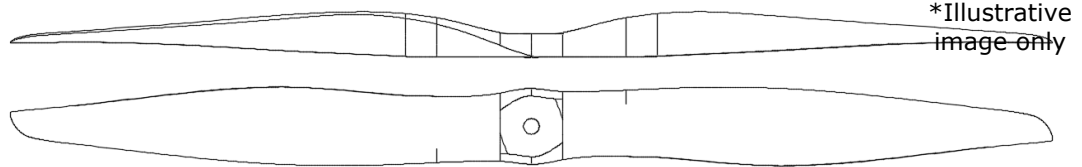


PROPELLER

18x10 2B E

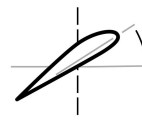
PN: 418100



63 g
Mass



18.0"
Diameter



10.0"
Pitch



Fixed wing

Engine/Motor type: Electric

Rotation direction: Counter-clockwise (Direction Guide)

Mass [g]: $63 \pm 10.0\%$

Moment of inertia [kgm^2]¹: $1.10\text{e-}03$

Core diameter [mm]: 24 (Drilling guide)

Limit RPM²: 10000

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

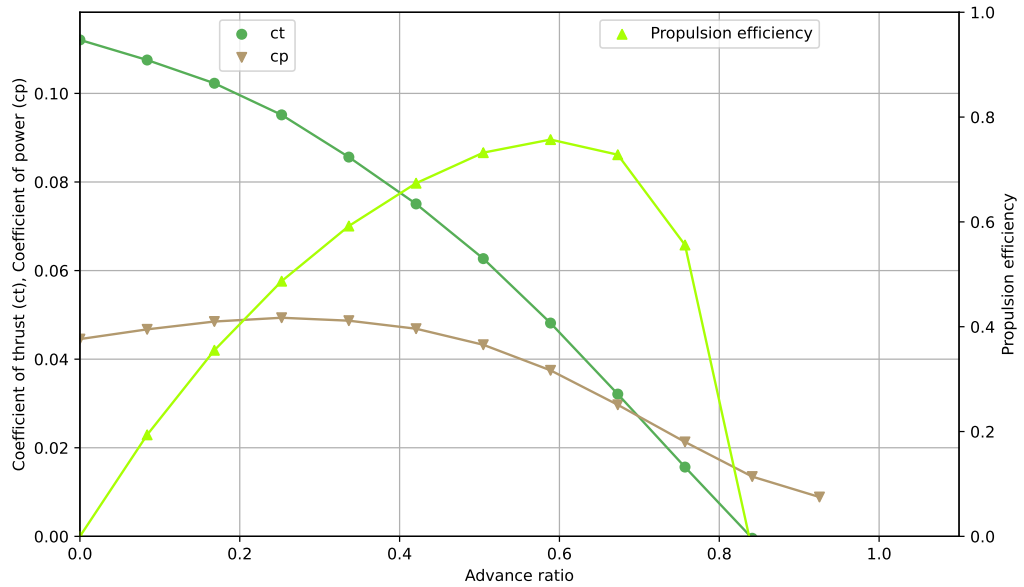
Production method: Wet layup

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 7800 RPM



v_inf	Ct	Cp	Propulsion efficiency	Advance ratio
0.0	0.1121	0.0445	0.0	0.0
5.0	0.1075	0.0467	0.1937	0.0841
10.0	0.1023	0.0485	0.3551	0.1682
15.0	0.0952	0.0494	0.4869	0.2524
20.0	0.0856	0.0487	0.5921	0.3365
25.0	0.075	0.0469	0.6738	0.4206
30.0	0.0627	0.0433	0.7321	0.5047
35.0	0.0482	0.0375	0.7571	0.5889
40.0	0.0321	0.0297	0.7282	0.673
45.0	0.0156	0.0213	0.5559	0.7571
50.0	-0.0004	0.0135	-0.0271	0.8412
55.0	-0.0127	0.0089	-1.3284	0.9254

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

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

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

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