

Professional Propulsion Systems

SYSTEM SPECIFICATIONS

ENGINE



Name:	4103
Manufacturer:	HIRTH ENGINES
Type:	2-cylinder
Displacement:	100 cm³
Max. performance:	5 kW at 6500 RPM
Weight:	3.4 kg
RPM range:	2500–6500 RPM
Running direction:	Clockwise

PROPELLER



Name:	26x12 2B
Manufacturer:	Mezlik
Diameter:	26 in
Pitch:	12 in
Mass:	197 g
Contact:	info@mezlik.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@mezlik.eu or info@hirthengines.com

ID: **0100**



PERFORMANCE OF THE SYSTEM

Flight velocity

0 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	5	0.19	19	0
1700	14	0.54	97	0
2400	29	1.09	274	0
3100	51	1.91	619	0
3900	83	3.04	1243	0
4600	116	4.32	2083	0
5300	159	5.89	3268	0
5400	166	6.17	3491	0
6000	208	7.78	4886	0
6800	274	10.52	7493	0

Flight velocity

10 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-2	0.02	2	—
1700	4	0.38	68	58
2400	18	1.10	278	64
3100	38	2.03	659	58
3900	68	3.33	1360	50
4600	102	4.72	2274	45
5300	142	6.40	3552	40
5400	149	6.66	3769	39
6000	190	8.41	5286	36
6800	254	11.16	7949	32

PERFORMANCE OF THE SYSTEM

Flight velocity

20 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-3	-0.13	-14	—
1700	-6	0.01	2	—
2400	-3	0.25	64	—
3100	13	1.24	401	64
3900	39	2.70	1103	71
4600	70	4.23	2038	69
5300	108	6.06	3362	64
5400	114	6.34	3585	63
6000	153	8.18	5139	59
6800	214	11.03	7855	55

Flight velocity

30 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-4	-0.41	-43	—
1700	-8	-0.24	-44	—
2400	-12	-0.03	-8	—
3100	-10	0.30	97	—
3900	3	1.09	443	23
4600	29	2.71	1305	66
5300	62	4.64	2574	72
5400	67	4.94	2794	72
6000	103	6.88	4322	71
6800	160	9.85	7018	68

PERFORMANCE OF THE SYSTEM

Flight velocity

40 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-6	-0.80	-84	—
1700	-10	-0.68	-121	—
2400	-15	-0.50	-126	—
3100	-22	-0.21	-69	—
3900	-20	0.37	150	—
4600	-12	0.70	335	—
5300	11	2.17	1207	35
5400	15	2.48	1402	43
6000	46	4.50	2827	64
6800	97	7.61	5419	71

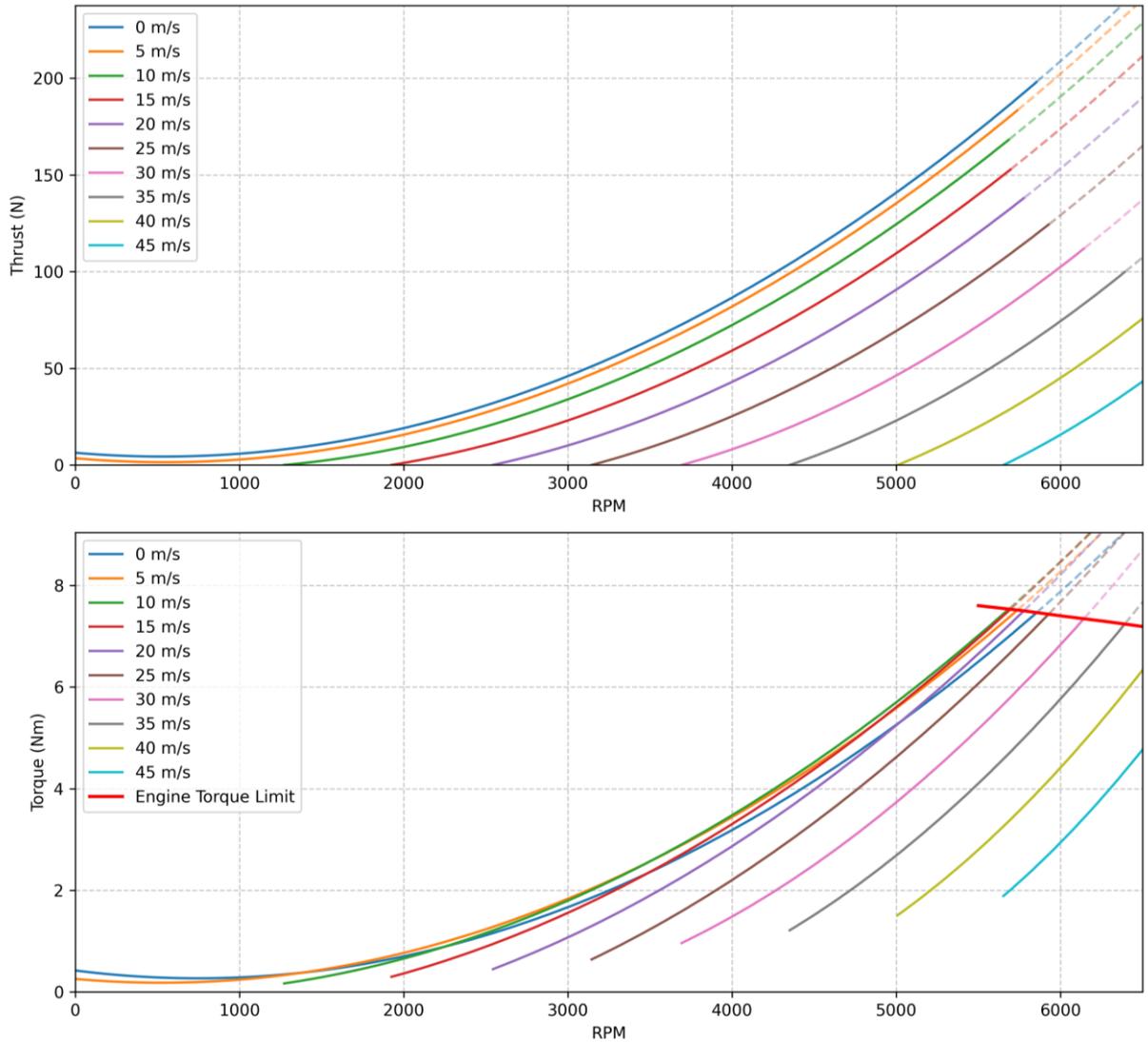
Flight velocity

50 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-8	-1.40	-147	—
1700	-13	-1.31	-233	—
2400	-18	-1.16	-292	—
3100	-25	-0.84	-273	—
3900	-34	-0.28	-114	—
4600	-34	0.30	146	—
5300	-27	0.73	406	—
5400	-26	0.81	457	—
6000	-12	1.51	949	—
6800	28	4.26	3033	46

PERFORMANCE OF THE SYSTEM

Hirth 4103 + Mejzlik 26x12 2B 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.