



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

NOMINAL VOLTAGE: 150 VDC

H106 Hexscreen Electric Thruster with 12150RH10 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	150	8.9	1.1	1	0.4	1	0.3	0.02	11	12	0.0	95.1%
200	150	17.4	1.7	3	1.5	3	1.3	0.04	33	34	0.0	96.4%
500	150	44.3	5.4	21	9.5	18	8.4	0.35	263	275	0.4	95.4%
800	150	73.1	12.3	55	24.8	48	21.9	1.28	958	1023	1.4	93.6%
1000	150	93.4	18.6	87	39.6	77	34.9	2.44	1817	1968	2.6	92.4%
1050	150	98.6	20.5	97	44.1	86	38.9	2.81	2094	2275	3.0	92.0%
1100	150	103.9	22.4	108	48.9	95	43.1	3.21	2397	2614	3.5	91.7%
1150	150	109.2	24.3	118	53.4	104	47.2	3.66	2729	2986	4.0	91.4%
1200	150	114.6	26.4	129	58.5	114	51.6	4.14	3091	3393	4.5	91.1%
1250	150	120.0	28.6	141	63.8	124	56.3	4.67	3483	3837	5.1	90.8%
1300	150	125.5	30.8	152	69.0	134	60.9	5.24	3908	4320	5.8	90.5%
1350	150	131.0	33.2	166	75.1	146	66.3	5.85	4367	4843	6.5	90.2%
1400	150	136.6	35.6	178	80.8	157	71.3	6.51	4860	5409	7.3	89.8%
1450	150	142.3	38.1	191	86.7	169	76.5	7.22	5389	6019	8.1	89.5%
1500	150	148.0	40.7	205	92.8	180	81.9	7.98	5956	6675	8.9	89.2%

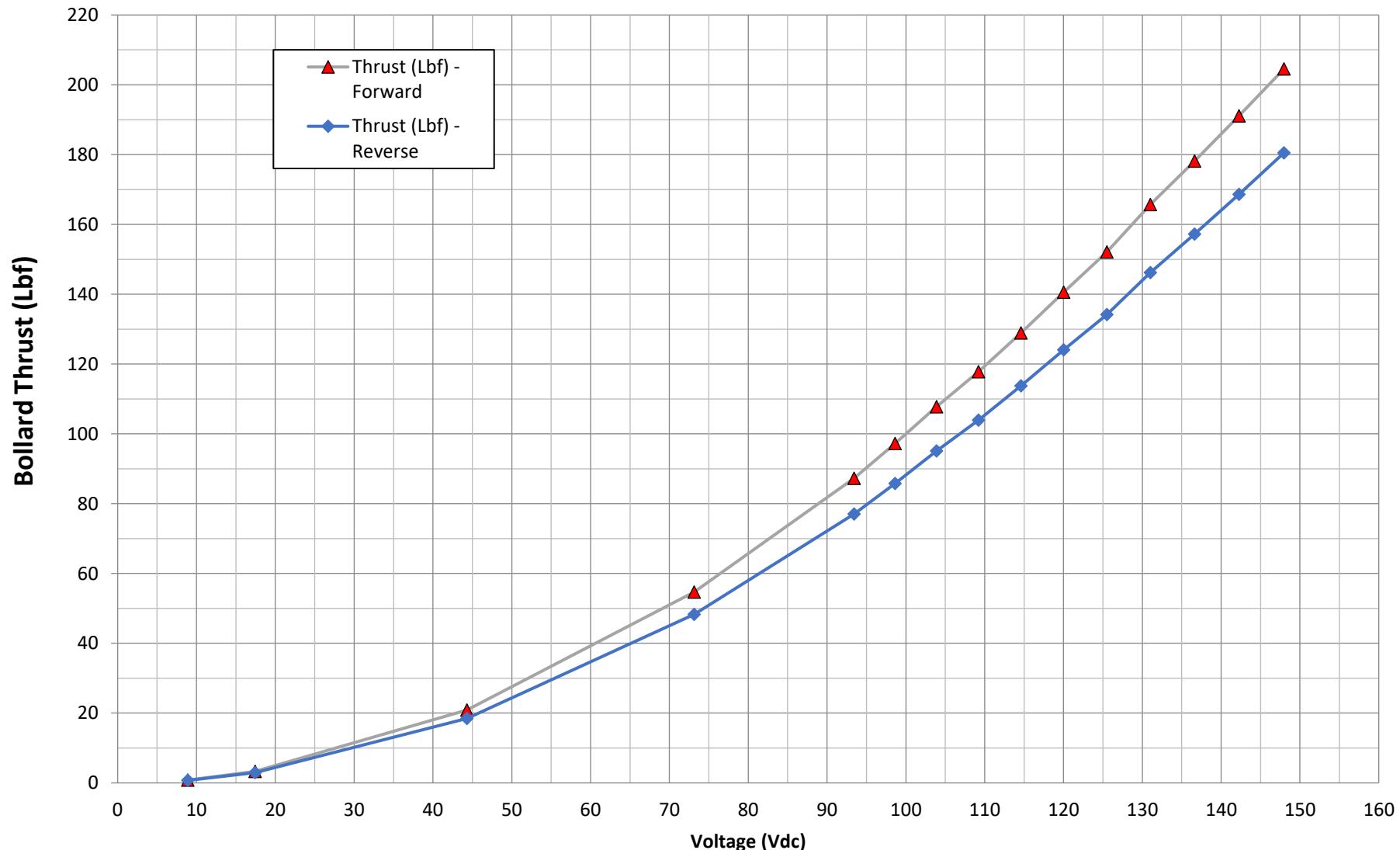
Table Information:

- 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 148 VDC.
- 8) Max Voltage should not exceed 10% of rated Voltage.



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

H106-12150RH10 Hexscreen Electric Thruster Thrust (Lbf) vs Voltage (Vdc)



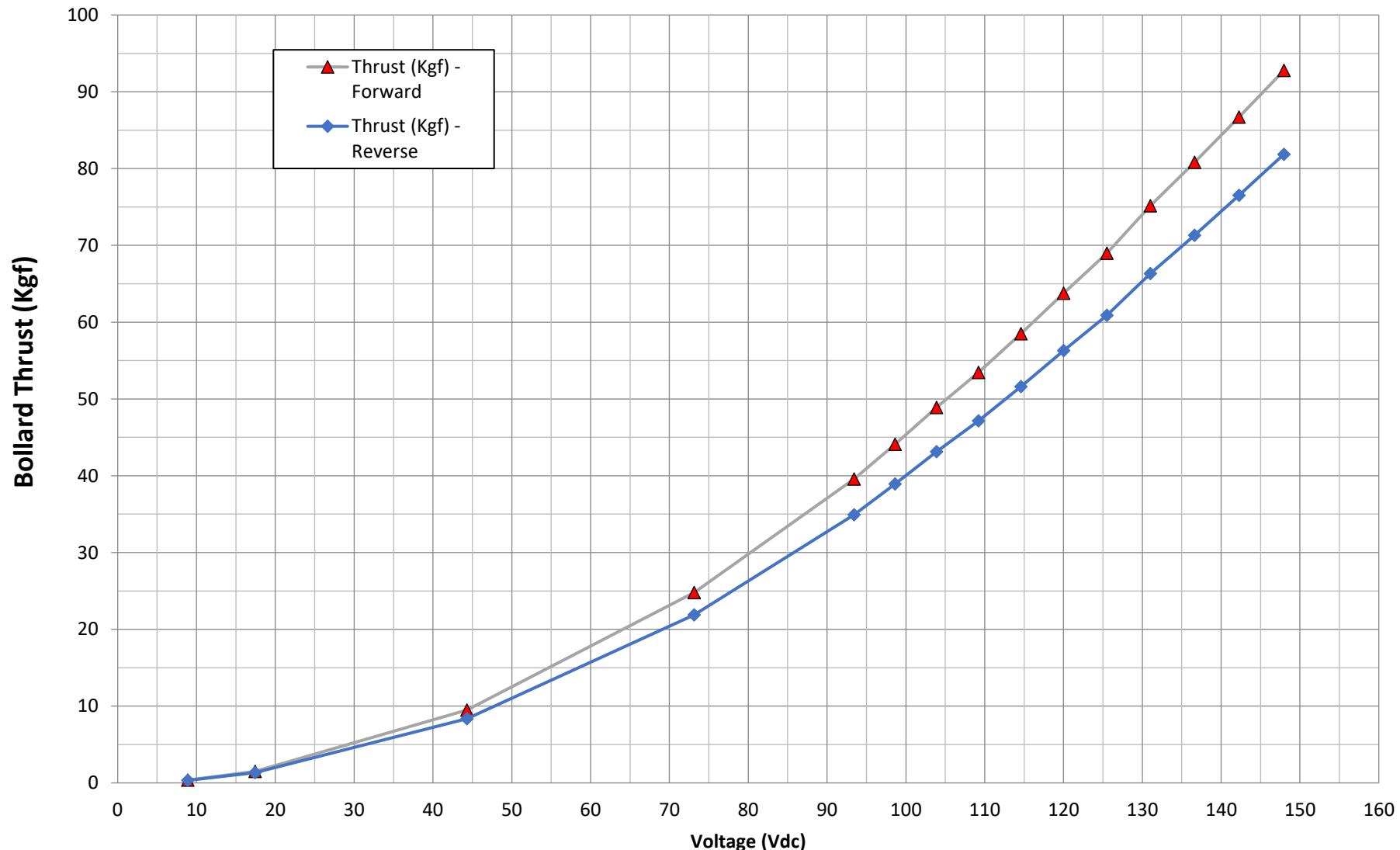
Note:

System Voltage equals 150 Vdc. Graph shows Thrust with Voltages below 150 Vdc.



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

H106-12150RH10 Hexscreen Electric Thruster Thrust (Kgf) vs Voltage (Vdc)



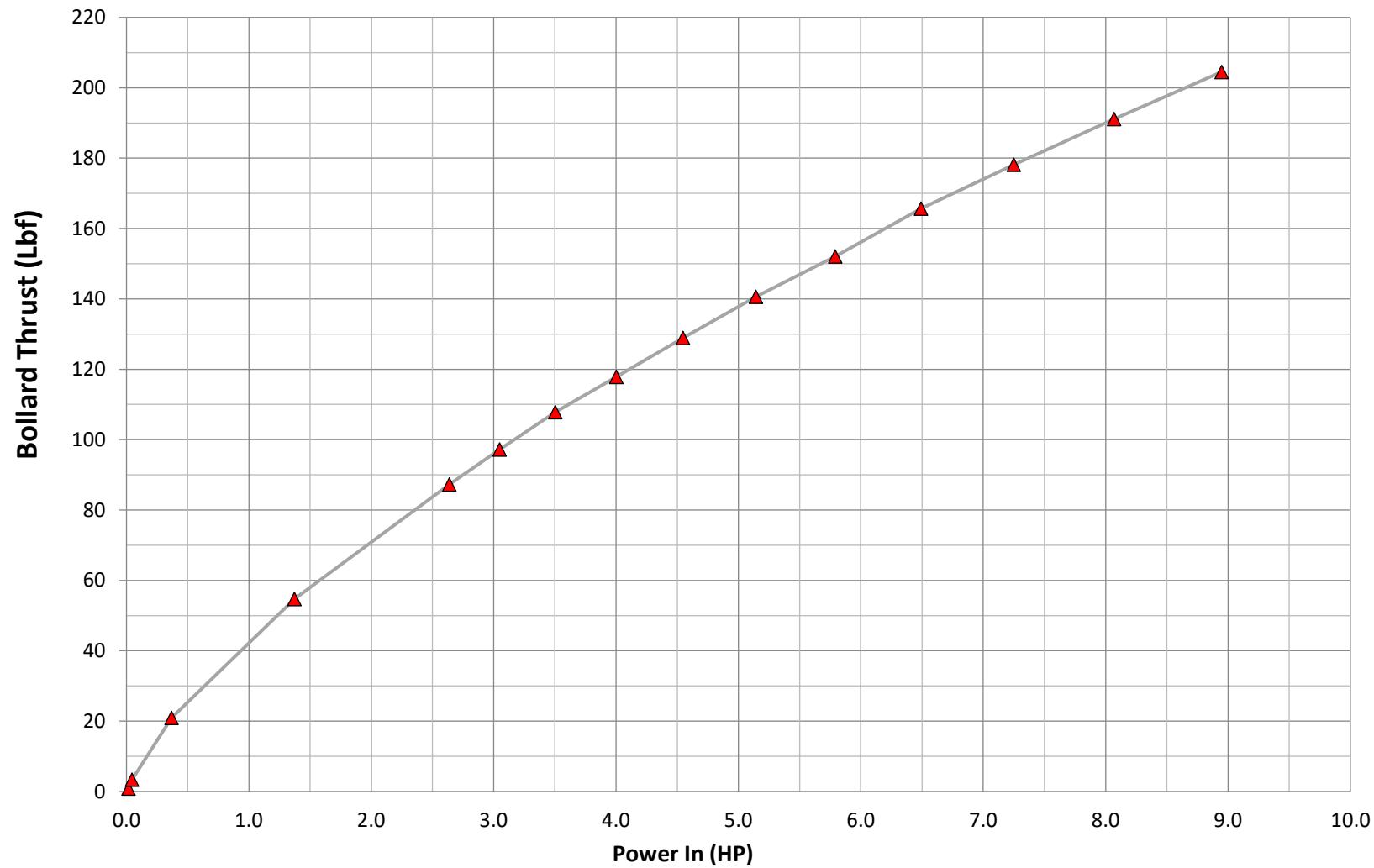
Note:

System Voltage equals 150 Vdc. Graph shows Thrust with Voltages below 150 Vdc.



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

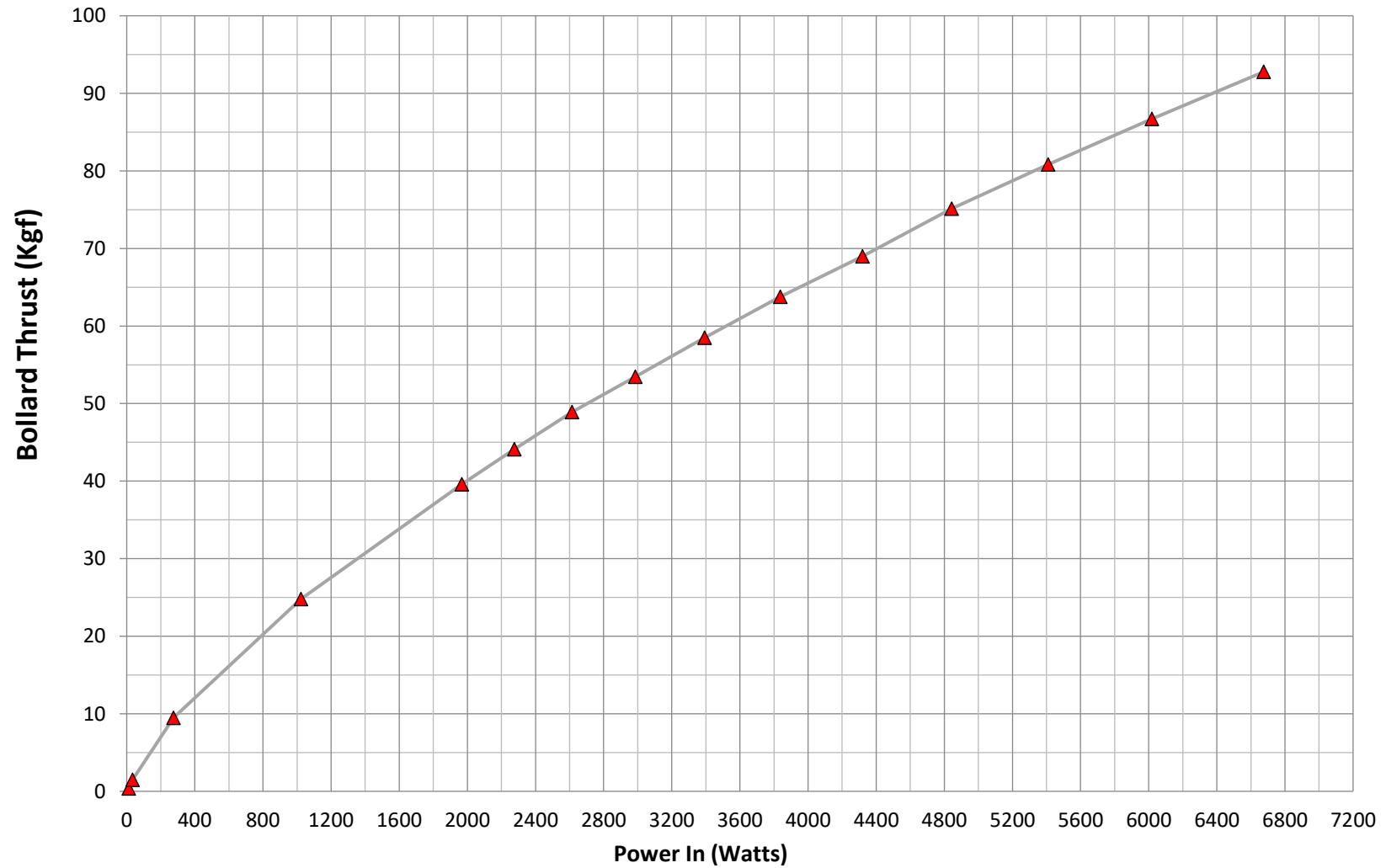
H106-12150RH10 Hexscreen Electric Thruster Thrust (Lbf) vs Power In (HP)





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

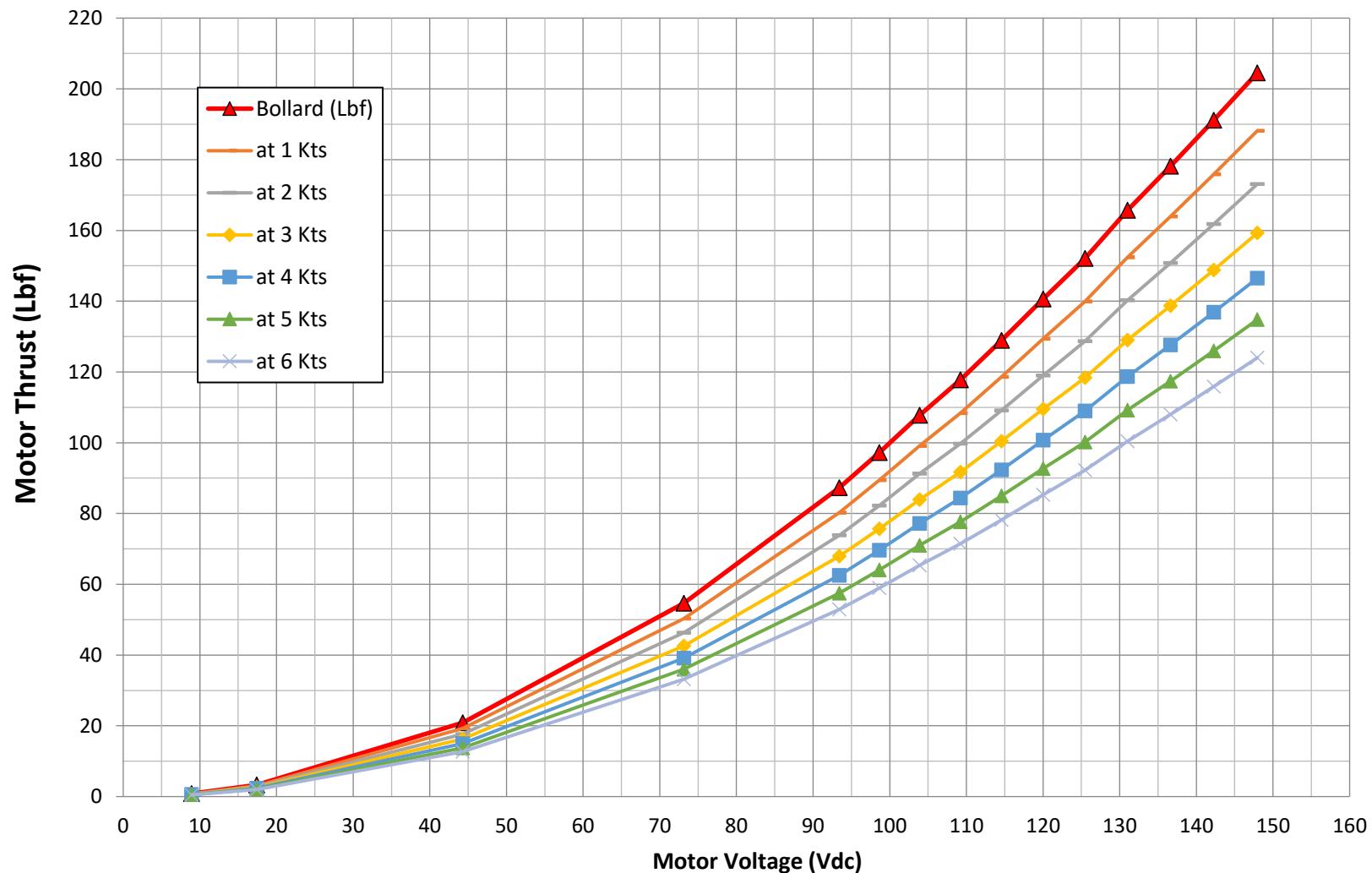
H106-12150RH10 Hexscreen Electric Thruster Thrust (Kgf) vs Power In (Watts)





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

H106-12150RH10 Hexscreen Electric Thruster Thrust (Lbf) vs Voltage (Vdc)



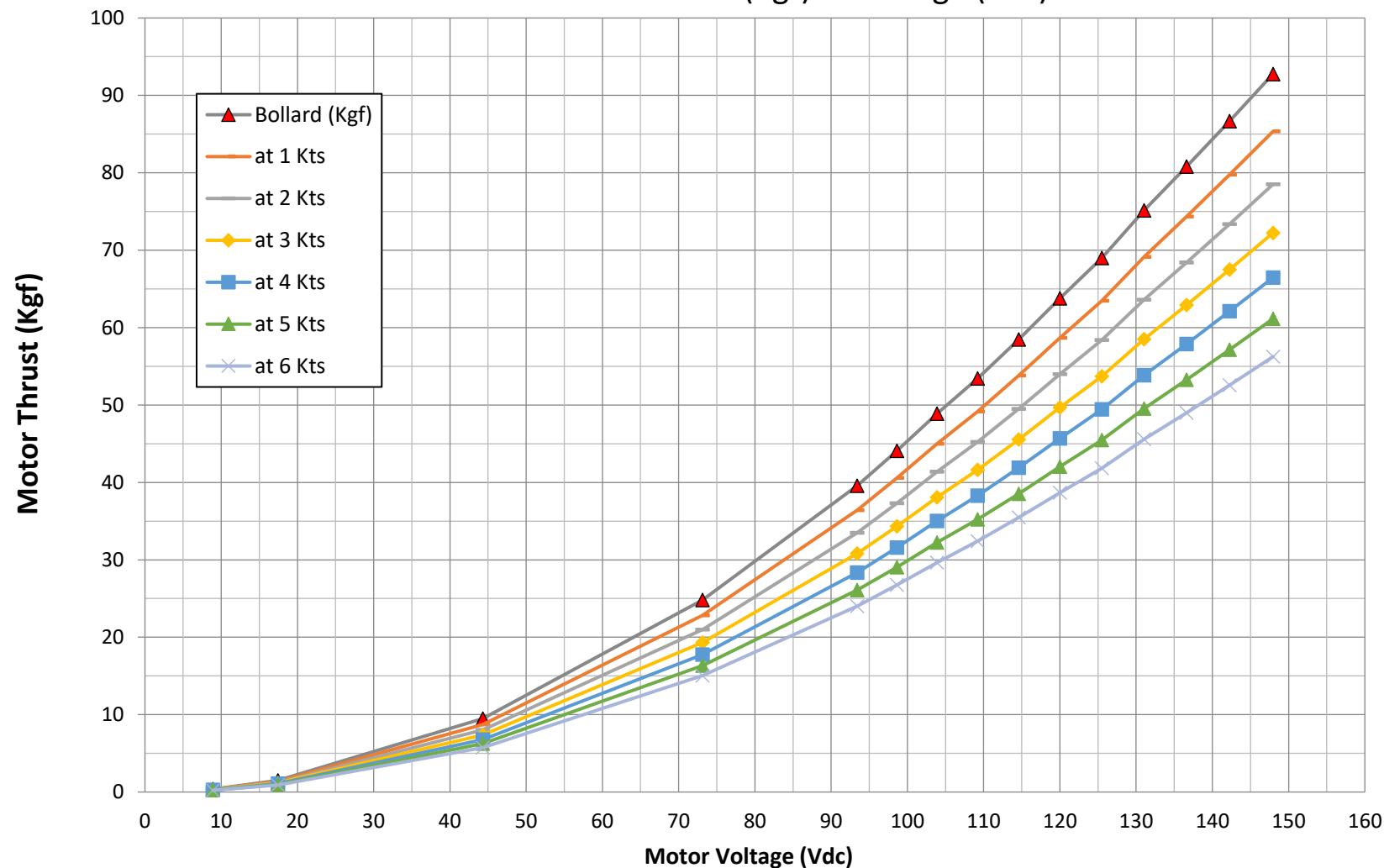
Note:

- 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 150 Vdc. Graph shows Thrust with Voltages below 150 Vdc.



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

H106-12150RH10 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 150 Vdc. Graph shows Thrust with Voltages below 150 Vdc.