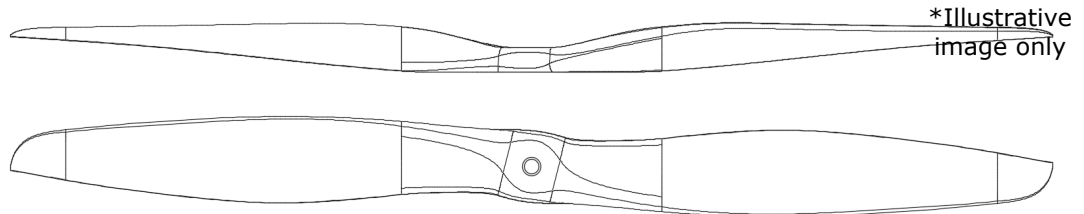


PROPELLER

20.5x12 2B E W

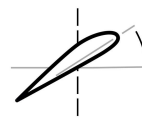
PN: 420624



80 g
Mass



20.5"
Diameter



12"
Pitch



Fixed wing

Engine/Motor type: Electric

Rotation direction: Counter-clockwise (Direction Guide)

Mass [g]: $80 \pm 10.0\%$

Moment of inertia [kgm^2]¹: $1.81\text{e-}03$

Core diameter [mm]: - (Drilling guide)

Limit RPM²: 8800

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

Production method: Wet layup

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

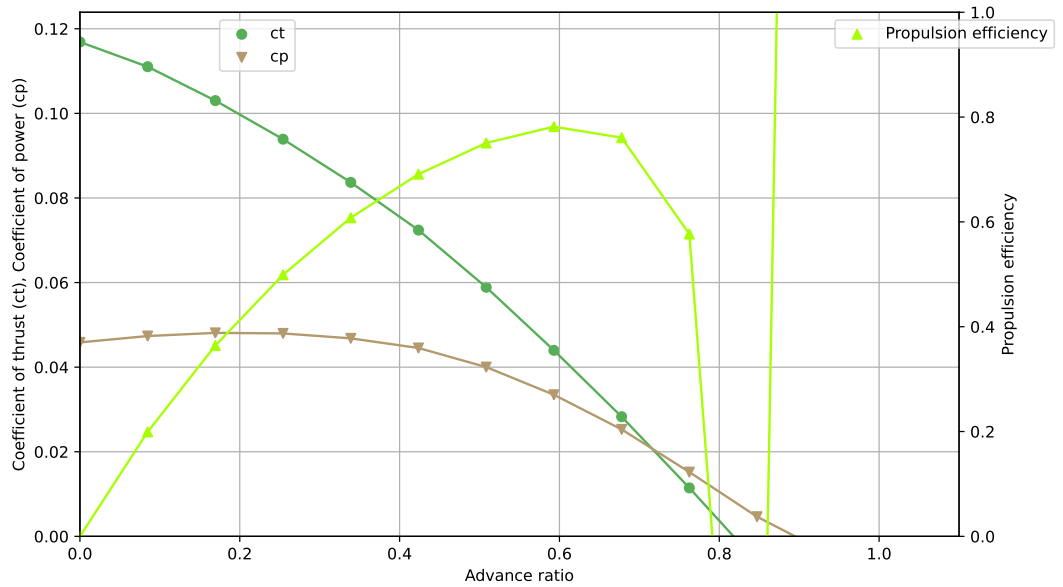
² RPM is limited by tip speed; forward speed reduces the limit.

For more information or custom propeller options, contact info@mejlzlik.eu.

Operation manual: Propeller Maintenance and Repair Manual

Dynamic Performance Data

Simulated data - at 6800 RPM



v_inf	Ct	Cp	Propulsion efficiency	Advance ratio
0.0	0.1169	0.0459	0.0	0.0
5.0	0.111	0.0474	0.1993	0.0847
10.0	0.103	0.0481	0.3641	0.1695
15.0	0.0939	0.048	0.4991	0.2542
20.0	0.0837	0.0468	0.6079	0.3389
25.0	0.0724	0.0445	0.6911	0.4236
30.0	0.0589	0.04	0.7505	0.5084
35.0	0.044	0.0335	0.7817	0.5931
40.0	0.0283	0.0253	0.7607	0.6778
45.0	0.0115	0.0152	0.5768	0.7625
50.0	-0.0061	0.0046	-1.1177	0.8473
55.0	-0.0238	-0.0036	6.1373	0.932

$$C_T = \frac{T}{\rho R P S^2 D^4}$$

$$C_P = \frac{P_{mech}}{\rho R P S^3 D^5}$$

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

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