



INNERSPACE CORPORATION

1138 E. EDNA PLACE, COVINA, CA 91724
TEL: (626) 331-0921 FAX: (626) 966-6391
www.innerspacethrusters.com

INNERSPACE BDC 12150-05

INNERSPACE - 5HP - 150VDC - 1002 ELECTRIC THRUSTER

Thruster Detail

MOTOR TYPE: 3 Phase BDC
BUS VOLTAGE: 150-180 VDC
THRUSTER DIA: 14.5 inch
LENGTH: 19 inch

Performance

Max Current: 30.0 Amps
Max THRUST: 282 lbs
TOTAL DRY WEIGHT: 48 lbs
TOTAL WET WEIGHT: 35 LBS

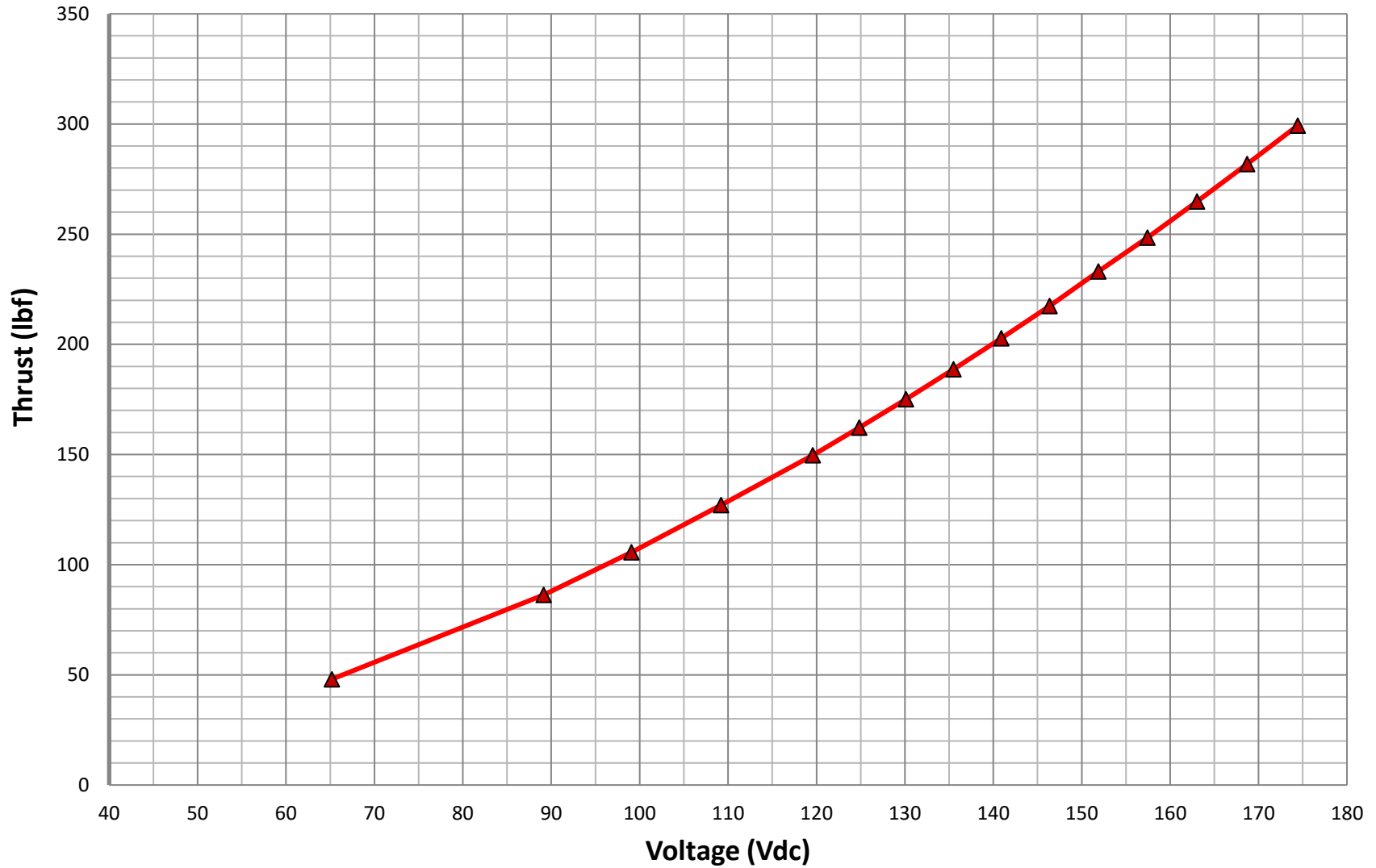
Reference Operating Point

SPEED: 1600 RPM
POWER IN: 4479 Watts
MIN VOLTAGE: 152 VDC
CURRENT: 26.1 Amps

Command SPEED (RPM)	Motor Voltage (Peak)	Current (A rms)	Motor SPEED RPM	Torque		Thrust			SHAFT POWER		POWER IN (watts)	POWER IN (HP)	Efficiency Pout/Pin
				N-M	in-lbs	lbf	Kgf	N	(HP)	(watts)			
750	65	6.5	750	5.9	52.3	48	22	214	0.62	465	496	0.7	93.7%
1000	89	10.8	1000	9.8	86.8	86	39	384	1.38	1028	1114	1.5	92.2%
1100	99	12.8	1100	11.7	103.4	106	48	470	1.80	1346	1469	2.0	91.6%
1200	109	15.1	1200	13.7	121.5	127	58	565	2.31	1726	1895	2.5	91.0%
1300	120	17.5	1300	16.0	141.2	150	68	666	2.91	2173	2402	3.2	90.5%
1350	125	18.8	1350	17.1	151.6	162	74	721	3.25	2423	2688	3.6	90.2%
1400	130	20.2	1400	18.4	162.5	175	79	779	3.61	2693	2996	4.0	89.9%
1450	135	21.6	1450	19.6	173.7	189	86	839	4.00	2982	3328	4.5	89.6%
1500	141	23.0	1500	20.9	185.3	203	92	902	4.41	3291	3686	4.9	89.3%
1550	146	24.5	1550	22.3	197.4	217	99	967	4.85	3621	4069	5.5	89.0%
1600	152	26.1	1600	23.7	209.8	233	106	1037	5.33	3973	4479	6.0	88.7%
1650	157	27.6	1650	25.2	222.6	248	113	1105	5.83	4347	4917	6.6	88.4%
1700	163	29.3	1700	26.6	235.8	265	120	1178	6.36	4745	5383	7.2	88.1%
1750	169	31.0	1750	28.2	249.4	282	128	1253	6.92	5166	5880	7.9	87.8%
1800	174	32.7	1800	29.8	263.4	299	136	1331	7.52	5611	6409	8.6	87.6%

5 HP 1002 THRUST (lbf) vs VOLTAGE (Vdc)

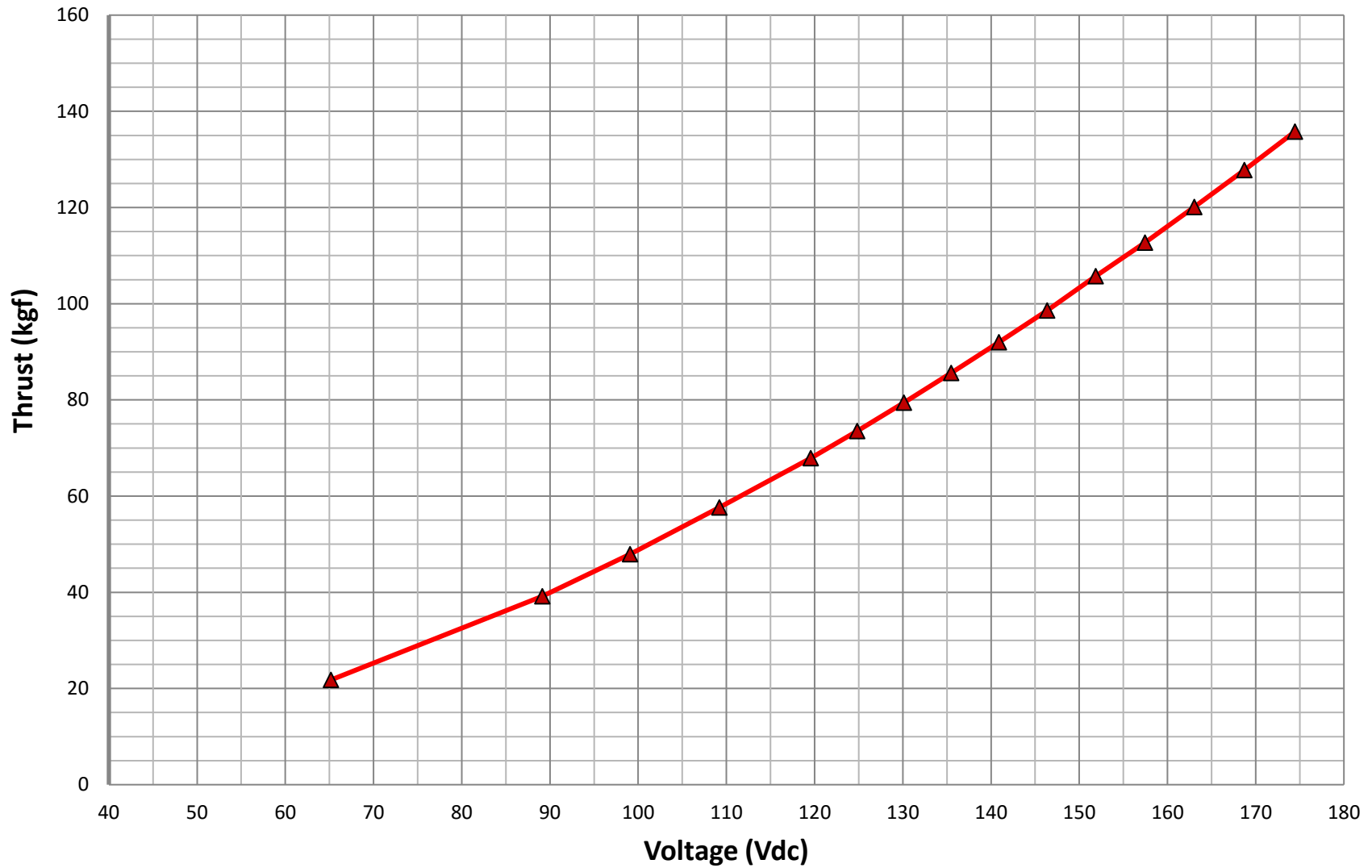
MOTOR: BDC 12150-05 (150 VDC, 5HP)



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5 HP 1002 THRUST (kgf) vs VOLTAGE (Vdc)

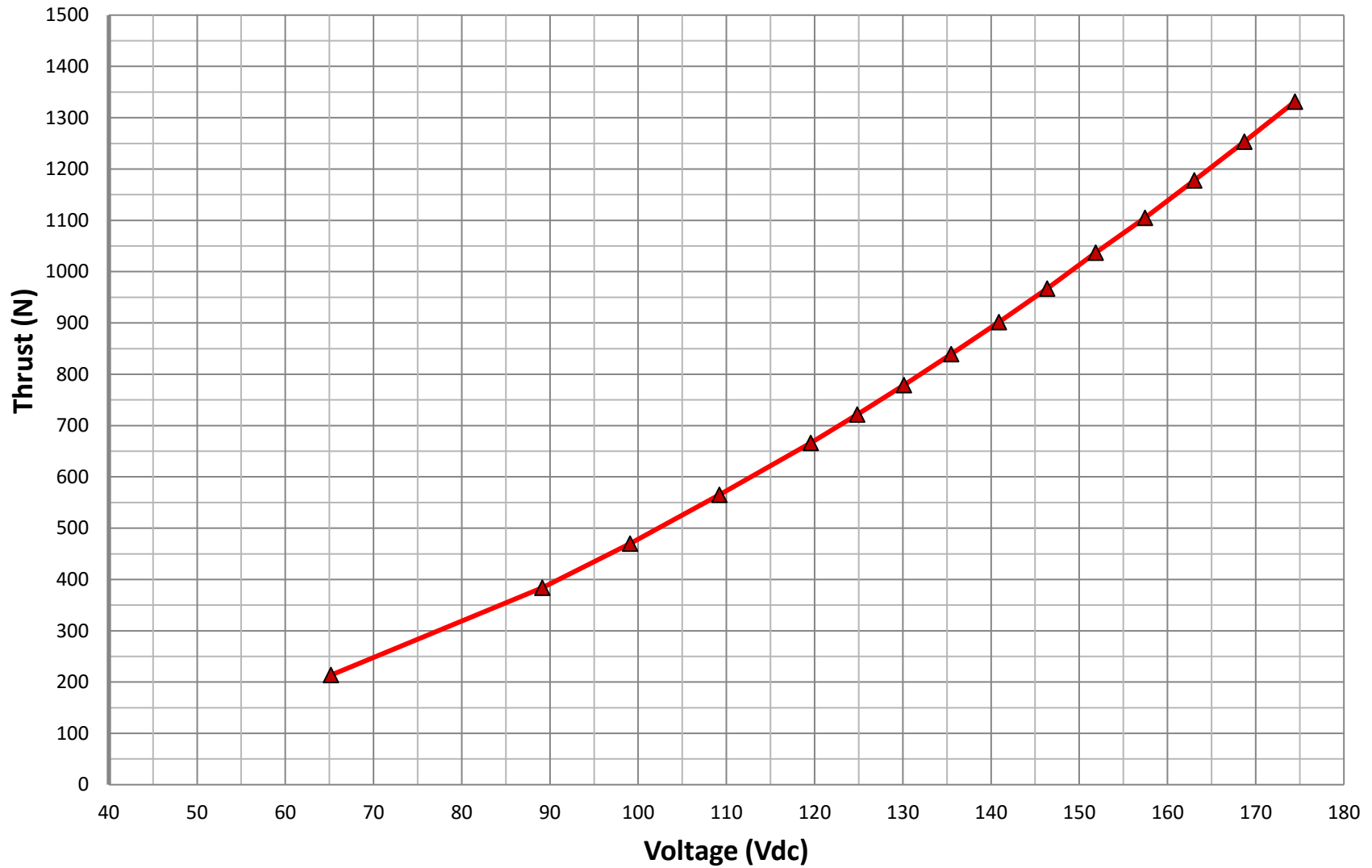
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5 HP 1002 THRUST (N) vs VOLTAGE (Vdc)

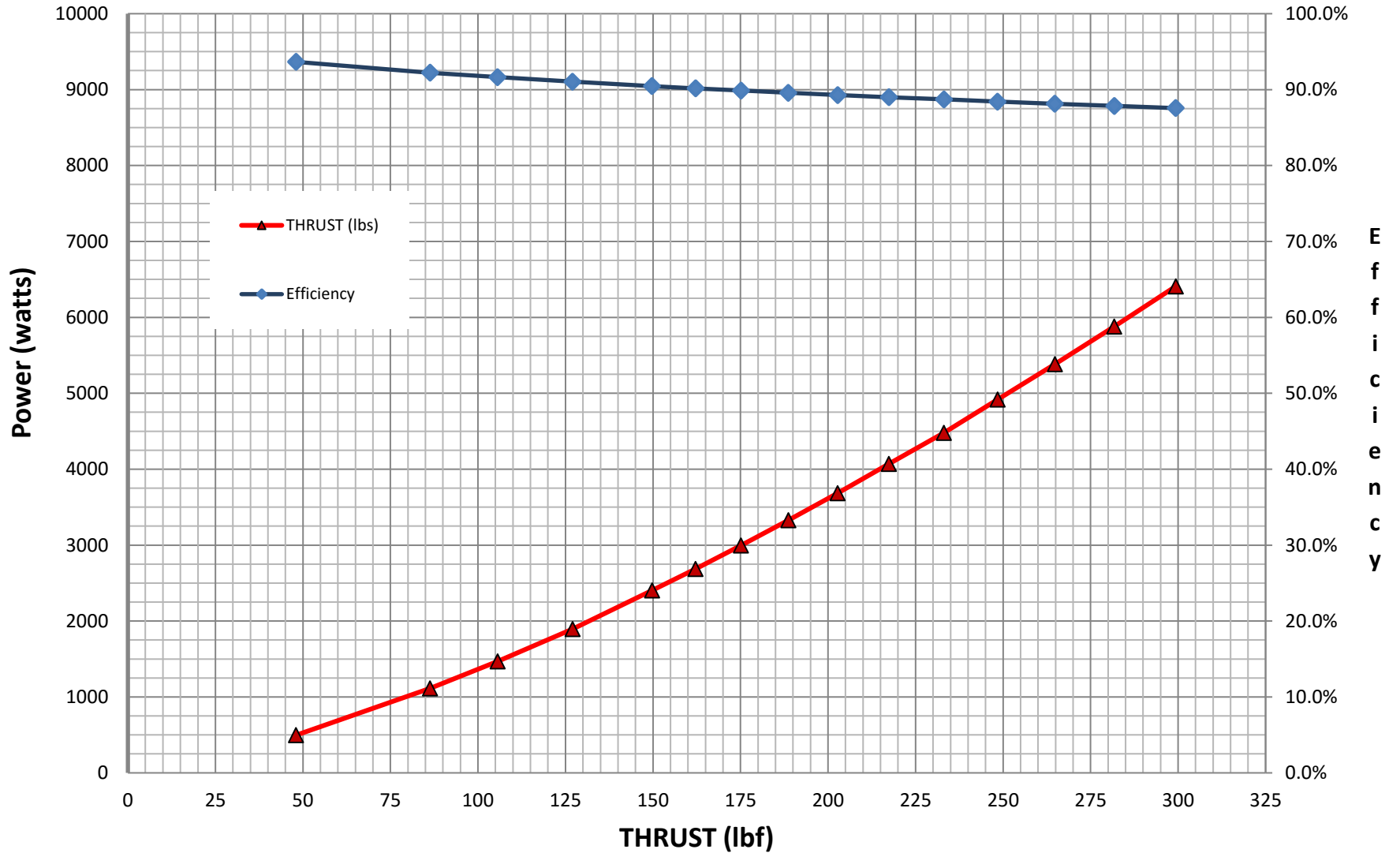
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5 HP 1002 THRUST (lbf) vs POWER IN (watts)

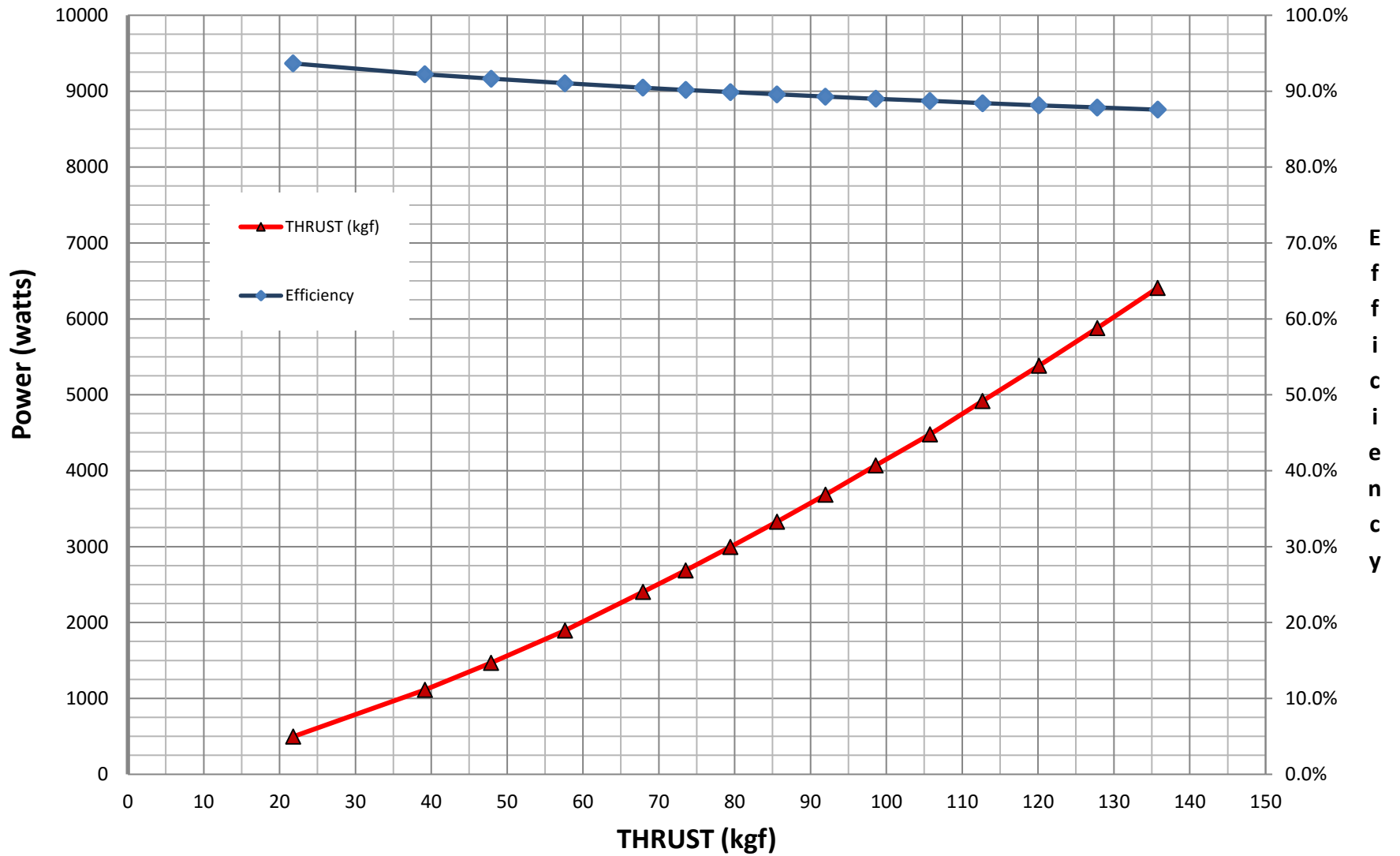
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5 HP 1002 THRUST (kgf) vs POWER IN (watts)

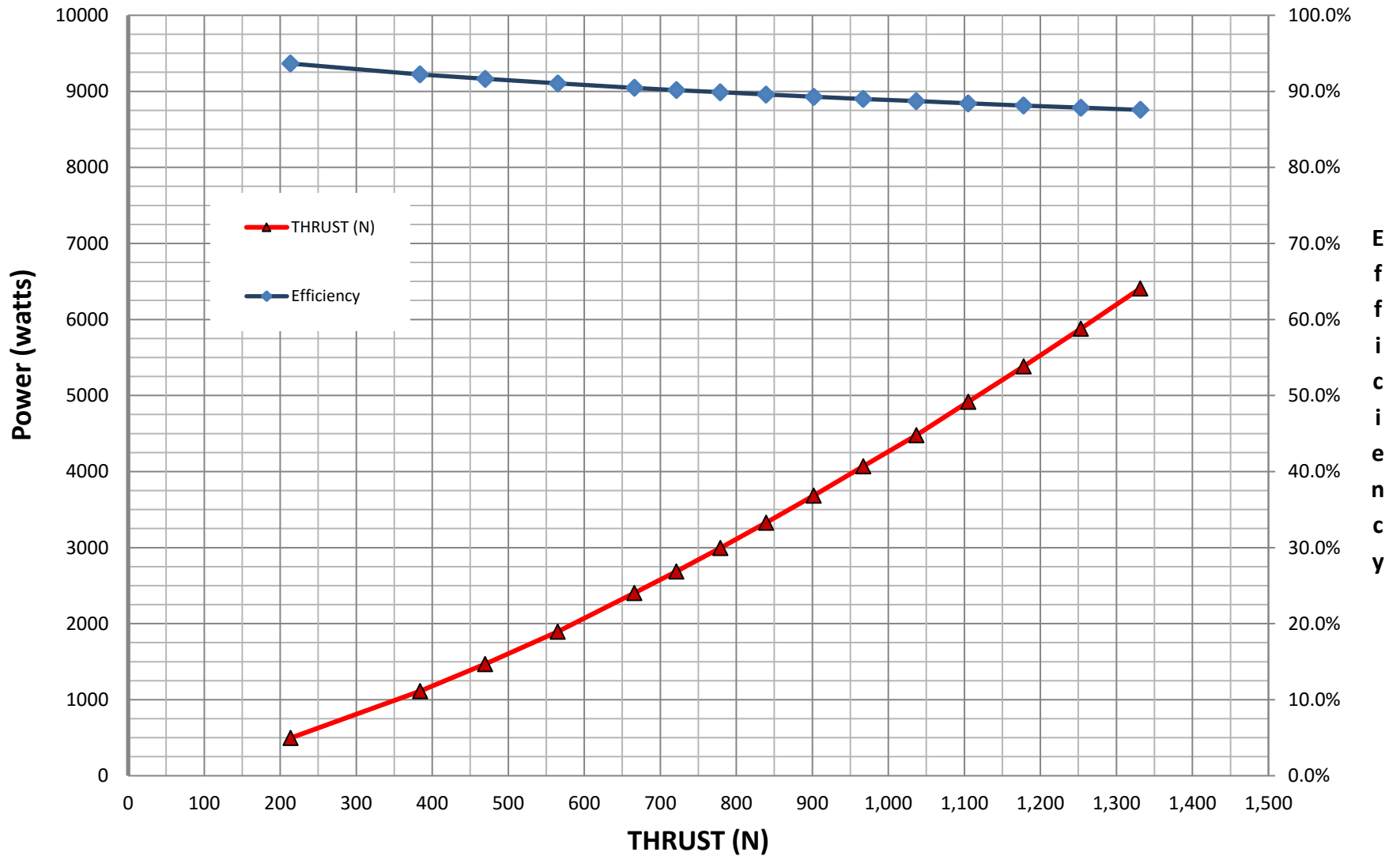
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5 HP 1002 THRUST (N) vs POWER IN (watts)

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