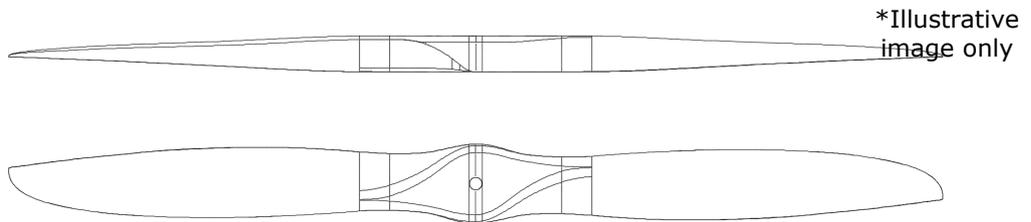


# PROPELLER

## 31x12 2B GAS EVO LF

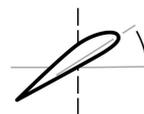
PN: 231127, 231128



252 g  
Mass



31.0"  
Diameter



12.0"  
Pitch



Fixed wing

Engine/Motor type: Gas

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

Mass [g]:  $252 \pm 2.0\%$

Moment of inertia [ $\text{kgm}^2$ ]<sup>1</sup>: 1.30e-02

Core diameter [mm]: 54 (Drilling guide)

Limit RPM<sup>2</sup>: 5800

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

Production method: Wet layup

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

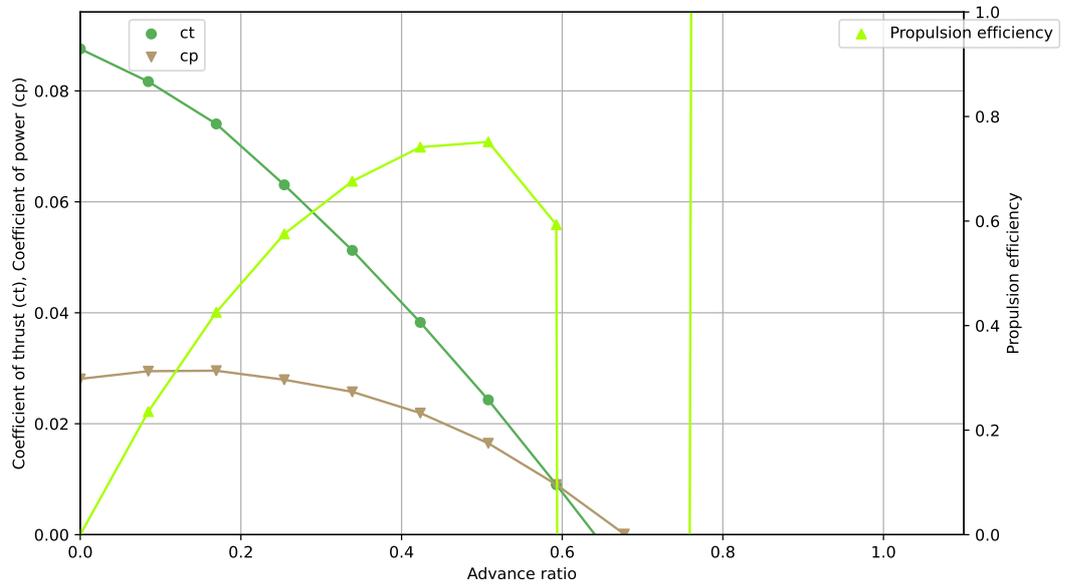
<sup>2</sup> RPM is limited by tip speed; forward speed reduces the limit.

For more information or custom propeller options, contact [info@mejluk.eu](mailto:info@mejluk.eu).

Operation manual: Propeller Maintenance and Repair Manual

# Dynamic Performance Data

Simulated data - at 4500 RPM



v_inf	Ct	Cp	Propulsion efficiency	Advance ratio
0.0	0.0876	0.0281	0.0	0.0
5.0	0.0817	0.0295	0.2354	0.0847
10.0	0.074	0.0296	0.4255	0.1693
15.0	0.0631	0.0279	0.5754	0.254
20.0	0.0512	0.0258	0.6762	0.3387
25.0	0.0383	0.0219	0.7414	0.4233
30.0	0.0243	0.0165	0.7514	0.508
35.0	0.009	0.009	0.5932	0.5927
40.0	-0.0068	0.0001	-45.6114	0.6773
45.0	-0.022	-0.0093	1.803	0.762
50.0	-0.0344	-0.0175	1.6756	0.8467
55.0	-0.0456	-0.0264	1.611	0.9313

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

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

$$\eta = \frac{C_T \cdot J}{C_P}$$

$$J = \frac{v_{inf}}{n \cdot D}$$