



INNERSPACE CORPORATION
1138 E. EDNA PLACE, COVINA, CA 91724
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www.innerspacethrusters.com

NOMINAL VOLTAGE: 600 VDC

H106 Hexscreen Electric Thruster with 12600RH10 Motor Performance Table

Speed (RPM)	System Voltage (VDC)	Min Voltage (VDC)	Current (A rms)	Bollard Thrust		Reverse Thrust		Power Shaft		Power In		Efficiency (Pout/Pin)
				0 (Lbf)	0 (Kgf)	(Lbf)	(Kgf)	(HP)	(Watts)	(Watts)	(HP)	
100	600	17.0	0.6	1	0.4	1	0.3	0.02	11	12	0.0	94.9%
200	600	33.2	0.9	3	1.5	3	1.3	0.04	33	34	0.0	96.2%
500	600	84.4	2.8	21	9.5	18	8.3	0.35	263	276	0.4	95.2%
800	600	139.5	6.5	55	24.8	48	21.8	1.28	958	1027	1.4	93.3%
1000	600	178.4	9.8	87	39.6	77	34.8	2.44	1817	1976	2.6	92.0%
1050	600	188.4	10.8	97	44.1	86	38.8	2.81	2094	2285	3.1	91.6%
1100	600	198.5	11.8	108	48.9	95	43.0	3.21	2397	2626	3.5	91.3%
1150	600	208.7	12.8	118	53.4	104	47.0	3.66	2729	3000	4.0	91.0%
1200	600	219.1	13.9	129	58.5	113	51.5	4.14	3091	3410	4.6	90.6%
1250	600	229.5	15.1	141	63.8	124	56.1	4.67	3483	3857	5.2	90.3%
1300	600	240.0	16.3	152	69.0	134	60.7	5.24	3908	4343	5.8	90.0%
1350	600	250.7	17.5	166	75.1	146	66.1	5.85	4367	4870	6.5	89.7%
1400	600	261.4	18.8	178	80.8	157	71.1	6.51	4860	5440	7.3	89.3%
1450	600	272.3	20.1	191	86.7	168	76.3	7.22	5389	6054	8.1	89.0%
1500	600	283.3	21.5	205	92.8	180	81.6	7.98	5956	6716	9.0	88.7%

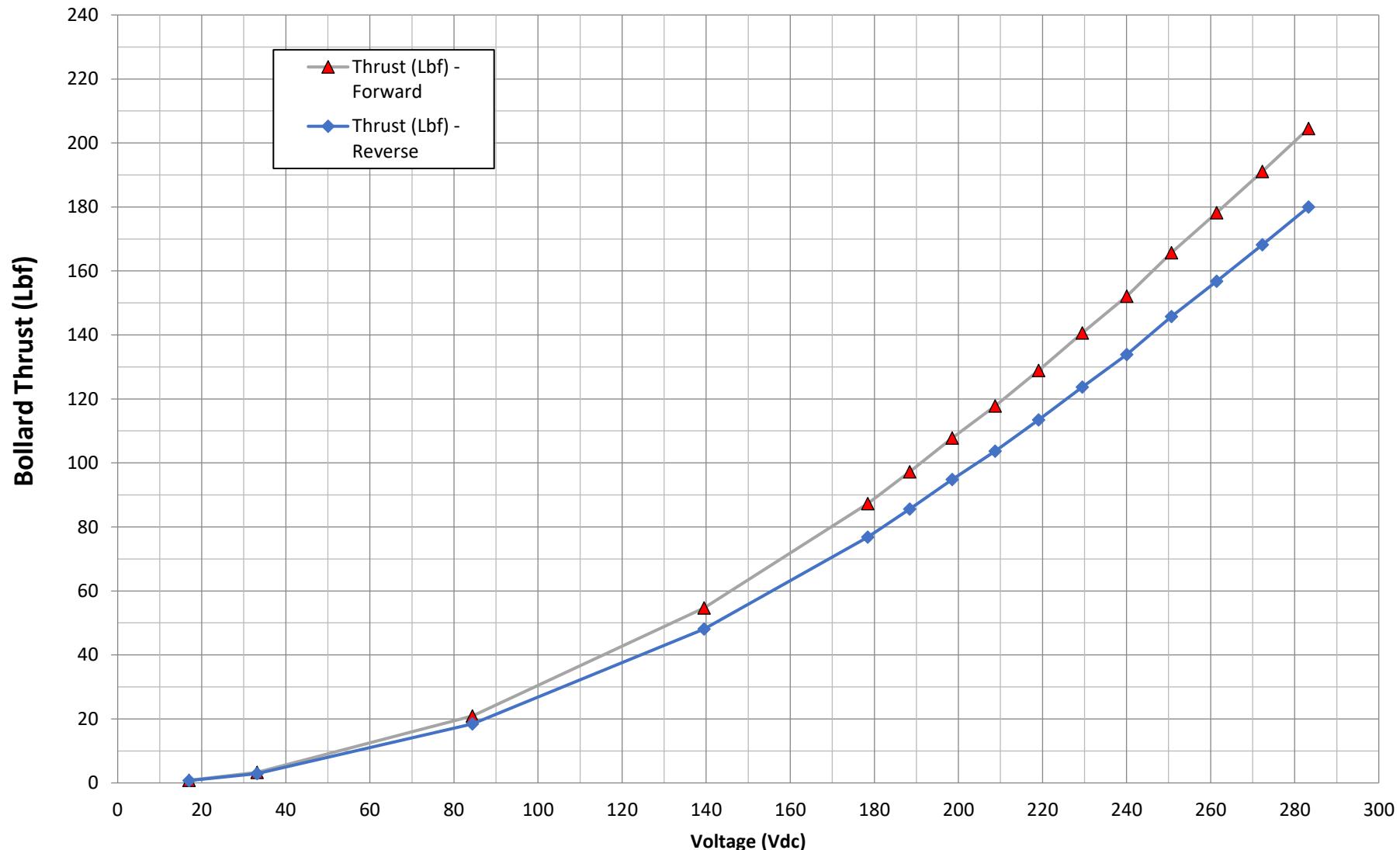
Table Information:

- 1) The Minimum Voltage column in the above table shows the minimum Voltage needed to achieve the performance at that corresponding propeller RPM/Thrust.
- 2) The Current shown represents the continuous RMS Current to the motor to achieve the Thrust at the corresponding propeller RPM.
- 3) The Shaft HP developed is a function of the propeller and increases with propeller RPM.
- 4) The maximum performance achieved will depend on the limitations of customers system Voltage and driver Current capacity.
- 5) For Thrust at Forward Vehicle Speed (Kts), anything lower than 500 RPM varies greatly with vehicle design.
- 6) The Current/RPM might need to be limited depending on customer connector spec and or system Current limitations.
- 7) Minimum Voltage to achieve full Thrust is 283 VDC.
- 8) Max Voltage should not exceed 10% of rated Voltage.



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H106-12600RH10 Hexscreen Electric Thruster Thrust (Lbf) vs Voltage (Vdc)



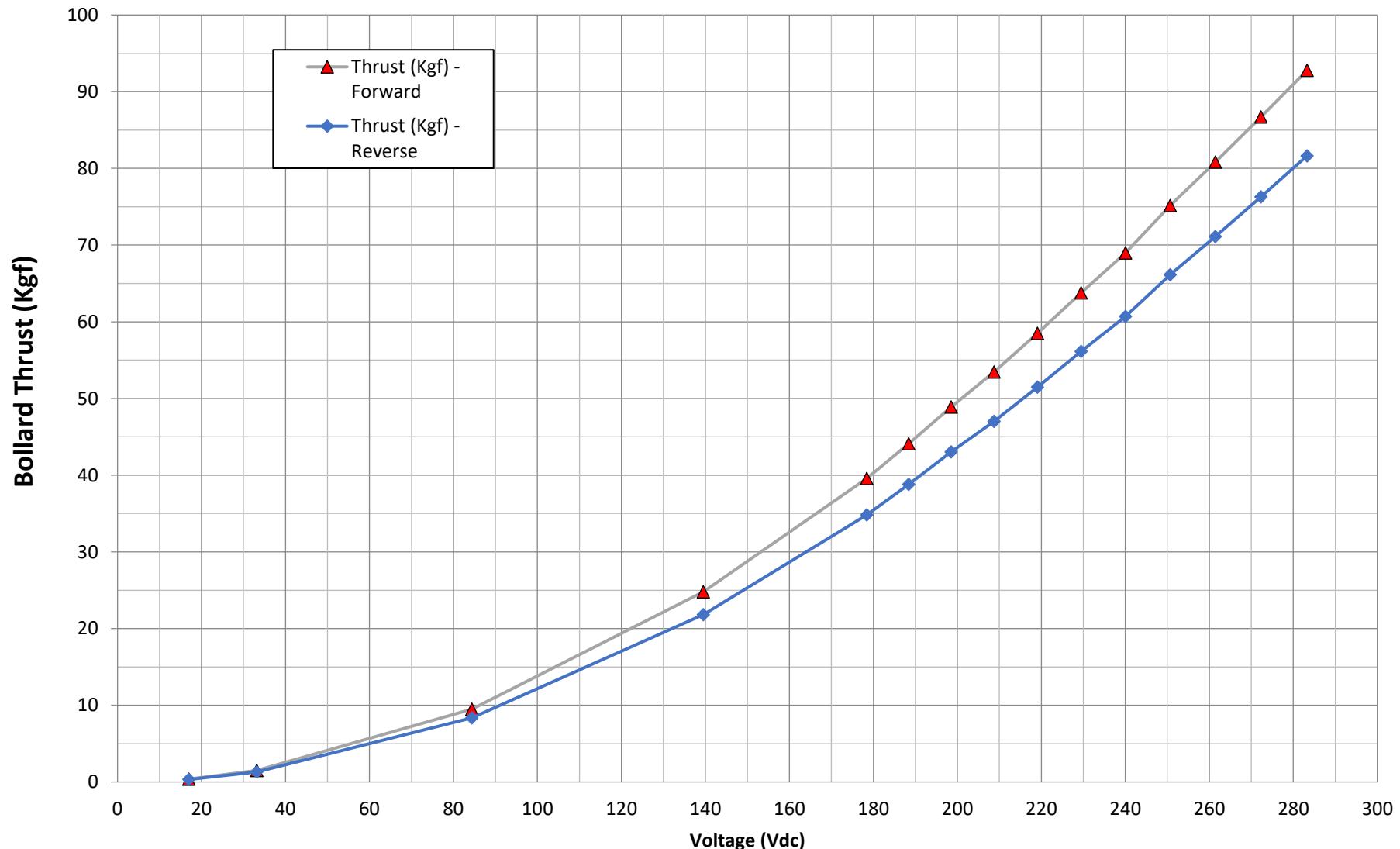
Note:

System Voltage equals 600 Vdc. Graph shows Thrust with Voltages below 600 Vdc.



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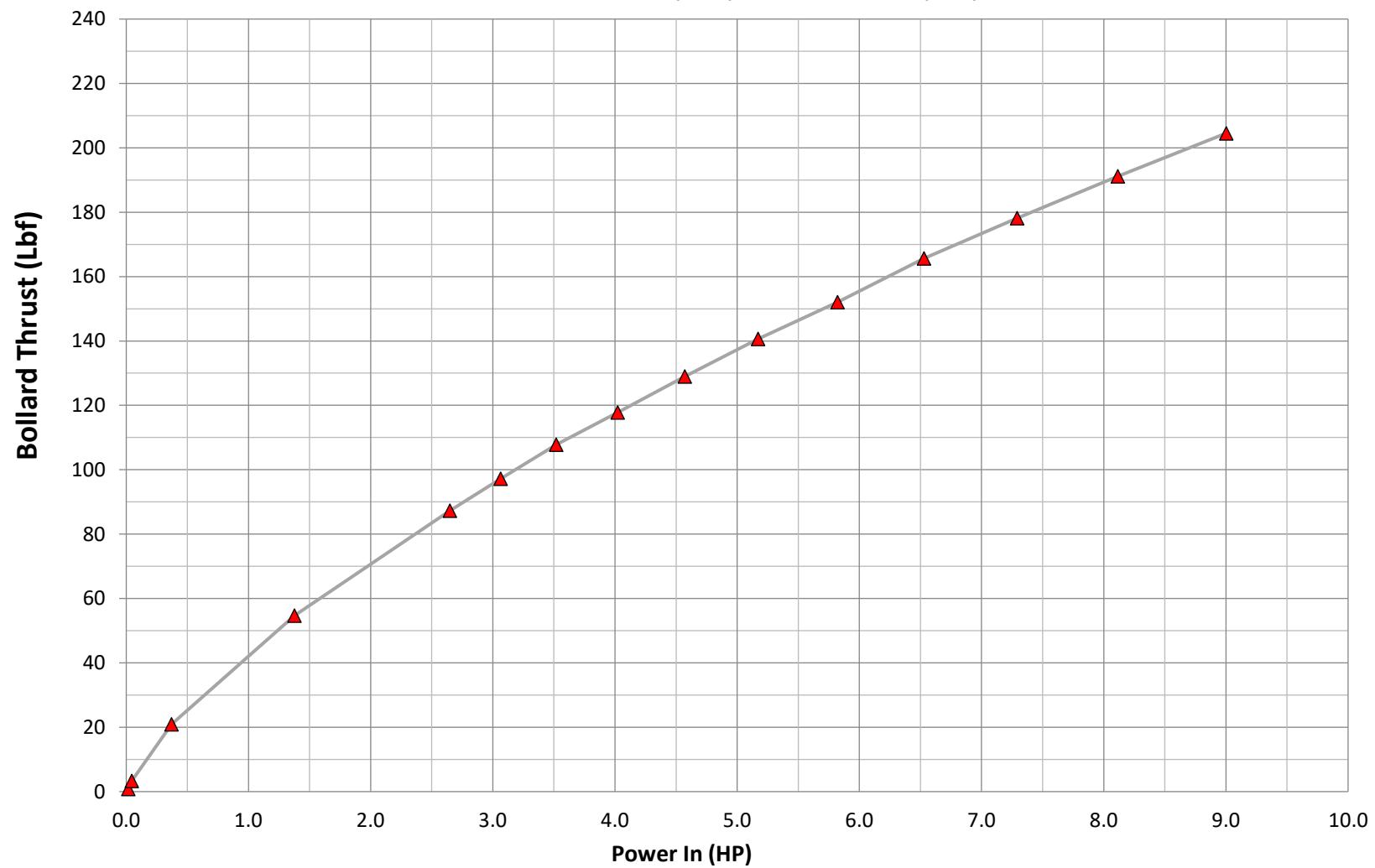
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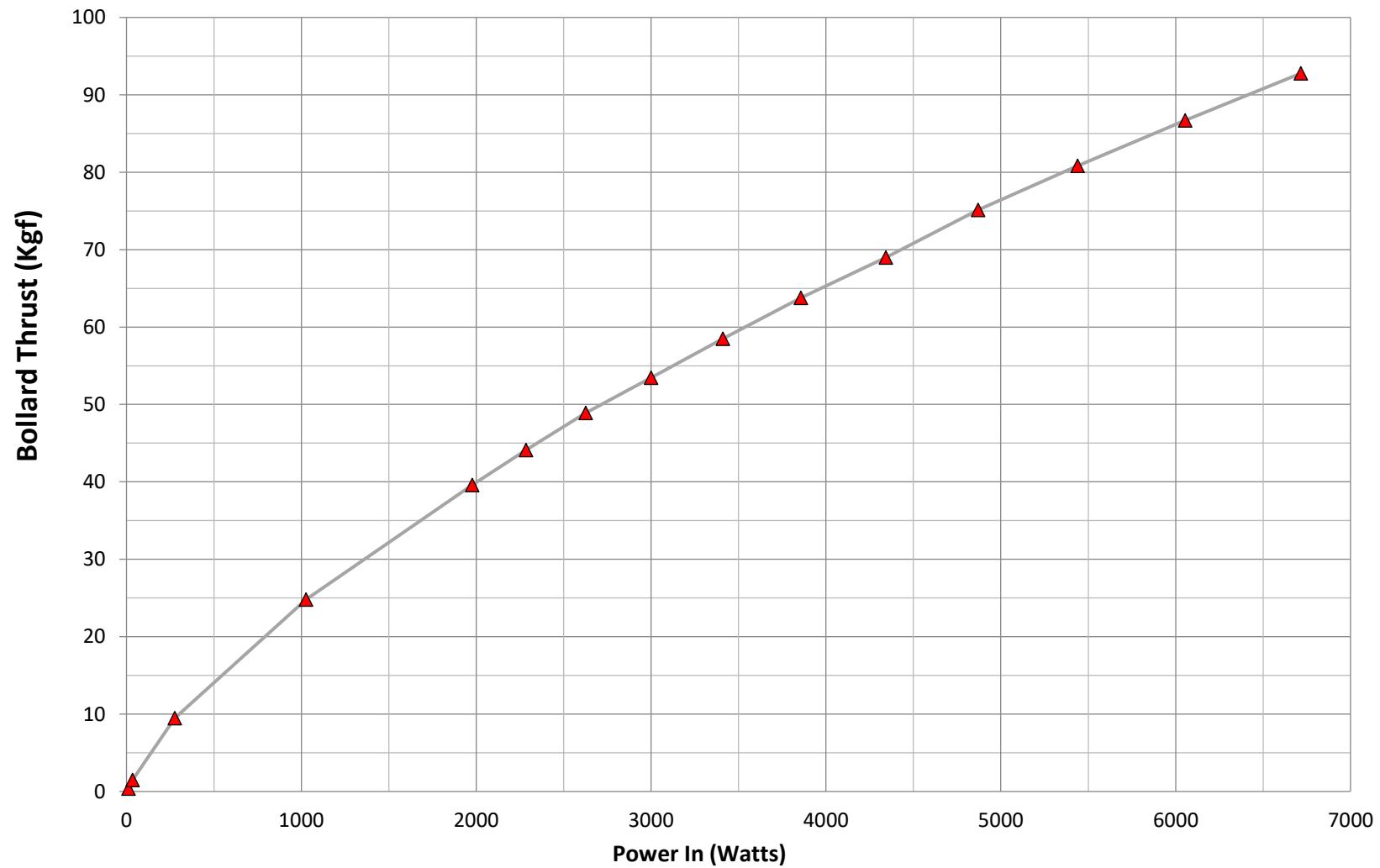
H106-12600RH10 Hexscreen Electric Thruster Thrust (Lbf) vs Power In (HP)





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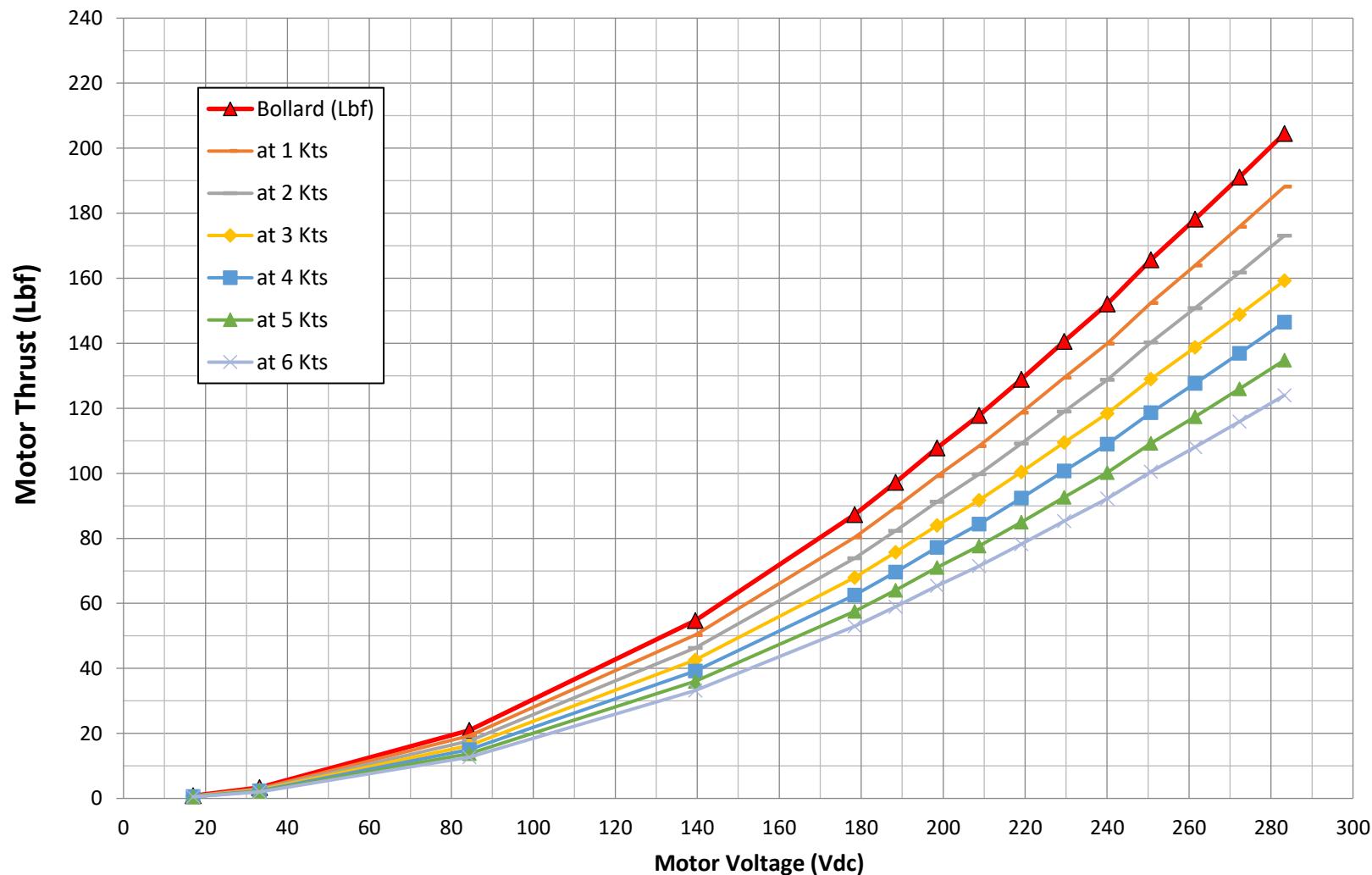
H106-12600RH10 Hexscreen Electric Thruster Thrust (Kgf) vs Power In (Watts)





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H106-12600RH10 Hexscreen Electric Thruster Thrust (Lbf) vs Voltage (Vdc)



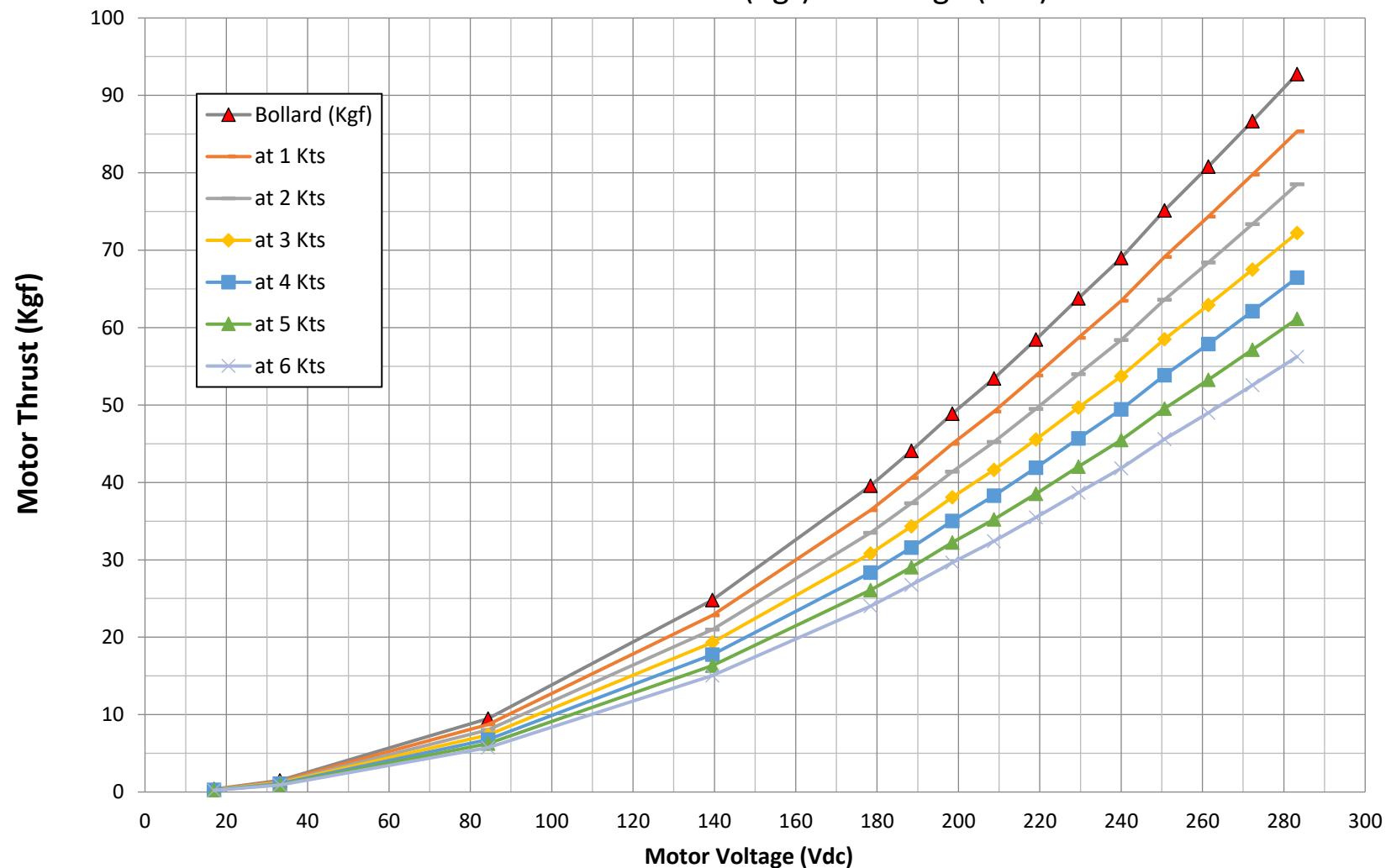
Note:

- 1) For Thrust at Forward Vehicle Speed (Kts), anything lower than 500 RPM varies greatly with vehicle design.
- 2) Thrust at forward vehicle speed from 1 Kts to 6 Kts is based on a local water speed with a very conservative vehicle wake factor.
- 3) System Voltage equals 600 Vdc. Graph shows Thrust with Voltages below 600 Vdc.



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H106-12600RH10 Hexscreen Electric Thruster Thrust (Kgf) vs Voltage (Vdc)



Note:

- 1) For Thrust at Forward Vehicle Speed (Kts), anything lower than 500 RPM varies greatly with vehicle design.
- 2) Thrust at forward vehicle speed from 1 Kts to 6 Kts is based on a local water speed with a very conservative vehicle wake factor.
- 3) System Voltage equals 600 Vdc. Graph shows Thrust with Voltages below 600 Vdc.