PROPELLER
18x10 3B GAS

PN: 318100, 31810001
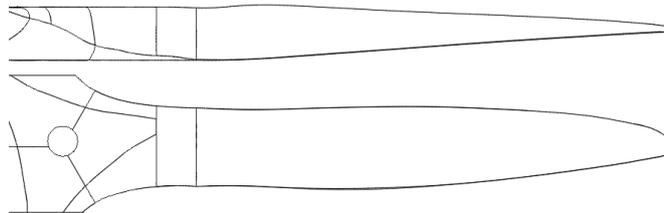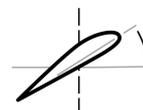

*Illustrative image only

111 g Mass	18.0" Diameter	10.0" Pitch	Fixed wing

Engine/Motor type:	Gas
Rotation direction:	Counter-clockwise and Clockwise available (Direction Guide)
Mass [g]:	$111 \pm 10.0\%$
Moment of inertia [kgm^2][1]:	2.90e-03
Core diameter [mm]:	36 (Drilling guide)
Limit RPM[2]:	10000
Working temperature [°C]:	from -20°C to 60°C
Production method:	Wet layup

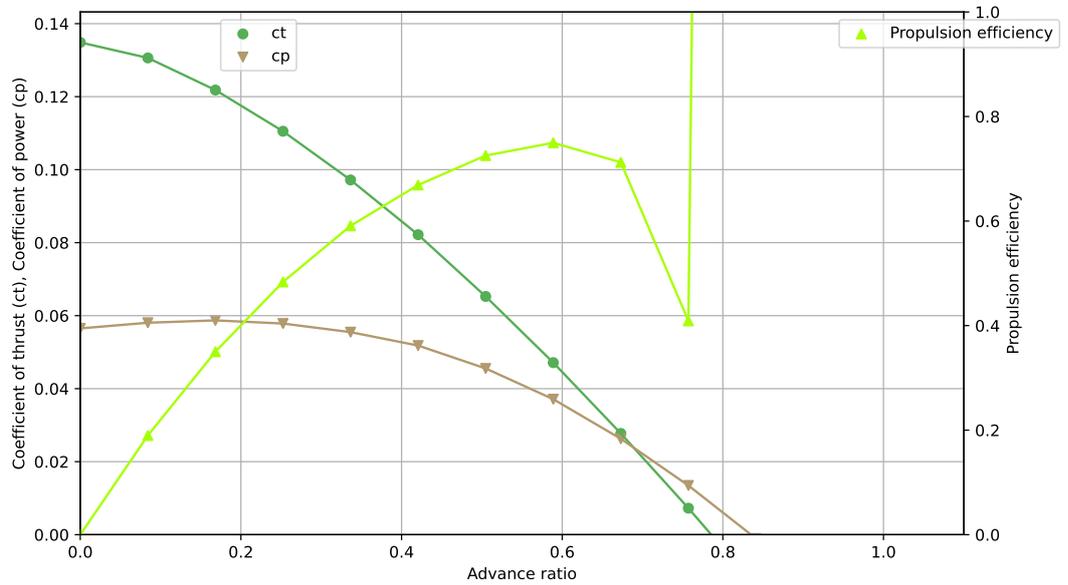[1] Moment of inertia is only an estimation: $I = \frac{1}{24} \cdot mass \cdot diameter^2 \cdot n^o of blades$
[2] RPM is limited by tip speed; forward speed reduces the limit.

For more information or custom propeller options, contact info@mejzlik.eu.
Operation manual: Propeller Maintenance and Repair Manual

Dynamic Performance Data

Simulated data - at 7800 RPM

v_inf	Ct	Cp	Propulsion efficiency	Advance ratio
0.0	0.1349	0.0565	0.0	0.0
5.0	0.1306	0.0581	0.1897	0.0841
10.0	0.1218	0.0587	0.3501	0.1682
15.0	0.1105	0.0578	0.4835	0.2524
20.0	0.0972	0.0555	0.5909	0.3365
25.0	0.0822	0.0518	0.6689	0.4206
30.0	0.0653	0.0455	0.7253	0.5047
35.0	0.0471	0.0371	0.7497	0.5889
40.0	0.0277	0.0263	0.7122	0.673
45.0	0.0073	0.0135	0.409	0.7571
50.0	-0.0142	-0.0011	11.3628	0.8412
55.0	-0.0319	-0.0112	2.6508	0.9254

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