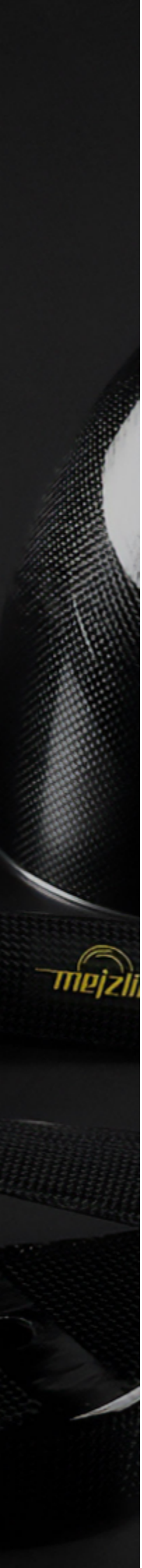
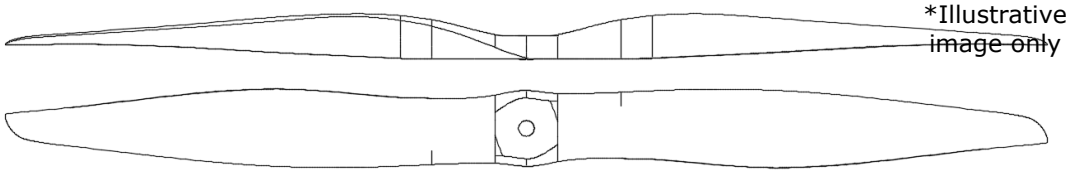


PROPELLER
20x10 2B E L

PN: 420105



38 g	20.0”	10”	Fixed wing
Mass	Diameter	Pitch	

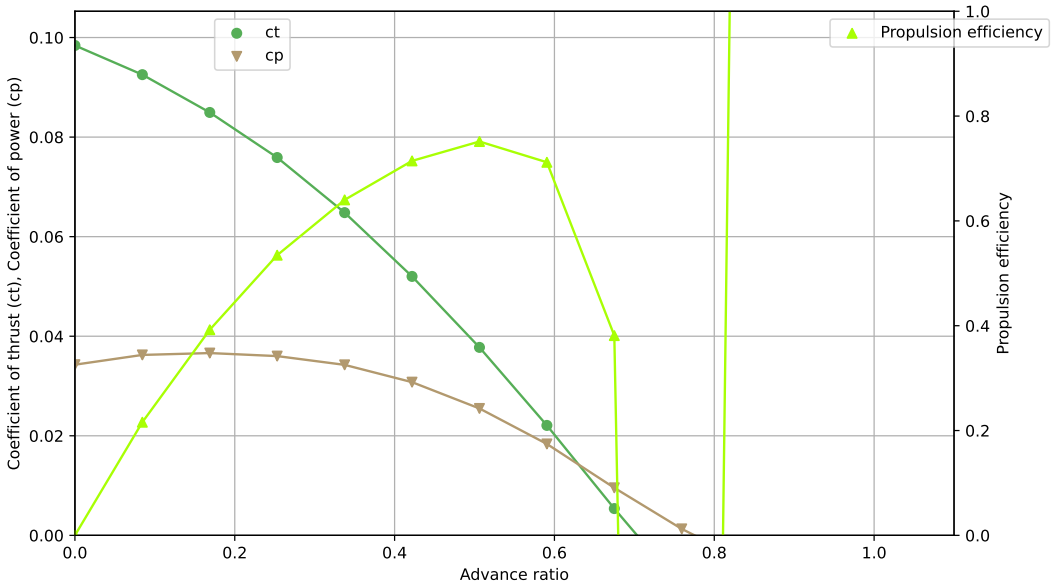
Engine/Motor type:	Electric
Rotation direction:	Counter-clockwise (Direction Guide)
Mass [g]:	38 $\pm$ 5.0%
Moment of inertia [kgm^2][1]:	8.17e-04
Core diameter [mm]:	23.5 (Drilling guide)
Limit RPM[2]:	9000
Working temperature [°C]:	from -20°C to 60°C
Production method:	Wet layup

[1] Moment of inertia is only an estimation: $I = \frac{1}{24} \cdot mass \cdot diameter^2 \cdot n^o of blades$
[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 7000 RPM



v_inf	Ct	Cp	Propulsion efficiency	Advance ratio
0.0	0.0984	0.0343	0.0	0.0
5.0	0.0925	0.0362	0.2159	0.0844
10.0	0.0849	0.0366	0.3923	0.1687
15.0	0.0759	0.036	0.5346	0.2531
20.0	0.0648	0.0342	0.6401	0.3375
25.0	0.052	0.0308	0.7145	0.4218
30.0	0.0378	0.0255	0.7515	0.5062
35.0	0.0221	0.0184	0.7119	0.5906
40.0	0.0054	0.0095	0.3812	0.6749
45.0	-0.0105	0.0013	-6.1718	0.7593
50.0	-0.0256	-0.0055	3.9107	0.8436
55.0	-0.039	-0.0126	2.8785	0.928

$$C_T = \frac{T}{\rho\, RPS^2\, D^4} \qquad C_P = \frac{P_{mech}}{\rho\, RPS^3\, D^5} \qquad \eta = \frac{C_T \cdot J}{C_P} \qquad J = \frac{v_{inf}}{n \cdot D}$$