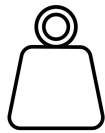
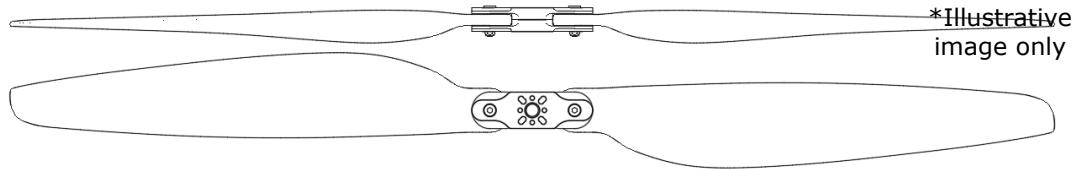


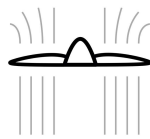
PROPELLER

32x11.8 2B MC gen.02 Folding

PN: 23201181, 23201182



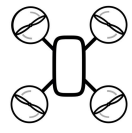
192 g
Mass



23.5 kgf
Max Thrust



32.0"
Diameter



Multicopter

Engine/Motor type: Electric

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

Features: Folding Blades

Mass [g]: $192 \pm 5.0\%$

Moment of inertia [kgm^2]¹: $1.06\text{e-}02$

Center hole diameter [mm]: 10

Drilling pattern [mm]: 4xM3 on $\varnothing 20$ and 4xM4 on $\varnothing 21-26$

Limit hover RPM²: 4400

Limit forward speed [m/s]: 25

Working temperature [$^{\circ}\text{C}$]: from -20°C to 110°C

Production method: Prepreg

Tests performed³: Static Performance Test, Overspin Test,
Endurance Test, Centrifugal Load Test

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

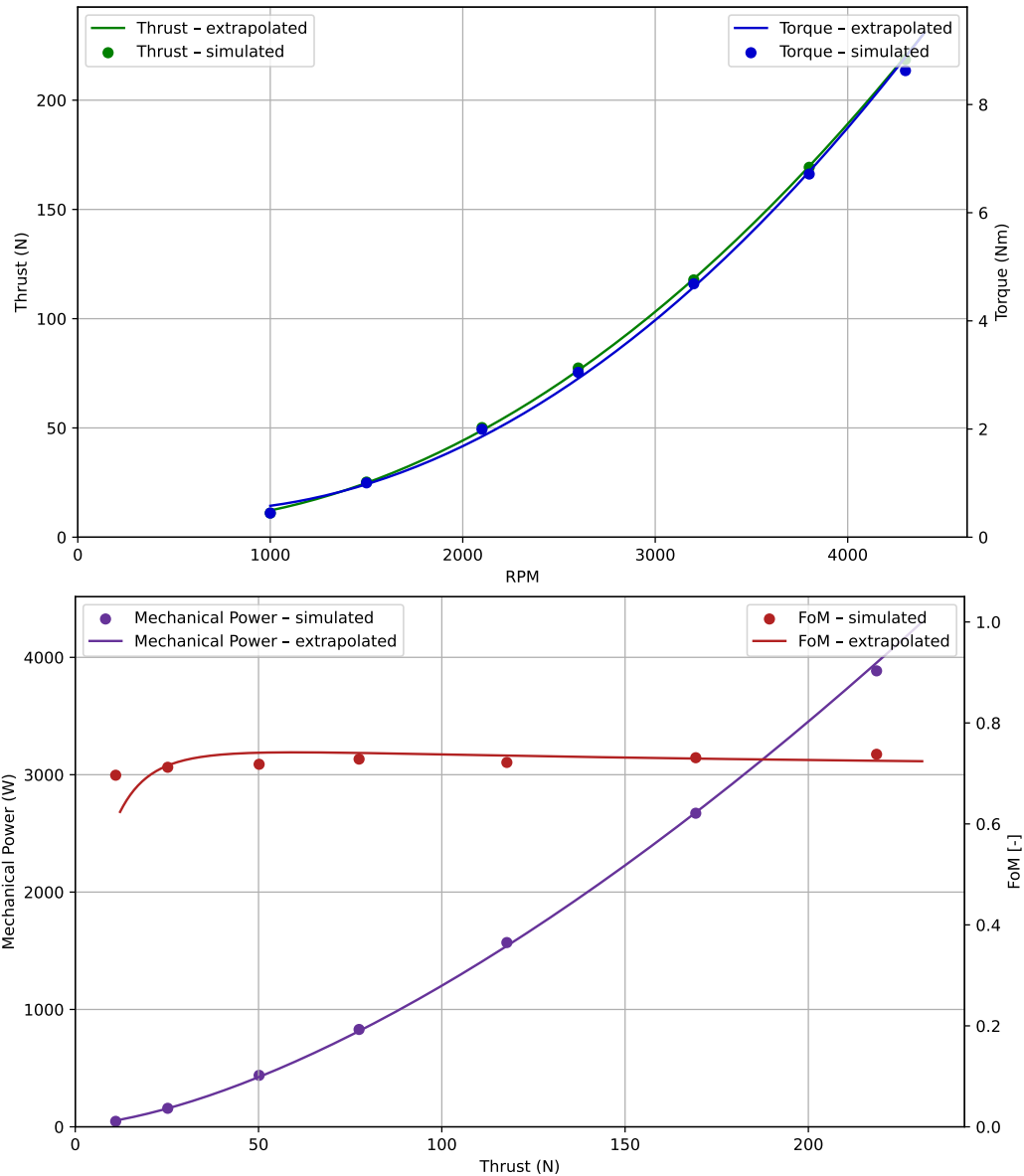
² RPM is limited by tip speed; forward speed reduces the limit.

³ Tests performed on a sample propeller.

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

Static Performance Data

Simulated data



$$\text{Thrust (RPM): } 1.349e-05 \cdot \text{RPM}^2 + -8.500e-03 \cdot \text{RPM} + 7.236e+00$$

$$\text{Torque (RPM): } 6.135e-07 \cdot \text{RPM}^2 + -7.379e-04 \cdot \text{RPM} + 7.048e-01$$

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

Formulas used to
calculate FOM

:

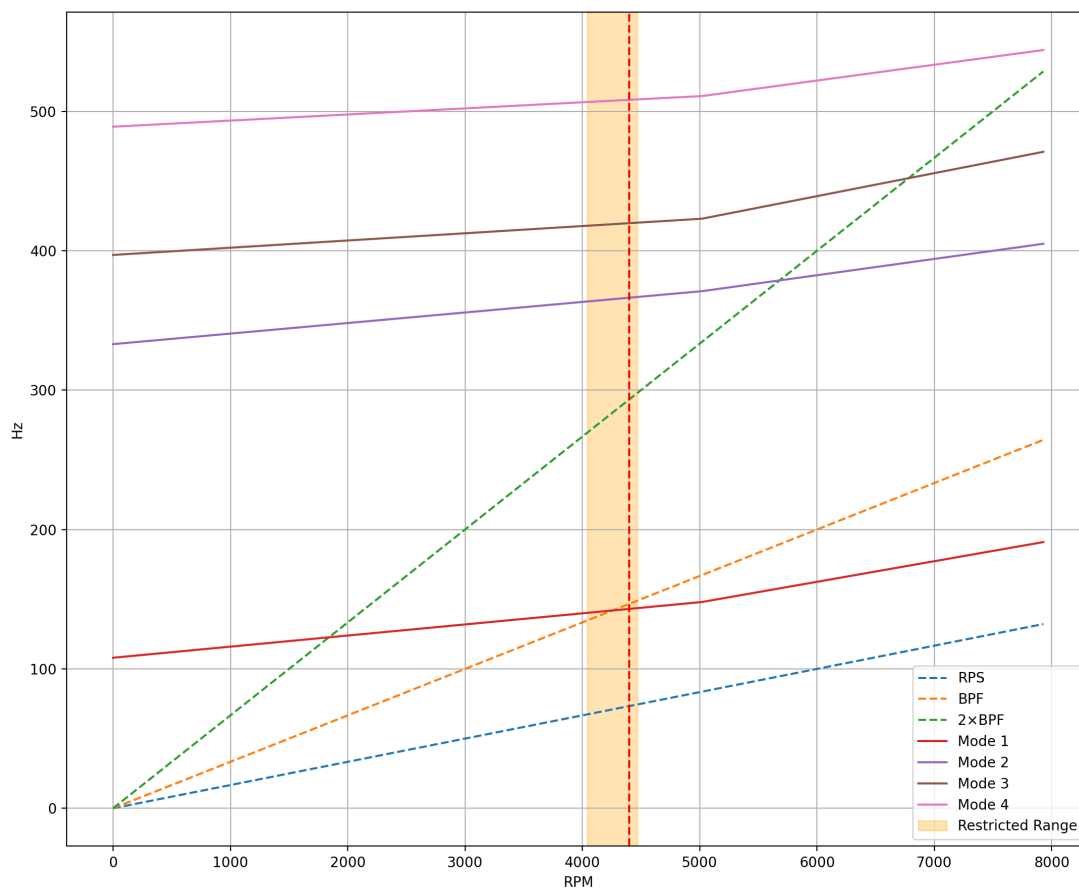
$$C_T = \frac{T}{\rho RPS^2 D^4}$$

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

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

Natural frequencies

Simulated data



Intersection	Restricted RPM ranges ¹
RPS - Mode 1	-
BPF - Mode 1	4040-4470 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 simulated using Finite Element Analysis (FEA).