

Professional Propulsion Systems

SYSTEM SPECIFICATIONS

ENGINE



Name:	305 HS
Manufacturer:	ZANZOTTERA ENGINES
Type:	2-cylinder boxer
Displacement:	312 cm³
Max. performance:	29.7 HP at 7000 RPM
Weight:	13 Kg
Max RPM:	7000 RPM
Running direction:	Clockwise

PROPELLER



Name:	36x12 2B L CW and CCW (Direction guide)
Manufacturer:	Mejzlik
Diameter:	36 in
Pitch:	12 in
Mass:	324 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 idanbi@zanzotteraengines.com

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PERFORMANCE OF THE SYSTEM

Flight velocity

0 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	17	0.75	78	0
1400	33	1.48	218	0
1900	64	2.8	557	0
2400	104	4.55	1144	0
2900	153	6.73	2042	0
3400	213	9.44	3360	0
3900	285	12.5	5106	0
4400	369	16.38	7548	0
4900	466	20.99	10771	0

Flight velocity

10 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-5	-0.1	-10	—
1400	6	0.74	108	53
1900	31	2.32	461	67
2400	67	4.28	1075	62
2900	111	6.58	1997	55
3400	165	9.29	3308	50
3900	230	12.58	5140	45
4400	305	16.44	7575	40
4900	395	21	10777	37

PERFORMANCE OF THE SYSTEM

Flight velocity

20 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-11	-0.32	-34	—
1400	-17	0.13	19	—
1900	-17	-0.43	-85	—
2400	7	1.31	329	43
2900	45	4.08	1240	73
3400	94	7.23	2574	73
3900	153	10.84	4425	69
4400	224	15.01	6915	65
4900	307	19.77	10144	61

Flight velocity

30 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-15	-1.28	-134	—
1400	-21	-0.68	-99	—
1900	-31	0.22	44	—
2400	-41	-1.13	-283	—
2900	-34	-1.52	-461	—
3400	3	1.72	612	17
3900	54	5.71	2330	70
4400	117	10.27	4732	74
4900	192	15.31	7856	73

PERFORMANCE OF THE SYSTEM

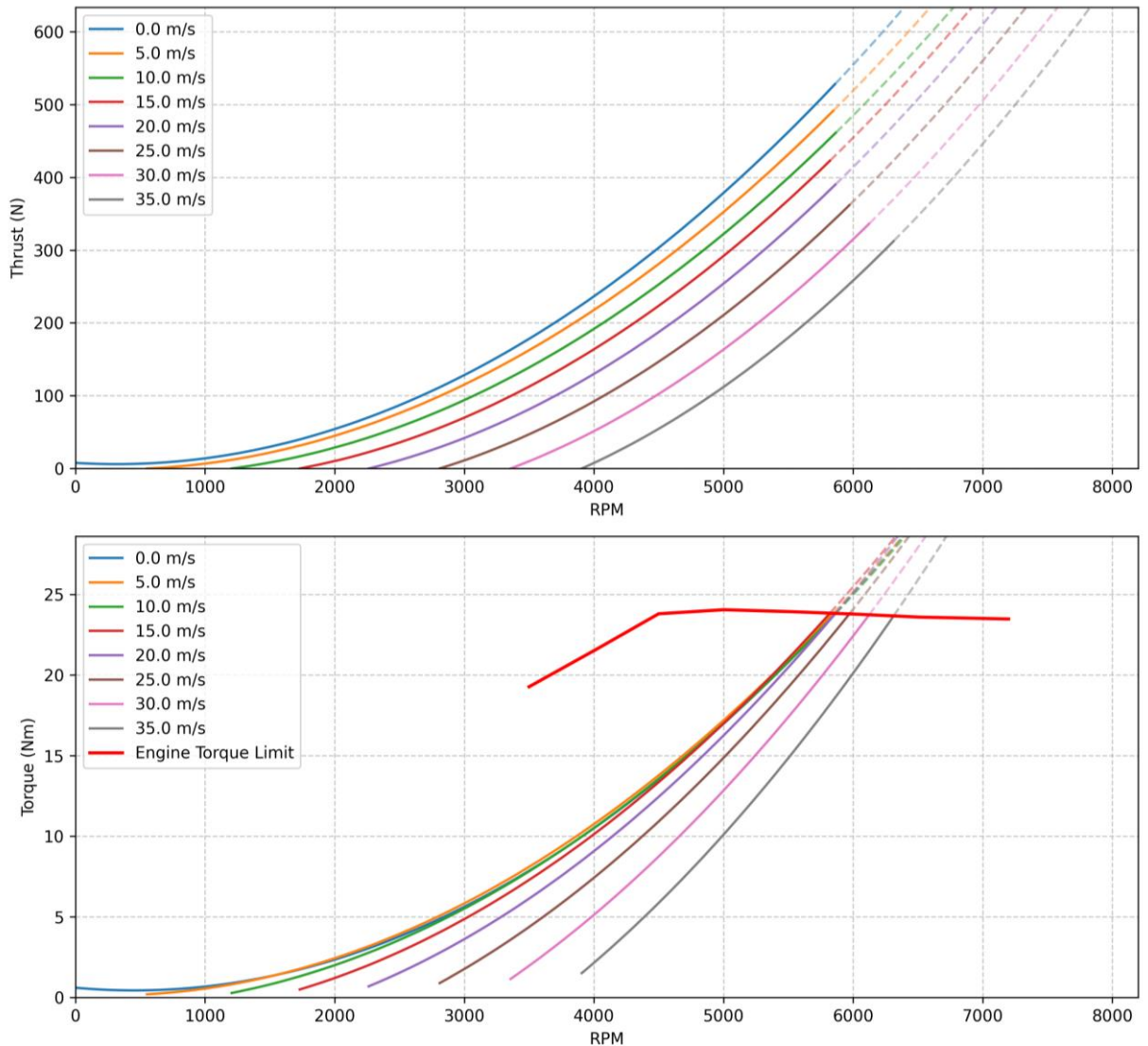
Flight velocity

40 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-18	-2.52	-263	—
1400	-26	-2.03	-297	—
1900	-38	-1.3	-259	—
2400	-55	-0.93	-234	—
2900	-72	-2.17	-660	—
3400	-83	-5.01	-1785	—
3900	-57	-2.68	-1095	—
4400	-6	2.04	942	—
4900	58	7.25	3719	62

PERFORMANCE OF THE SYSTEM

305HS + Mejlík 36x12 2B L 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 Mejlík's 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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