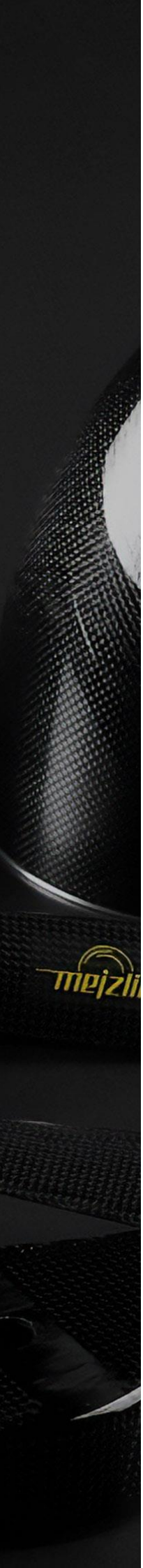

Professional Propulsion Systems

SYSTEM SPECIFICATIONS

ENGINE

Name:	**4201**
Manufacturer:	**HIRTH ENGINES**
Type:	**2-cylinder, two stroke**
Displacement:	**183 cm³**
Max. performance:	**11 kW at 6500 RPM**
Weight:	**5.7 kg**
RPM range:	**1800–6500 RPM**
Running direction:	**Clockwise**

PROPELLER

Name:	**30x13 2B EVO**
Manufacturer:	**Mejzlik**
Diameter:	**30 in**
Pitch:	**13 in**
Mass:	**295 g**
Contact:	**info@mejzlik.eu**

ANALYSIS

Need expert guidance on analyzing your flight performance?
Our team provides a comprehensive analysis of RPM calculations, motor and propeller efficiency, including customized propeller selection recommendations to ensure your system achieves maximum efficiency.

Please reach out to us at **info@mejzlik.eu** or **info@hirthengines.com**

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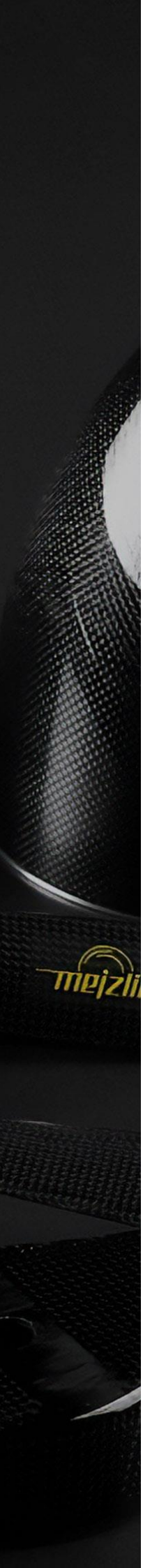
HIRTH ENGINES

mejzlik



PERFORMANCE OF THE SYSTEM

Flight velocity

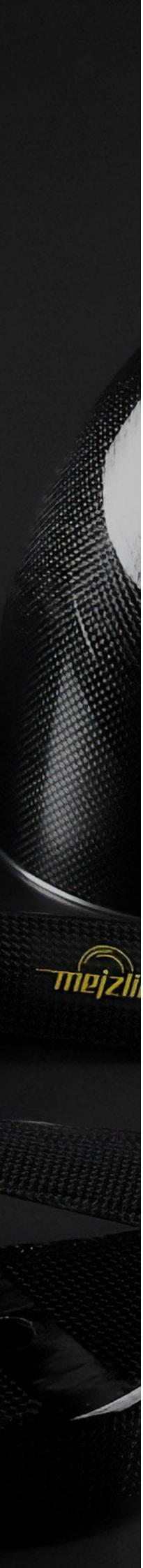
0 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	9	0.37	**39**	**0**
1600	23	0.96	**161**	**0**
2200	45	1.83	**421**	**0**
2800	76	3.07	**900**	**0**
3400	112	4.57	**1627**	**0**
4000	158	6.37	**2668**	**0**
4600	211	8.65	**4167**	**0**
5200	277	11.30	**6154**	**0**
5900	362	15.00	**9265**	**0**

Flight velocity

10 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-3	-0.09	**-10**	**—**
1600	7	0.62	**104**	**68**
2200	27	1.76	**404**	**67**
2800	56	3.19	**936**	**60**
3400	90	4.84	**1725**	**52**
4000	133	6.83	**2859**	**47**
4600	184	9.18	**4424**	**42**
5200	244	11.98	**6524**	**37**
5900	326	15.89	**9816**	**33**



PERFORMANCE OF THE SYSTEM

Flight velocity

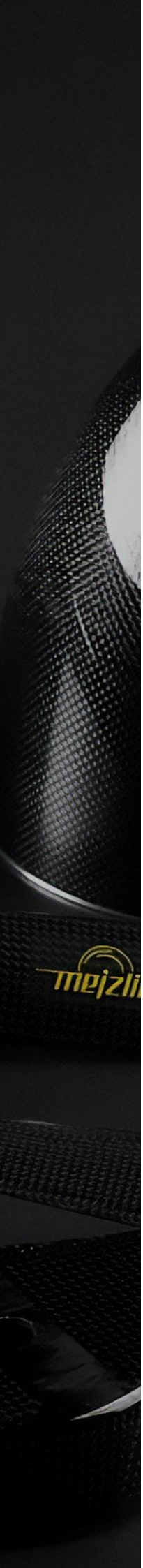
20 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-6	-0.31	**-33**	**—**
1600	-11	-0.19	**-31**	**—**
2200	-5	-0.01	**-2**	**—**
2800	18	1.67	**489**	**74**
3400	49	3.63	**1293**	**76**
4000	88	5.85	**2450**	**72**
4600	135	8.33	**4013**	**67**
5200	193	11.34	**6174**	**62**
5900	272	15.45	**9543**	**57**

Flight velocity

30 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-8	-0.89	**-93**	**—**
1600	-14	-0.59	**-98**	**—**
2200	-21	-0.30	**-70**	**—**
2800	-20	-0.79	**-231**	**—**
3400	-1	0.59	**211**	**—**
4000	33	3.16	**1322**	**76**
4600	76	6.08	**2928**	**78**
5200	128	9.31	**5069**	**76**
5900	201	13.58	**8389**	**72**



PERFORMANCE OF THE SYSTEM

Flight velocity

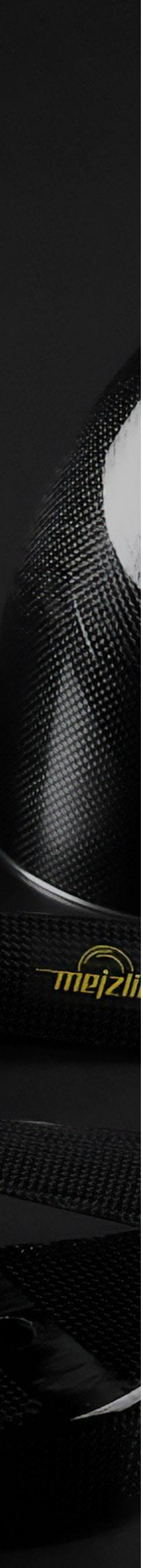
40 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-11	-1.64	**-172**	—
1600	-17	-1.40	**-235**	—
2200	-26	-1.03	**-236**	—
2800	-34	-0.68	**-200**	—
3400	-42	-2.08	**-740**	—
4000	-28	-1.31	**-551**	—
4600	7	1.65	**793**	**36**
5200	53	5.20	**2834**	**75**
5900	120	9.88	**6105**	**78**

Flight velocity

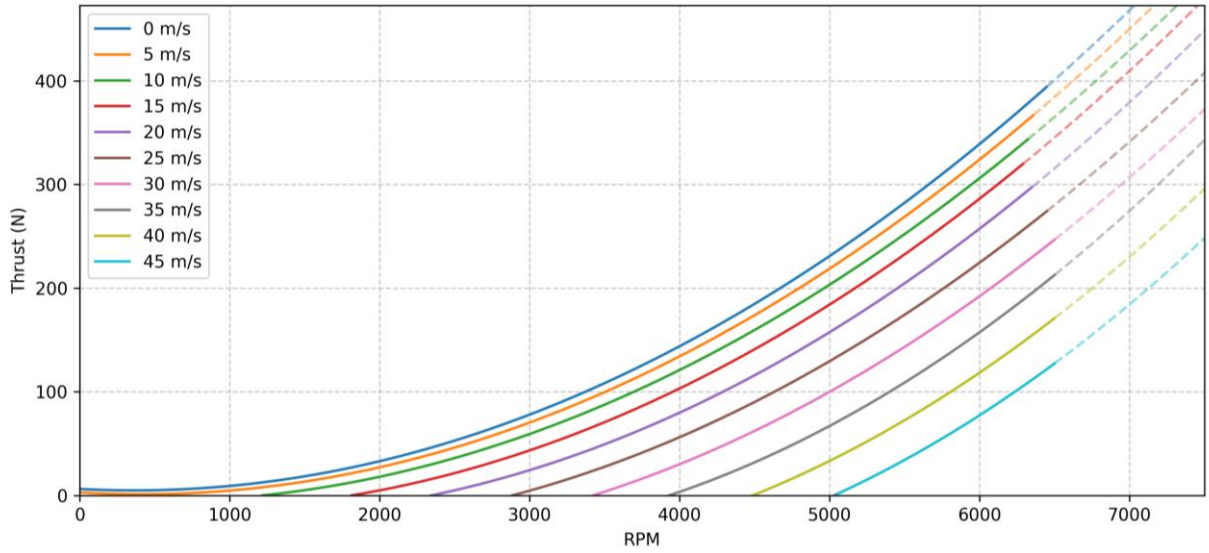
50 m/s

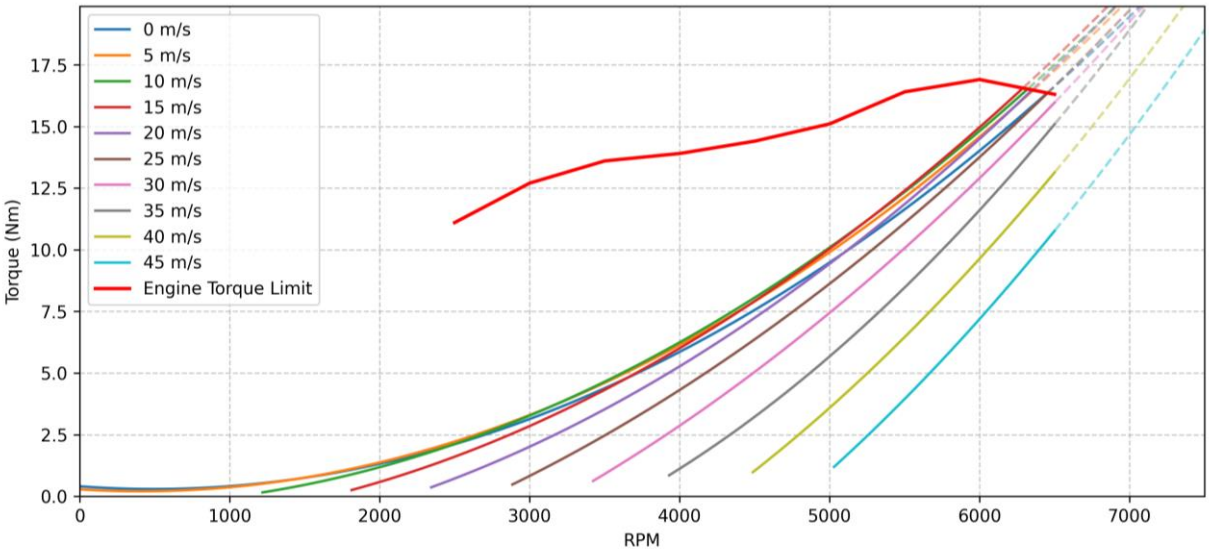
Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-14	-2.67	**-279**	—
1600	-21	-2.45	**-410**	—
2200	-30	-2.13	**-491**	—
2800	-40	-1.52	**-444**	—
3400	-49	-0.99	**-351**	—
4000	-66	-3.82	**-1601**	—
4600	-56	-3.11	**-1500**	—
5200	-28	-0.88	**-481**	—
5900	29	3.95	**2441**	**58**



PERFORMANCE OF THE SYSTEM

Hirth 4201 + Mejzlik 30x13 2B EVO
Performance in flight





NOTE

Data presented in this product sheet are a combination of measurements of engine performance (RPM, torque), which is complemented with propeller data, simulated in Mejzliks proprietary simulation software. The greyed out values are above engine limit.

Data is valid for 0m ISA. Propeller performance simulation accuracy can diverge at higher tip speeds (above 0.7 Mach). Propeller is structurally safe to operate below Mach 1 tip speed.

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