

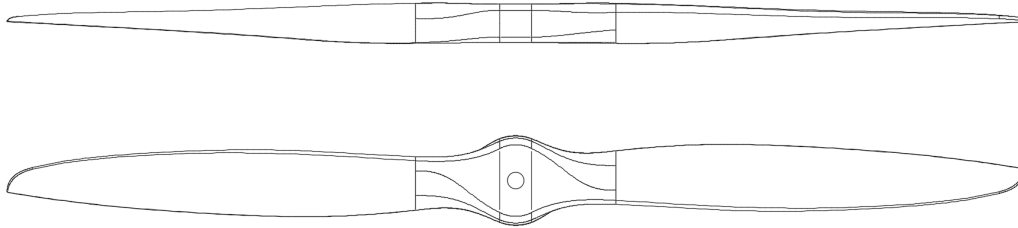


# 26.5x16.2 2B GAS

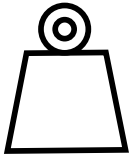
PN:226163

## Product sheet

Rev.: 01  
2024-08-26



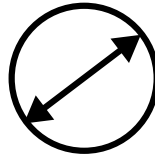
\*Illustrative  
image only



192 g  
Mass



35.8 kgf  
Max Thrust



26.5"  
Diameter



Fixed wing

Engine type:	Gas
Folding/Fixed	Fixed
Rotational direction:	Clockwise (Direction Guide)
Weight [g]:	192 ± 10.0%
Moment of inertia [kgm <sup>2</sup> ]:	7.25e-03
Center hole [mm]:	∅ 10
Max drilling diameter [mm]:	40
Mounting:	link to possible patterns
Limit RPM (0.7 Mach at blade tip)	6800
Working temperature [°C]	from -20°C to 60°C
Materials used:	carbon fiber, wood, roving, polyurethane, epoxy
Tests performed:	balancing, visual Inspection, structural integrity (ATO)

Formula used to calculate moment of inertia:  $I = \frac{1}{12} \cdot mass \cdot diameter^2$

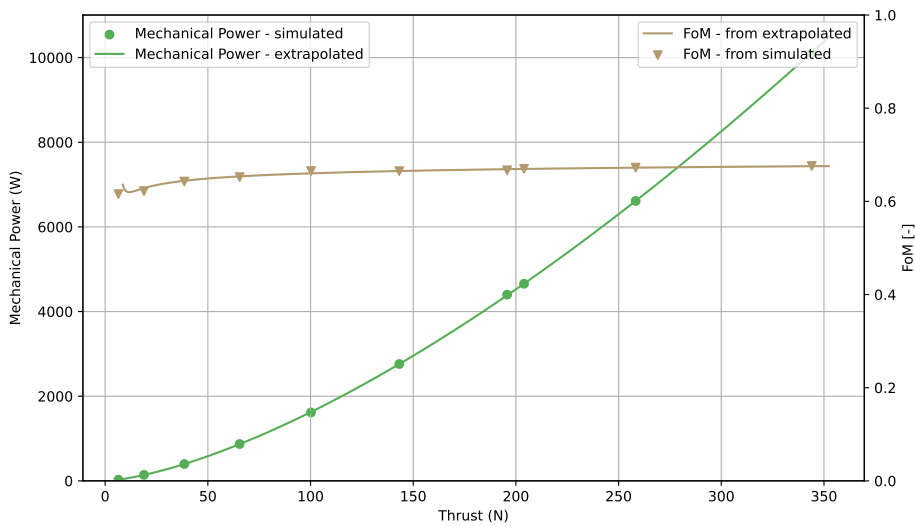
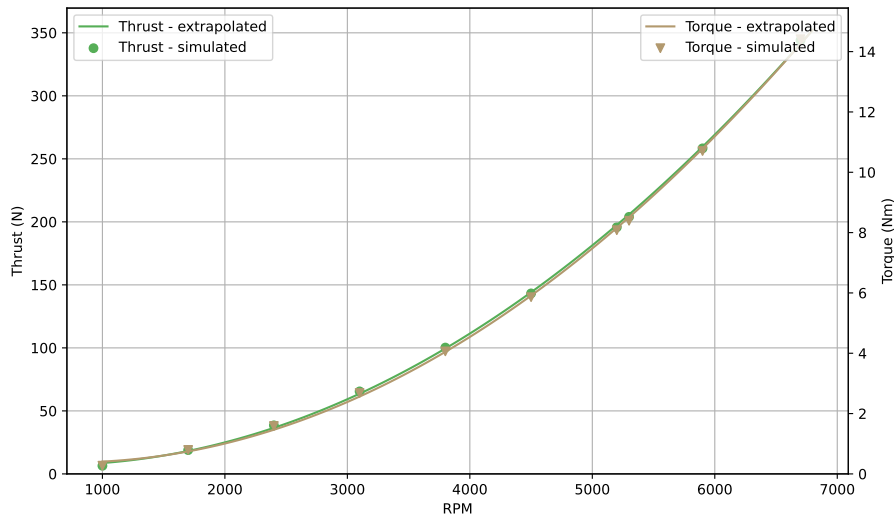


# 26.5x16.2 2B GAS

PN:226163

## Simulated data

Static simulation



$$\text{Thrust (RPM)} = 8.93484e - 06 \cdot \text{RPM}^2 + -0.01043 \cdot \text{RPM} + 10.12778$$

$$\text{Torque (RPM)} = 3.89338e - 07 \cdot \text{RPM}^2 + -0.000569031 \cdot \text{RPM} + 0.58759$$

$$\text{Mechanical power (RPM)} = 4.98485e - 08 \cdot \text{RPM}^3 + -0.000159029 \cdot \text{RPM}^2 + 0.37189 \cdot \text{RPM} + -251.47854$$

Formulas used to calculate FOM:

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

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

$$FOM = \sqrt{\frac{2}{\pi}} \cdot \frac{C_T^{\frac{3}{2}}}{C_P}$$

To get more information about the manufacturing process or possibility to customize the propeller, reach out to [info@mejzlik.eu](mailto:info@mejzlik.eu).

To learn more about how to operate the propeller, check out the Operating Manual on our website.

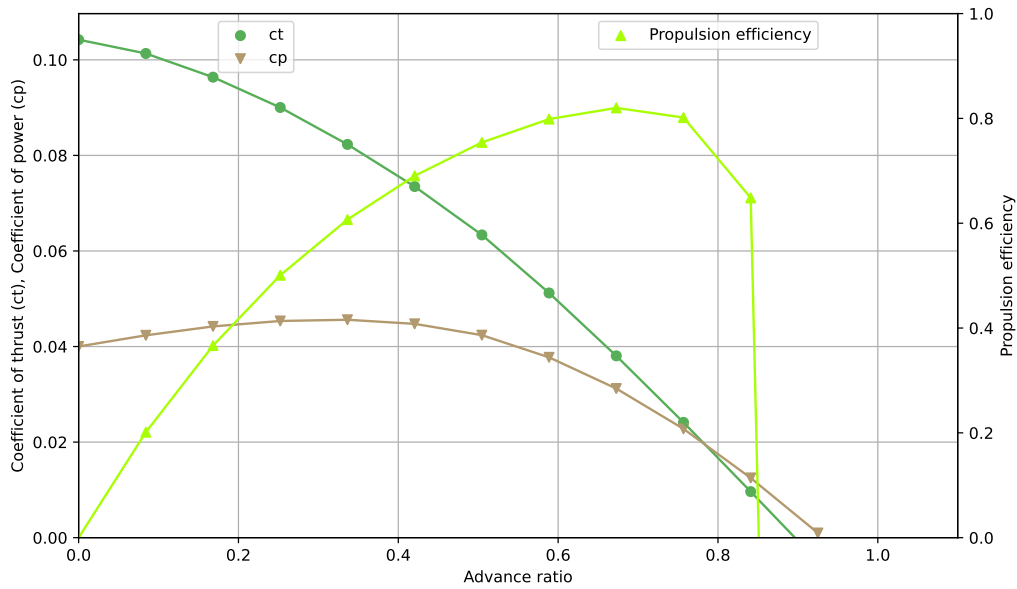


# 26.5x16.2 2B GAS

PN:226163

## Simulated data

Dynamic simulation - at 5300 RPM



v_inf	Ct	Cp	Propulsion efficiency	Advance ratio
0.0	0.1042	0.04	0.0	0.0
5.0	0.1013	0.0423	0.2012	0.0841
10.0	0.0964	0.0442	0.3666	0.1682
15.0	0.09	0.0454	0.5007	0.2523
20.0	0.0823	0.0456	0.607	0.3364
25.0	0.0735	0.0447	0.6904	0.4205
30.0	0.0634	0.0424	0.7542	0.5046
35.0	0.0512	0.0377	0.7987	0.5887
40.0	0.0381	0.0312	0.8201	0.6728
45.0	0.0241	0.0228	0.8016	0.7568
50.0	0.0096	0.0125	0.6484	0.8409
55.0	-0.005	0.001	-4.7379	0.925

Formulas for forward flight:

Propulsion efficiency:  $\eta = \frac{C_T \cdot J}{C_P}$

Advance ratio:  $J = \frac{v}{n \cdot D}$

To get more information about the manufacturing process or possibility to customize the propeller, reach out to [info@mejzlik.eu](mailto:info@mejzlik.eu).

To learn more about how to operate the propeller, check out the Operating Manual on our website.