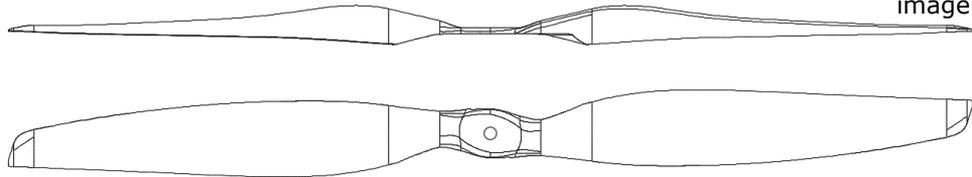


PROPELLER

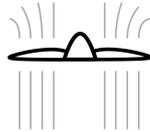
40x13.3 2B MC D-Box

PN: 24001330, 24001331

*Illustrative
image only



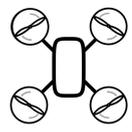
205 g
Mass



62.6 kgf
Max Thrust



40.0"
Diameter



Multicopter

Engine/Motor type: Electric

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

Mass [g]: $205 \pm 6.0\%$

Moment of inertia [kgm^2]¹: $1.76\text{e-}02$

Core diameter [mm]: 35.6 (Drilling guide)

Limit hover RPM²: 4500

Limit forward speed [m/s]: Not calculated

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

Production method: Wet layup

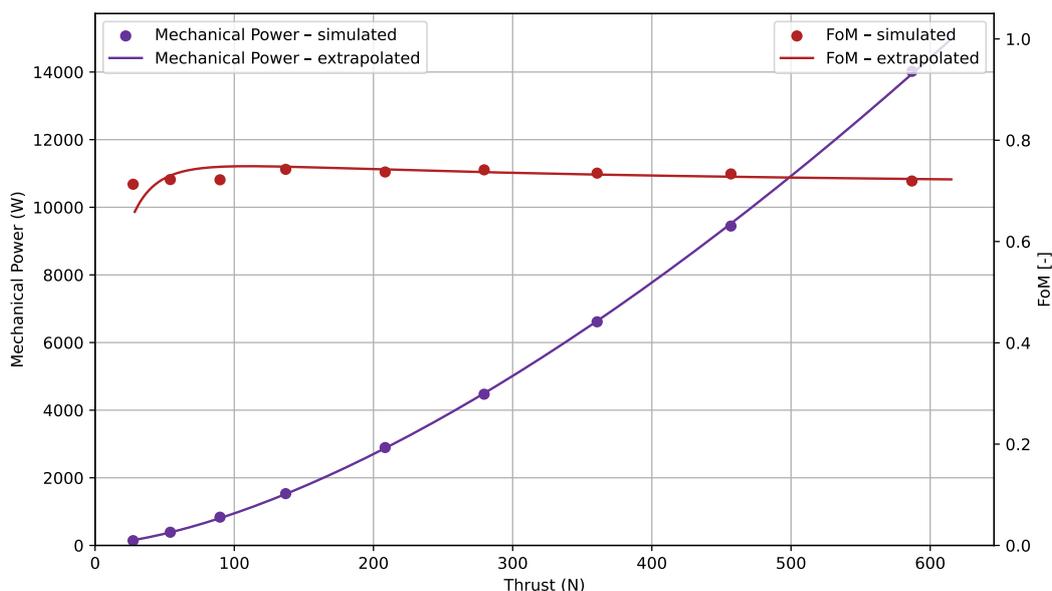
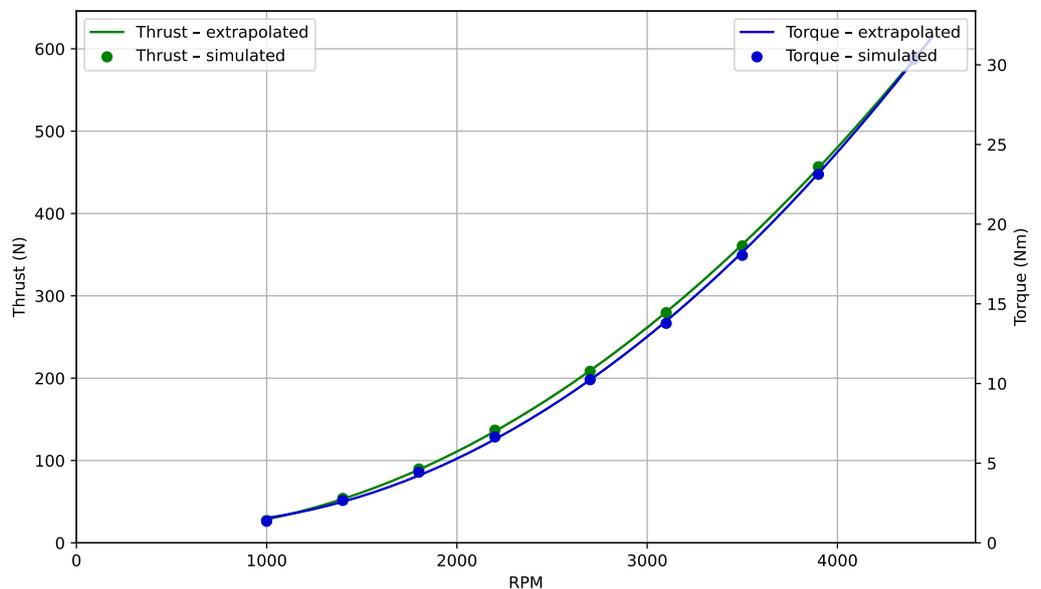
¹ Moment of inertia is only an estimation: $I = \frac{1}{24} \cdot \text{mass} \cdot \text{diameter}^2 \cdot n^{\circ} \text{ of blades}$

² RPM is limited by tip speed; forward speed reduces the limit.

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

Static Performance Data

Simulated data



$$\text{Thrust (RPM): } 3.407e - 05 \cdot RPM^2 + -1.975e - 02 \cdot RPM + 1.417e + 01$$

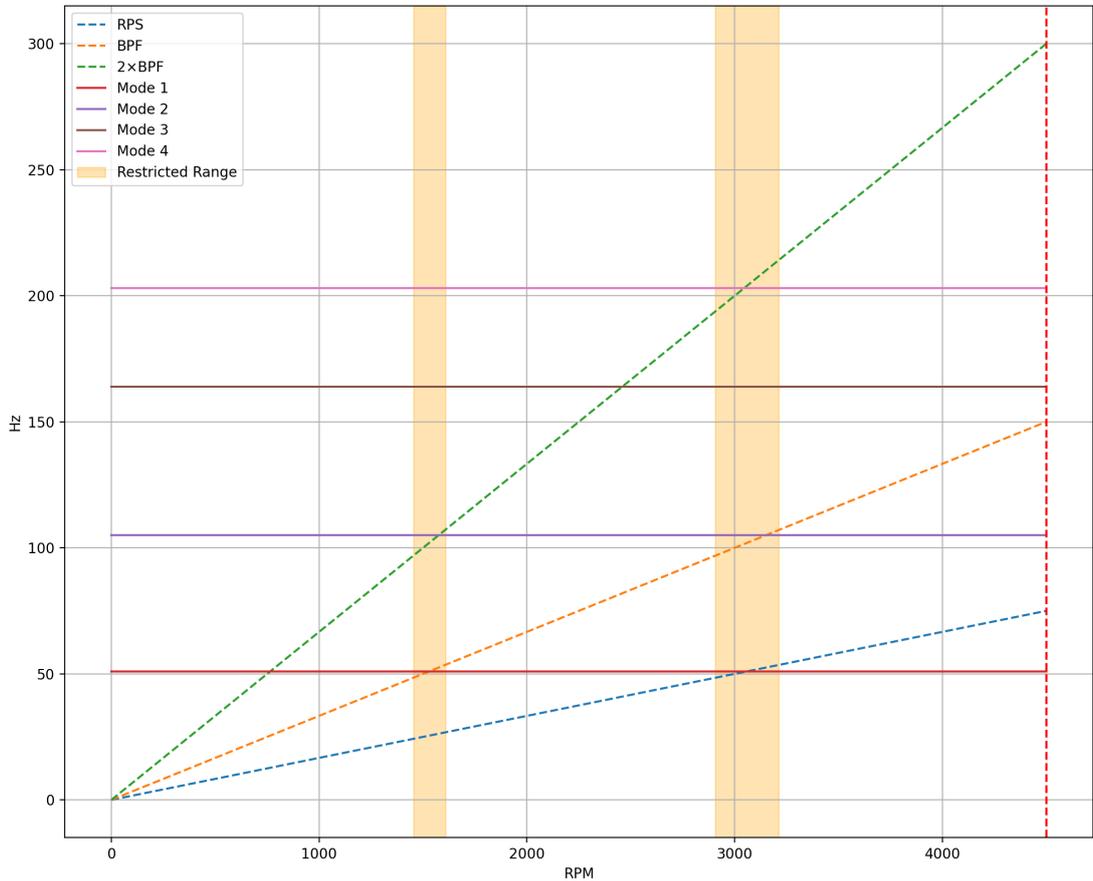
$$\text{Torque (RPM): } 1.965e - 06 \cdot RPM^2 + -2.170e - 03 \cdot RPM + 1.770e + 00$$

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

Formulas used to calculate FOM : $C_T = \frac{T}{\rho RPS^2 D^4}$ $C_P = \frac{P_{mech}}{\rho RPS^3 D^5}$ $FOM = \sqrt{\frac{2}{\pi} \frac{C_T^{3/2}}{C_P}}$

Natural frequencies

Measured data



| Intersection | Restricted RPM ranges ¹ |
|--------------|------------------------------------|
| RPS - Mode 1 | 2900-3220 ² |
| BPF - Mode 1 | 1450-1610 ² |

¹ Longterm use at these RPM should be avoided, as these RPM can lead to higher vibrations and possible damage to the propeller. Short-term use or crossing of this range to reach higher operational rpm is allowed.

² Data is measured at 0 RPM. Centrifugal stiffening is not accounted for. Real RPM range will be higher.