

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:	32x18 2B CW and CCW (Direction guide)
Manufacturer:	Mejzlik
Diameter:	32 in
Pitch:	18 in
Mass:	334 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	13	0.65	68	0
1500	29	1.46	229	0
2100	58	2.88	633	0
2600	90	4.48	1219	0
3200	140	6.86	2298	0
3800	199	10.06	4001	0
4300	263	12.98	5845	0
4900	347	17.63	9046	0
5500	451	23.15	13331	0

Flight velocity

10 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	1	0.26	27	36
1500	17	1.56	245	71
2100	48	3.49	768	62
2600	78	5.2	1415	55
3200	124	7.78	2606	47
3800	182	11.02	4385	42
4300	241	14.28	6431	38
4900	323	18.9	9699	33
5500	422	24.55	14141	30

PERFORMANCE OF THE SYSTEM

Flight velocity

20 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-7	-0.29	-30	—
1500	-6	0.12	20	—
2100	15	1.93	425	72
2600	48	4.54	1236	77
3200	97	8.07	2703	72
3800	155	11.78	4686	66
4300	206	14.92	6720	61
4900	284	19.7	10106	56
5500	380	25.58	14732	52

Flight velocity

30 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-10	-0.86	-90	—
1500	-14	-0.39	-62	—
2100	-11	0.41	90	—
2600	2	1.14	312	17
3200	46	5.25	1760	78
3800	104	9.98	3972	78
4300	162	14.32	6449	75
4900	244	20.11	10320	71
5500	335	26.21	15095	67

PERFORMANCE OF THE SYSTEM

Flight velocity

40 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-12	-1.58	-165	—
1500	-17	-1.09	-170	—
2100	-23	-0.16	-35	—
2600	-19	0.67	182	—
3200	-10	0.57	192	—
3800	37	5.19	2064	72
4300	92	10.25	4616	80
4900	171	16.85	8647	79
5500	265	24.22	13952	76

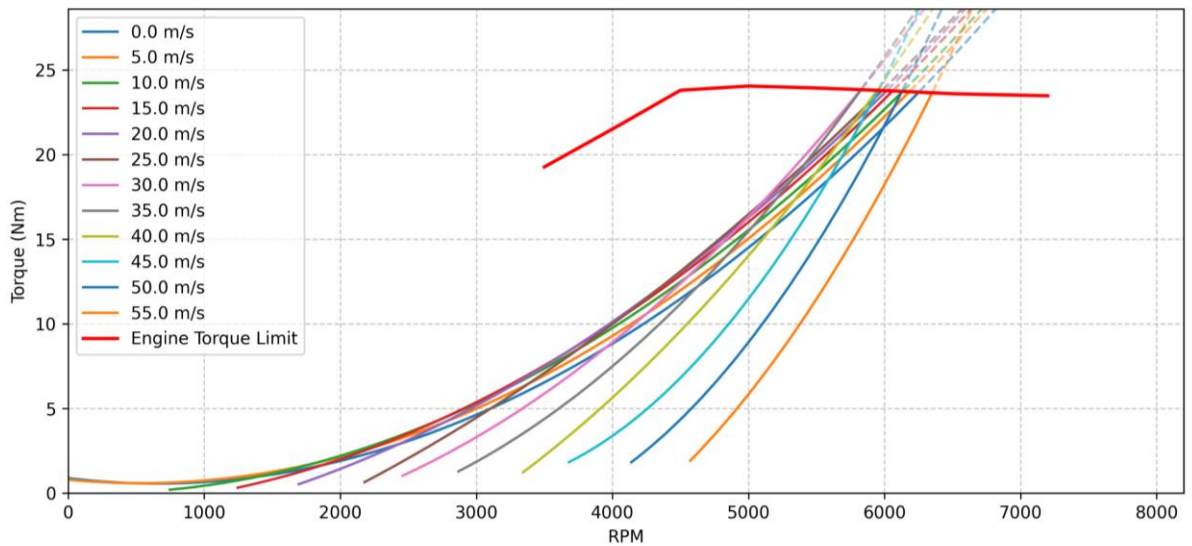
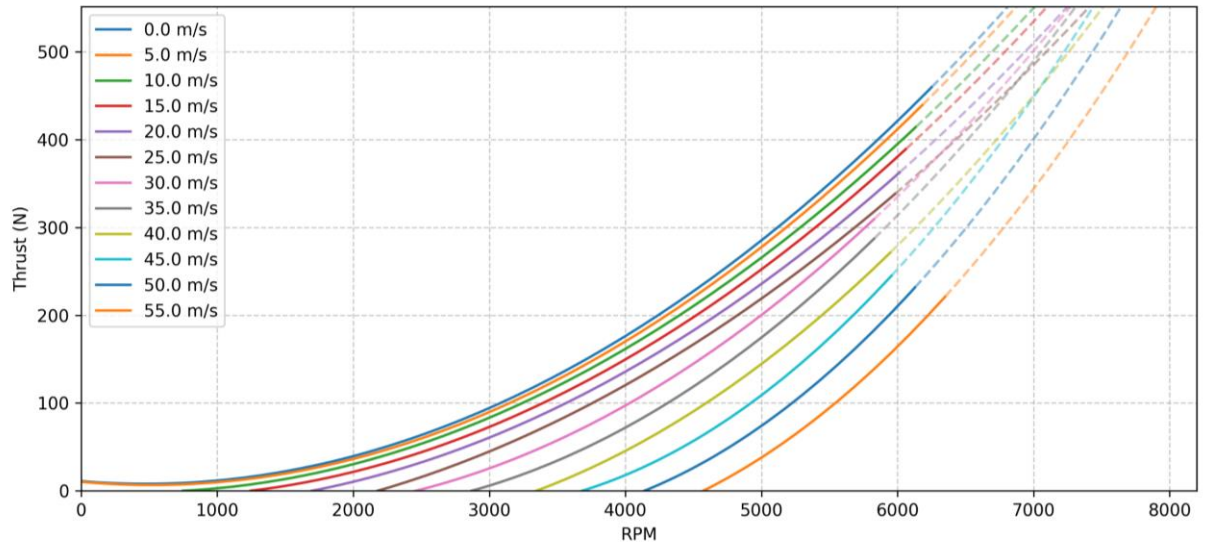
Flight velocity

50 m/s

Rotational Speed [RPM]	Thrust [N]	Torque [Nm]	Mechanical Power [W]	Propulsion efficiency [%]
1000	-15	-2.36	-247	—
1500	-20	-1.8	-283	—
2100	-27	-0.93	-205	—
2600	-33	-0.19	-52	—
3200	-29	1.12	374	—
3800	-22	0.2	80	—
4300	12	3.27	1473	39
4900	83	10.48	5378	77
5500	173	18.7	10772	80

PERFORMANCE OF THE SYSTEM

305HS + Mejlík 32x18 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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