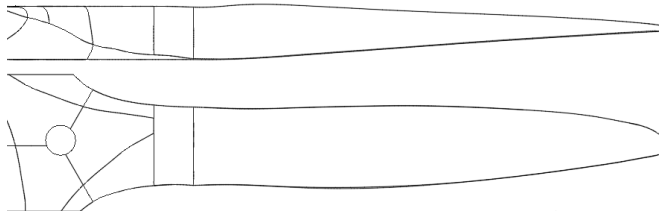


PROPELLER

27x12 3B GAS TH

PN: 327121



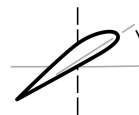
*Illustrative
image only



283 g
Mass



27.0"
Diameter



12.0"
Pitch



Fixed wing

Engine/Motor type: Gas

Rotation direction: Counter-clockwise (Direction Guide)

Mass [g]: $283 \pm 10.0\%$

Moment of inertia [kgm^2]¹: 1.66e-02

Core diameter [mm]: 46 (Drilling guide)

Limit RPM²: 6600

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

Production method: Wet layup

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

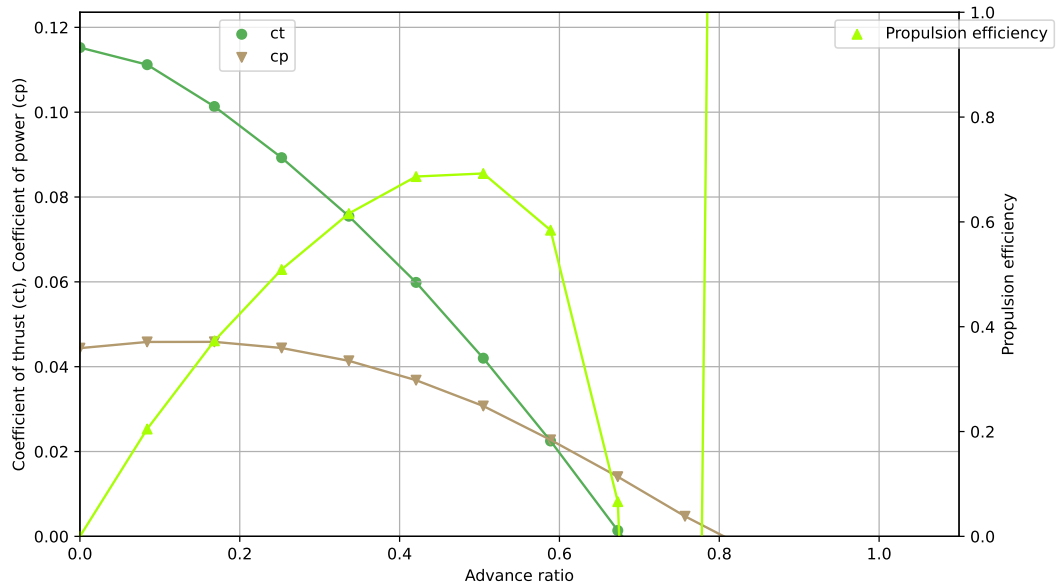
² RPM is limited by tip speed; forward speed reduces the limit.

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

Operation manual: Propeller Maintenance and Repair Manual

Dynamic Performance Data

Simulated data - at 5200 RPM



v_inf	Ct	Cp	Propulsion efficiency	Advance ratio
0.0	0.1152	0.0444	0.0	0.0
5.0	0.1112	0.0458	0.2048	0.0841
10.0	0.1013	0.0459	0.3732	0.1682
15.0	0.0893	0.0444	0.5092	0.2524
20.0	0.0755	0.0414	0.616	0.3365
25.0	0.0599	0.0368	0.6866	0.4206
30.0	0.042	0.0307	0.6924	0.5047
35.0	0.0225	0.0227	0.5842	0.5889
40.0	0.0014	0.0141	0.0663	0.673
45.0	-0.019	0.0047	-3.0565	0.7571
50.0	-0.0375	-0.0035	9.1595	0.8412
55.0	-0.0512	-0.0091	5.2151	0.9254

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

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

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

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