

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:	34x12 2B CCW (Direction guide)
Manufacturer:	Mejzlik
Diameter:	34 in
Pitch:	12 in
Mass:	382 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

ID: **0159**

PERFORMANCE OF THE SYSTEM

Flight velocity

0 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	14	0.62	65	0
1500	31	1.43	224	0
2000	59	2.58	540	0
2500	95	4.1	1074	0
3100	146	6.46	2097	0
3600	202	8.83	3330	0
4100	275	11.67	5011	0
4600	342	15	7224	0
5200	443	19.91	10844	0

Flight velocity

10 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-1	0.33	35	—
1500	11	1.1	172	61
2000	34	2.45	514	65
2500	65	4.17	1092	60
3100	114	6.69	2173	52
3600	164	9.24	3484	47
4100	223	12.23	5253	43
4600	293	15.75	7589	39
5200	391	20.78	11315	35

PERFORMANCE OF THE SYSTEM

Flight velocity

20 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-6	0.11	12	—
1500	-8	0.65	103	—
2000	-2	1.16	242	—
2500	18	2.47	648	54
3100	59	5.04	1636	72
3600	104	7.79	2936	71
4100	157	10.97	4708	67
4600	222	14.64	7054	63
5200	314	19.84	10801	58

Flight velocity

30 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-8	-0.3	-31	—
1500	-13	0.33	52	—
2000	-17	1.06	223	—
2500	-15	1.69	443	—
3100	-2	2.58	837	—
3600	31	4.66	1757	52
4100	77	7.56	3244	71
4600	134	11.36	5473	74
5200	218	16.76	9129	72

PERFORMANCE OF THE SYSTEM

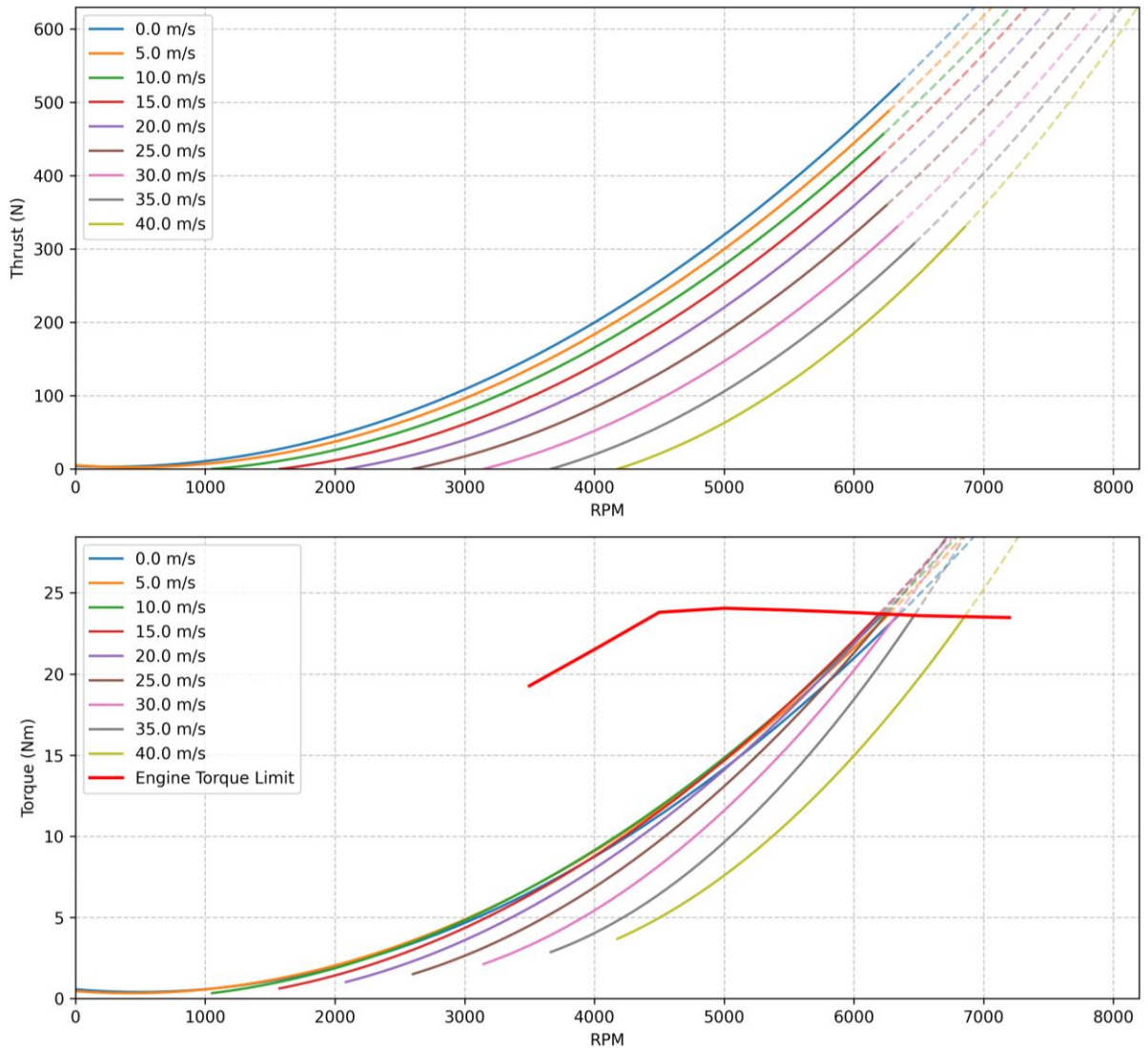
Flight velocity

40 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-10	-0.77	-81	—
1500	-15	-0.21	-33	—
2000	-22	0.47	99	—
2500	-30	1.25	326	—
3100	-32	2.02	657	—
3600	-27	2.74	1031	—
4100	-5	4.36	1873	—
4600	36	6.96	3354	43
5200	107	11.3	6153	69

PERFORMANCE OF THE SYSTEM

305HS + Mejlík 34x12 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 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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