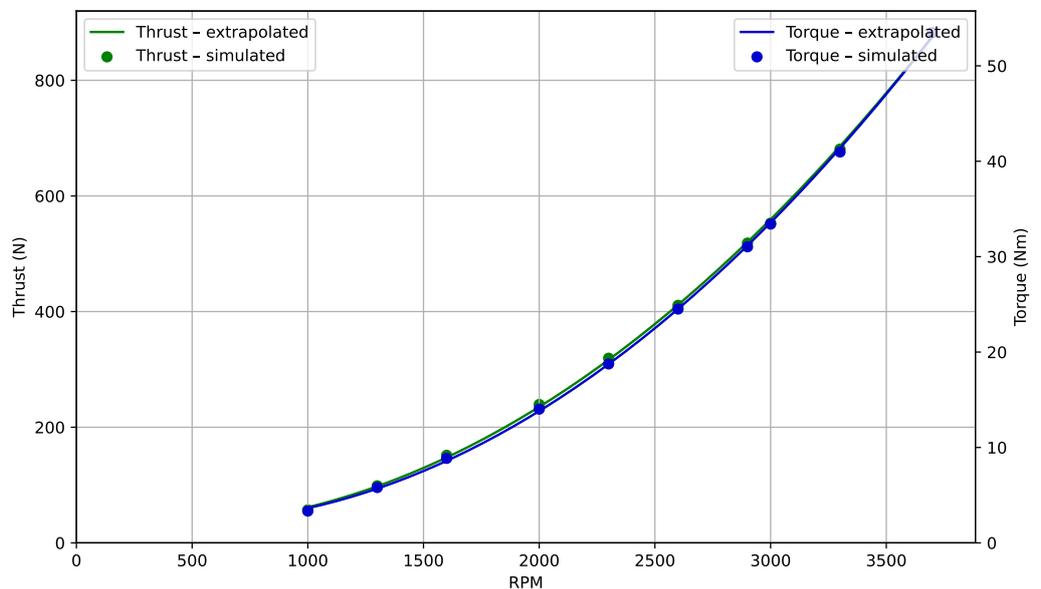
<sup>1</sup> Moment of inertia is only an estimation:  $I = \frac{1}{24} \cdot \text{mass} \cdot \text{diameter}^2 \cdot n^{\circ} \text{ of blades}$

<sup>2</sup> RPM is limited by tip speed; forward speed reduces the limit.

For more information or custom propeller options, contact [info@mejlzlik.eu](mailto:info@mejlzlik.eu).  
Operation manual: Propeller Maintenance and Repair Manual

# Static Performance Data

Simulated data



$$\text{Thrust (RPM): } 7.532e - 05 \cdot RPM^2 + -5.236e - 02 \cdot RPM + 3.863e + 01$$

$$\text{Torque (RPM): } 4.786e - 06 \cdot RPM^2 + -4.180e - 03 \cdot RPM + 3.031e + 00$$

$$\text{Mechanical power (RPM): } \frac{2\pi \cdot \text{Torque}[\text{Nm}] \cdot \text{RPM}}{60}$$

Formulas used to calculate FOM :

$$C_T = \frac{T}{\rho RPS^2 D^4} \quad C_P = \frac{P_{mech}}{\rho RPS^3 D^5} \quad FOM = \sqrt{\frac{2}{\pi} \frac{C_T^{3/2}}{C_P}}$$