PROPELLER
34x12.6 2B MC gen.02 Folding

PN: 23401261, 23401262

*Illustrative image only
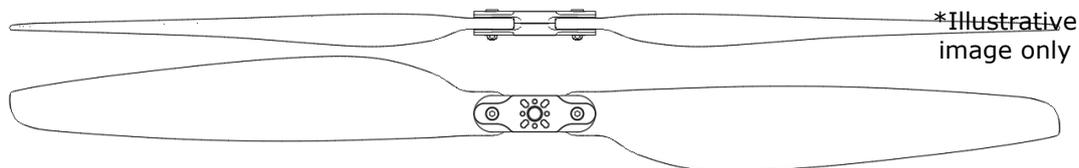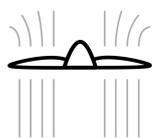
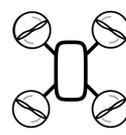| 204 g	27.4 kgf	34.0"	
Mass	Max Thrust	Diameter	Multicopter

Engine/Motor type:	Electric
Rotation direction:	Counter-clockwise and Clockwise available (Direction Guide)
Features:	Folding Blades
Mass [g]:	204 $\pm$ 5.0%
Moment of inertia [kgm^2][1]:	3.72e-03
Center hole diameter [mm]:	10
Drilling pattern [mm]:	4xM3 on 20 and 4xM4 on 21-26
Limit hover RPM[2]:	4100
Limit forward speed [m/s]:	25
Working temperature [°C]:	from -20°C to 110°C
Production method:	Prepreg
Tests performed[3]:	Static Performance Test, Overspin Test, Endurance Test, Centrifugal Load Test, Tip Deflection Test

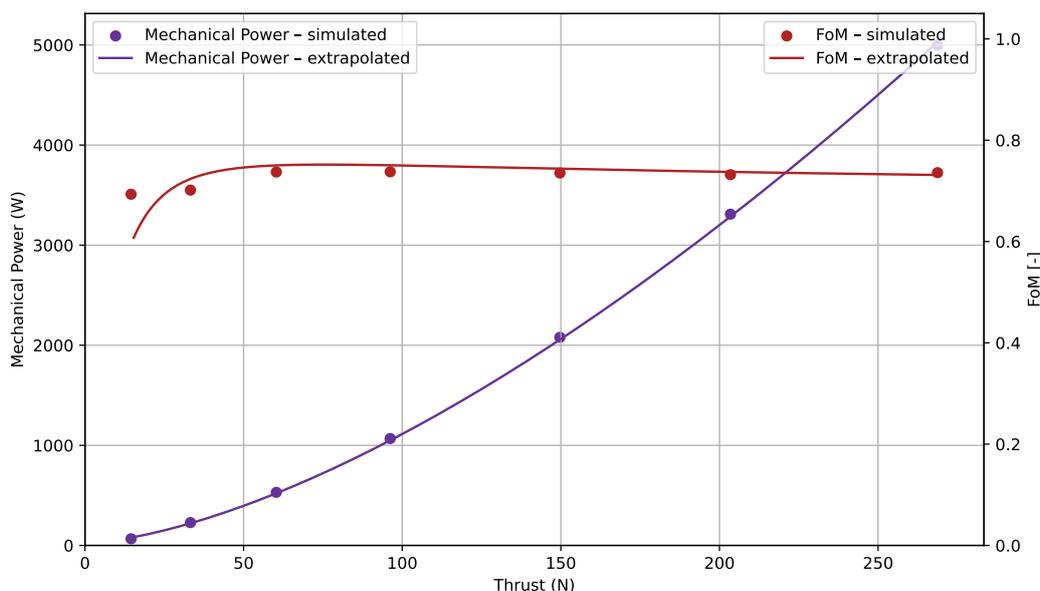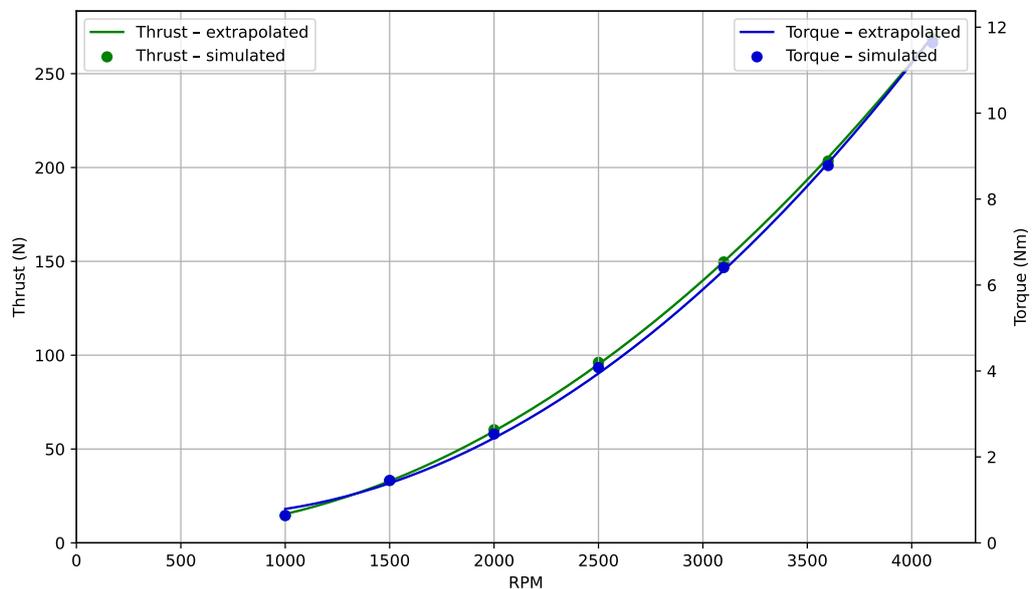[1] Moment of inertia is measured.
[2] RPM is limited by tip speed; forward speed reduces the limit.
[3] Tests performed on a sample propeller.

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

Static Performance Data

Simulated data

$$\text{Thrust (RPM):} \quad 1.806e-05 \cdot RPM^2 + -1.002e-02 \cdot RPM + 7.296e+00$$

$$\text{Torque (RPM):} \quad 9.032e-07 \cdot RPM^2 + -1.060e-03 \cdot RPM + 9.442e-01$$
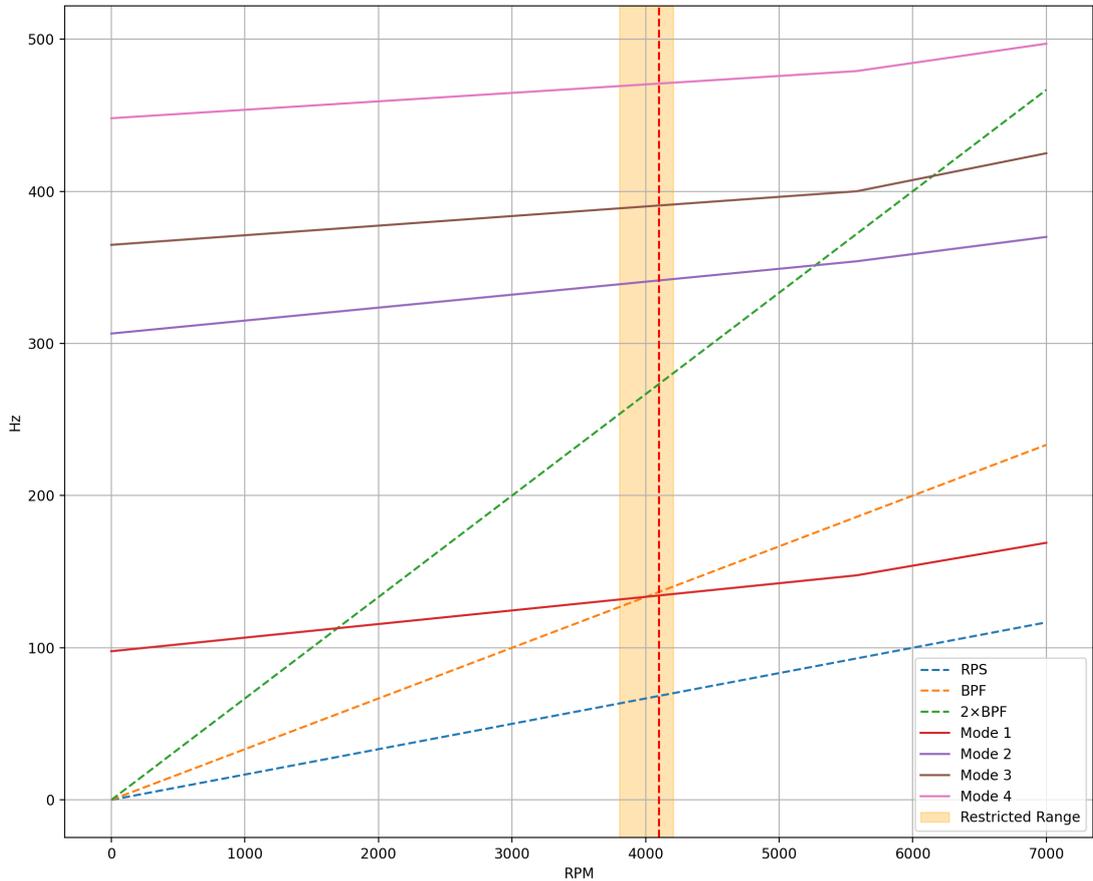
$$\text{Mechanical power (RPM):} \quad \frac{2\pi \cdot Torque[Nm] \cdot RPM}{60}$$

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

Natural frequencies

Simulated data

Intersection	Restricted RPM ranges[1]
RPS - Mode 1	-
BPF - Mode 1	3800-4210[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).