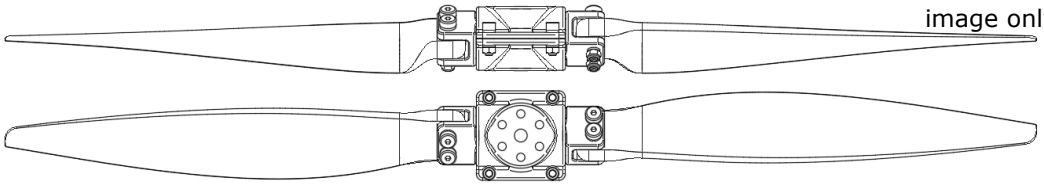
PROPELLER
30x(10.2-51.8) 2B OGA

PN: 23400001, 23400003



*Illustrative image only

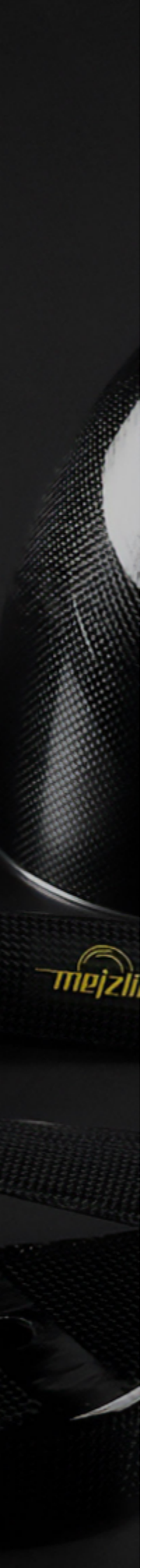
714 g	30.0”	(10.2-51.8)”	Fixed wing
Mass	Diameter	Pitch Range	

Engine/Motor type:	Gas and Electric
Rotation direction:	Counter-clockwise and Clockwise available (Direction Guide)
Features:	On Ground Adjustable Pitch
Pitch range [in]:	(10.2-51.8)
Mass [g]:	714 ± 5.0%
Center hole diameter [mm]:	10
Drilling pattern [mm]:	6xM6 on ⌀34
Limit RPM[2]:	6000
Working temperature [°C]	from -20°C to 60°C
Production method:	Wet Layup

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

[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



Pitch setting

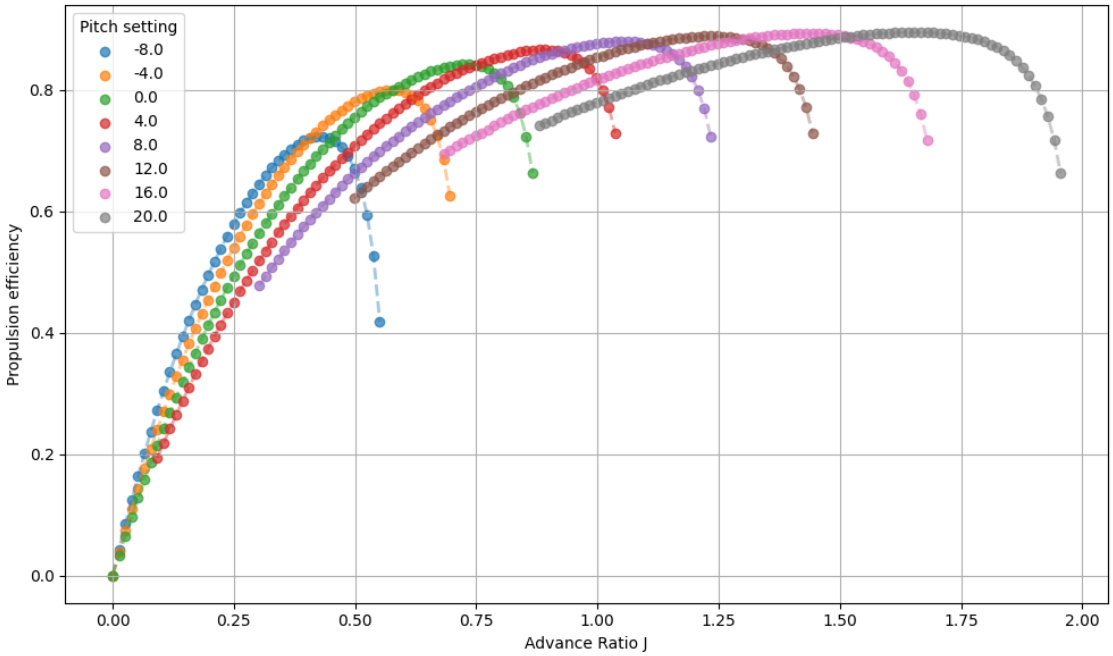
Hub setting to equivalent propeller propeller pitch

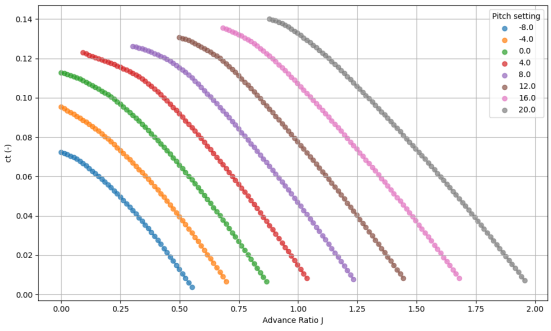
Hub Pitch Setting [°]	Propeller Pitch [in]
-8.0	10.2
-7.0	11.5
-6.0	12.7
-5.0	14.0
-4.0	15.3
-3.0	16.6
-2.0	17.9
-1.0	19.2
0.0	20.6
1.0	21.9
2.0	23.3
3.0	24.6
4.0	26.0
5.0	27.4
6.0	28.9
7.0	30.3
8.0	31.8
9.0	33.3
10.0	34.8
11.0	36.3
12.0	37.9
13.0	39.5
14.0	41.2
15.0	42.8
16.0	44.5
17.0	46.3
18.0	48.1
19.0	49.9
20.0	51.8

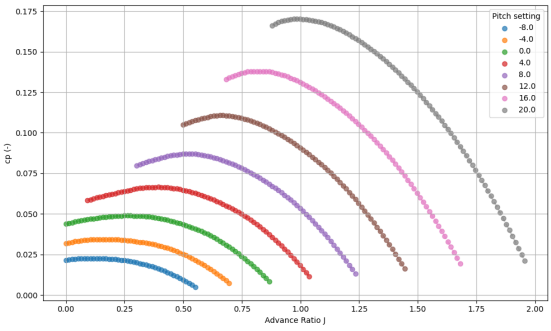
[1] To learn more about how to set and find the perfect pitch, check out our On Ground Adjustable Propellers Guide.

Dynamic Performance Data

Simulated data - at 6000 RPM







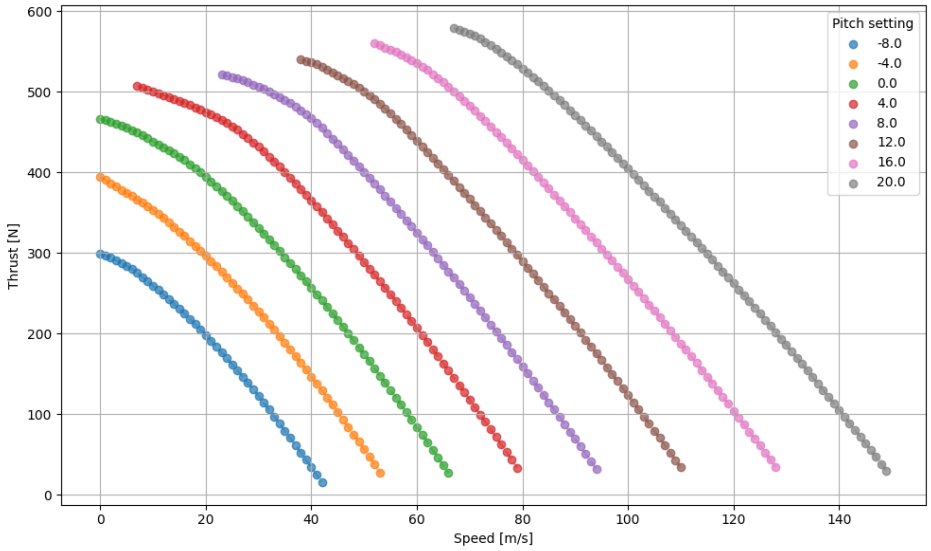
1 Data simulated at 6000 RPM. For exact simulated data points, see the corresponding excel file on our website.

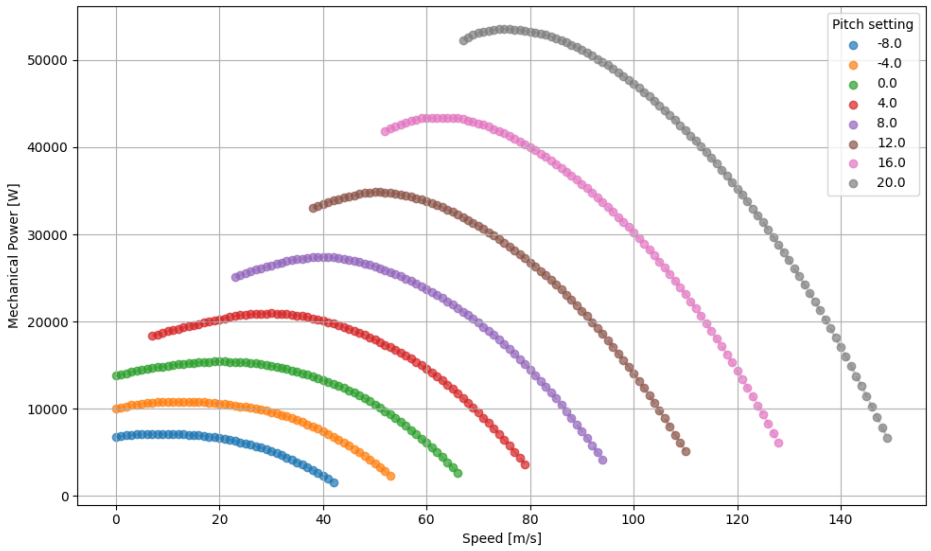
2 This data is interpolated and may contain interpolation artifacts.

3 For tip speeds above 0.7M, the simulation error may increase.

Dynamic Performance Data

Simulated data - at 6000 RPM





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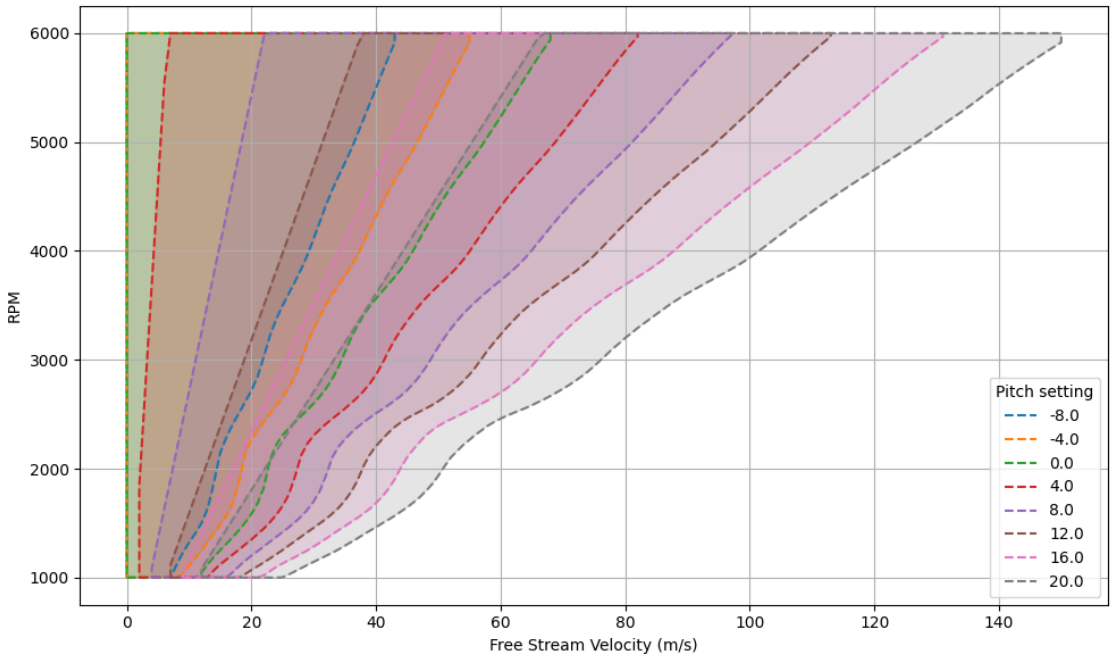
Operating range

Recommended operating range for given pitch



For each pitch setting, the propeller will stop producing useful thrust above a certain airspeed. This occurs due to the changing angle of attack of the airflow relative to the propeller blades. This limiting speed can be increased either by raising the rotational speed (RPM) or by increasing the blade pitch.

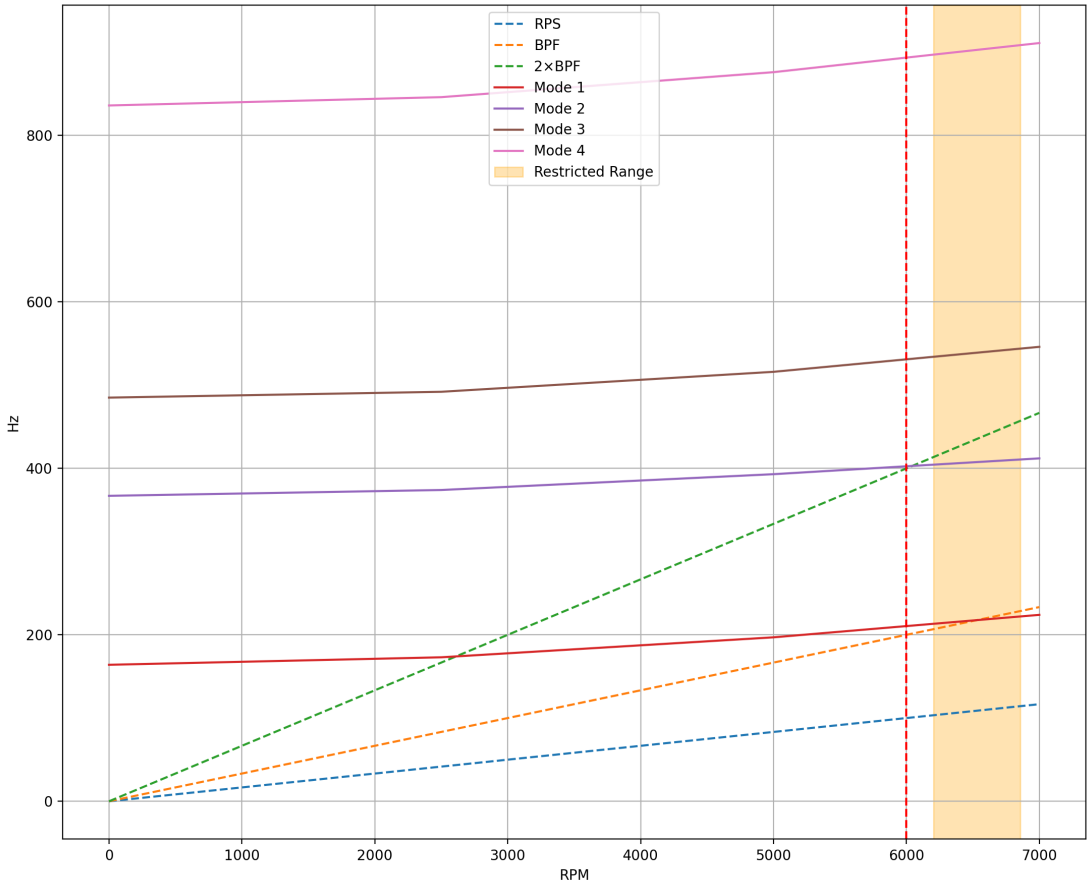
However, high-pitch propellers experience blade stall at lower airspeeds. As a result, although the propeller may still generate some thrust, its efficiency is significantly reduced until the aircraft reaches a higher speed at which the flow reattaches to the blades.

These two operating boundaries are indicated in the plot above.

This plot is based on simulated data and interpolation and may not exactly match real-world test results.

Natural frequencies

Simulated data



Intersection	Restricted RPM ranges[1]
RPS - Mode 1	-
BPF - Mode 1	6200-6860[2]

1 Longterm use at these RPM should be avoided, as these RPM can lead to higher vibrations and possible damage to the propeller. Short-term use or crossing of this range to reach higher operational rpm is allowed.

2 Data is simulated using Finite Element Analysis (FEA).