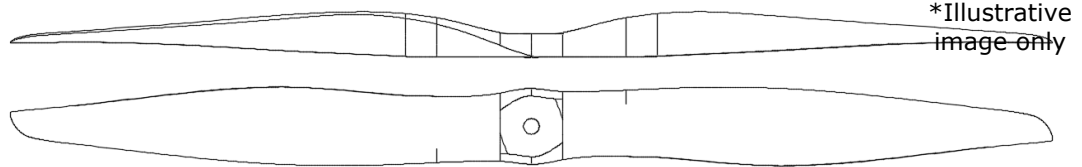


PROPELLER

21x13 2B E

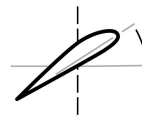
PN: 421130



86 g
Mass



21.0"
Diameter



13.0"
Pitch



Fixed wing

Engine/Motor type: Electric

Rotation direction: Counter-clockwise (Direction Guide)

Mass [g]: $86 \pm 10.0\%$

Moment of inertia [kgm^2]¹: $2.04\text{e-}03$

Core diameter [mm]: - (Drilling guide)

Limit RPM²: 8500

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

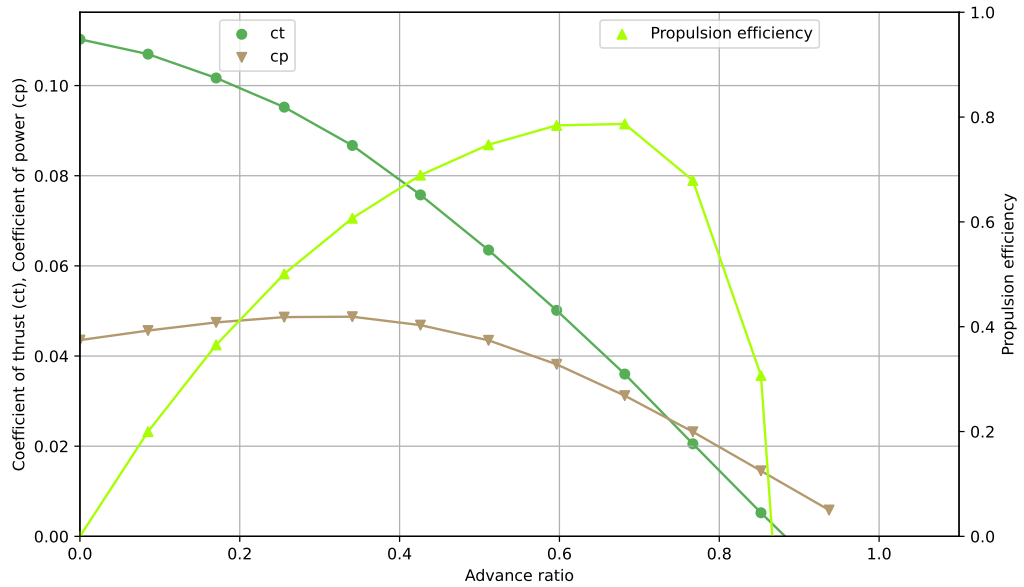
Production method: Wet layup

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@mejzlik.eu.
Operation manual: Propeller Maintenance and Repair Manual

Dynamic Performance Data

Simulated data - at 6600 RPM



v_inf	Ct	Cp	Propulsion efficiency	Advance ratio
0.0	0.1103	0.0435	0.0	0.0
5.0	0.107	0.0457	0.1998	0.0852
10.0	0.1017	0.0475	0.3653	0.1704
15.0	0.0952	0.0486	0.5008	0.2556
20.0	0.0867	0.0487	0.607	0.3409
25.0	0.0758	0.0469	0.6892	0.4261
30.0	0.0635	0.0435	0.7472	0.5113
35.0	0.0501	0.0382	0.7841	0.5965
40.0	0.036	0.0312	0.7869	0.6817
45.0	0.0205	0.0232	0.6791	0.7669
50.0	0.0052	0.0145	0.3069	0.8522
55.0	-0.0095	0.0058	-1.5323	0.9374

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

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

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

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