INNERSPACE CORPORATION
1138 E. EDNA PLACE, COVINA, CA 91724
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NOMINAL VOLTAGE: 150 VDC

1002H Hexscreen Electric Thruster with 14150R Motor Performance Table

Speed	System Voltage	Min Voltage	Current	Torque		Bollard Thrust		Reverse Thrust		Power Shaft		Power In		Efficiency
(RPM)	(VDC)	(VDC)	(A rms)	(N-M)	(In-Lbs)	0 (Lbf)	0 (Kgf)	(Lbf)	(Kgf)	(HP)	(Watts)	(Watts)	(HP)	(Pout/Pin)
100	150	7.7	1.5	1.2	10.8	1	0.4	1	0.4	0.02	13	13	0.0	96.3%
250	150	18.6	2.1	1.7	15.0	6	2.7	5	2.4	0.06	44	45	0.1	97.9%
500	150	37.2	4.1	3.4	30.0	24	10.8	21	9.7	0.24	177	181	0.2	97.9%
800	150	60.1	8.4	6.9	61.1	61	27.5	55	25.0	0.78	579	594	0.8	97.3%
1000	150	75.8	12.3	10.2	89.9	95	43.0	86	39.0	1.43	1064	1098	1.5	96.9%
1200	150	91.7	17.2	14.1	125.0	137	62.0	124	56.1	2.38	1775	1842	2.5	96.4%
1300	150	99.7	19.9	16.4	145.0	160	72.7	145	65.9	2.99	2231	2320	3.1	96.2%
1400	150	107.8	22.9	18.8	166.5	186	84.3	168	76.4	3.70	2759	2877	3.9	95.9%
1500	150	116.0	26.0	21.4	189.7	213	96.8	193	87.7	4.51	3368	3520	4.7	95.7%
1550	150	120.2	27.7	22.8	201.9	228	103.4	207	93.7	4.96	3703	3876	5.2	95.5%
1600	150	124.3	29.4	24.2	214.4	243	110.1	220	99.8	5.44	4061	4256	5.7	95.4%
1700	150	132.6	33.0	27.2	240.8	274	124.3	248	112.7	6.49	4845	5091	6.8	95.2%
1800	150	141.0	36.9	30.4	268.7	307	139.4	279	126.3	7.68	5726	6032	8.1	94.9%
1900	150	149.5	40.9	33.7	298.3	342	155.3	310	140.8	8.99	6708	7085	9.5	94.7%

Table Information:

1) The Minimum Voltage column in the above table shows the minimum Voltage needed to achieve the performance at that corrosponding propeller RPM/Thrust.
2) The Current shown represents the continues 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 150 VDC.
8) Max Voltage should not exceed 10% of rated Voltage.

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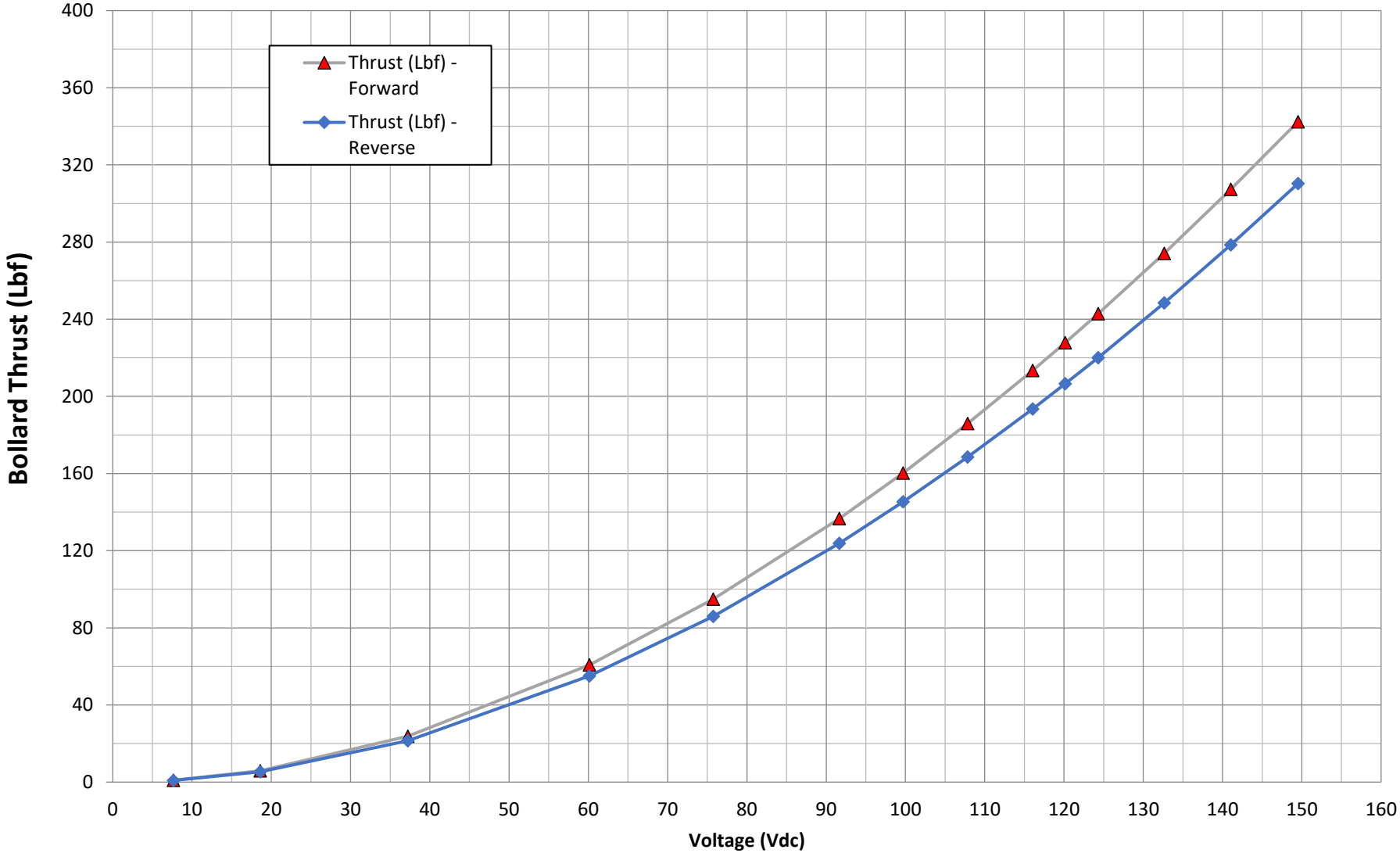
1002H-14150R Hexscreen Electric Thruster
Thrust (Lbf) vs Voltage (Vdc)



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

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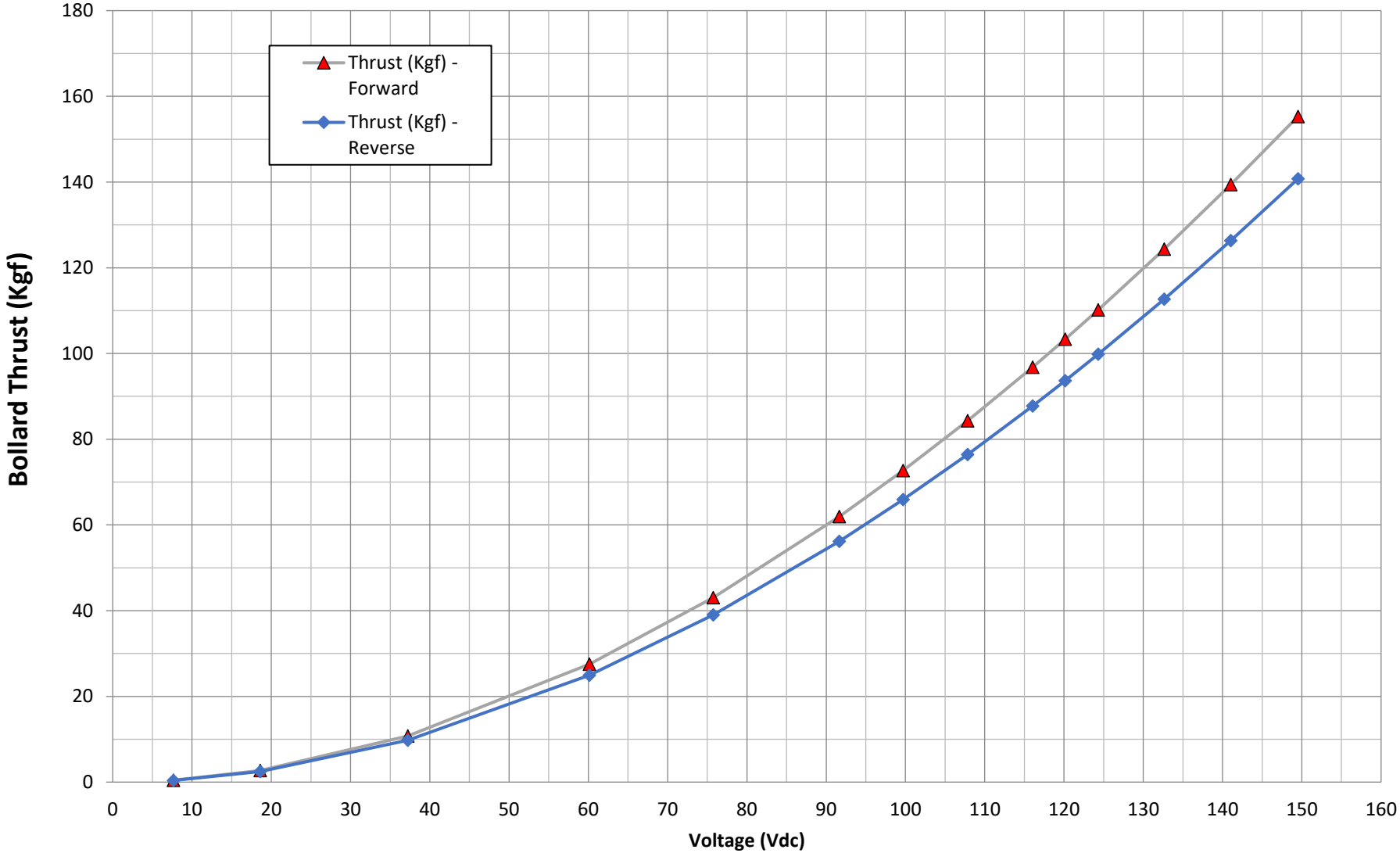
Thrust (Kgf) vs Voltage (Vdc)



Note:
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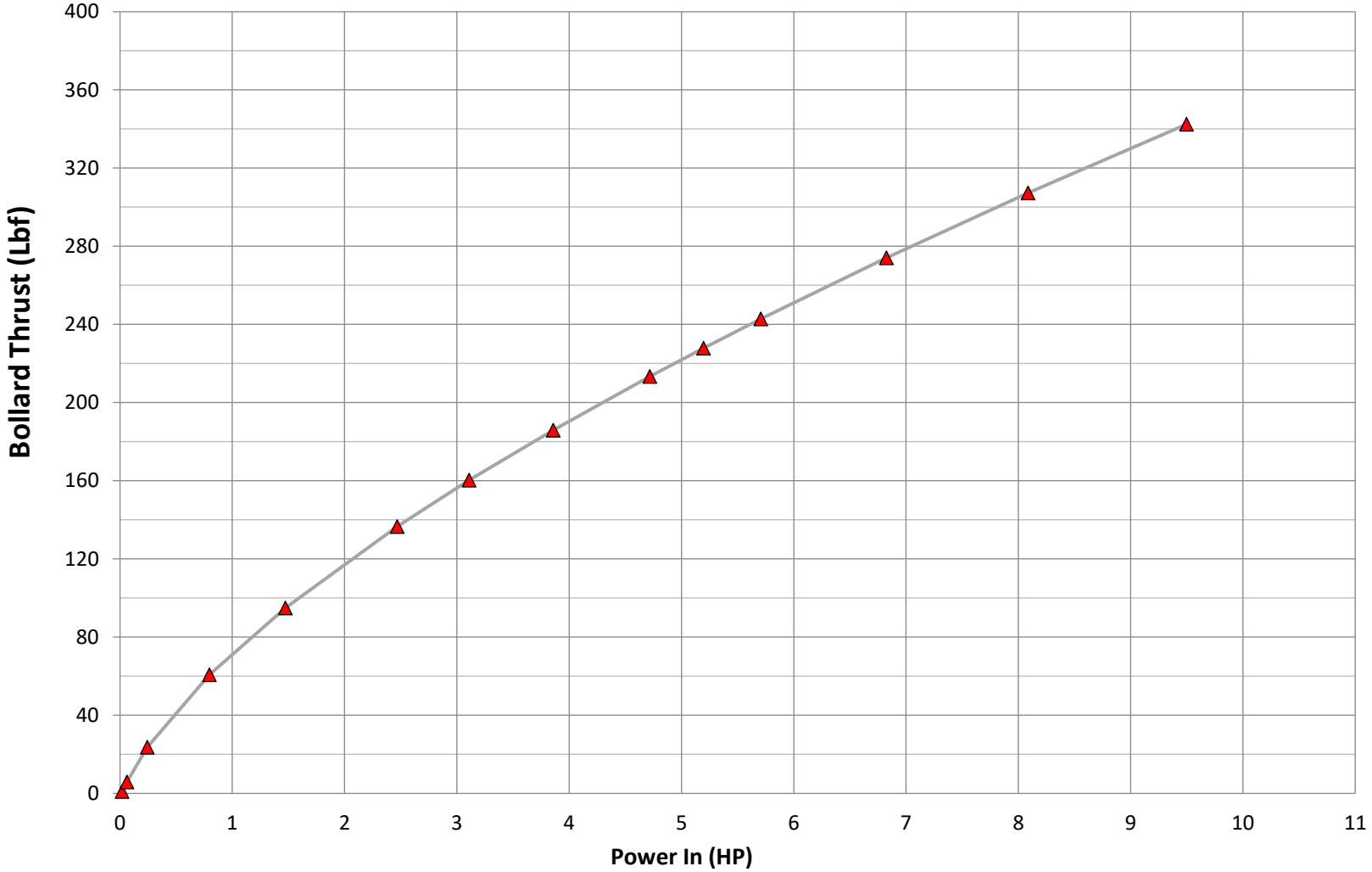
1002H-14150R Hexscreen Electric Thruster
Thrust (Lbf) vs Power In (HP)



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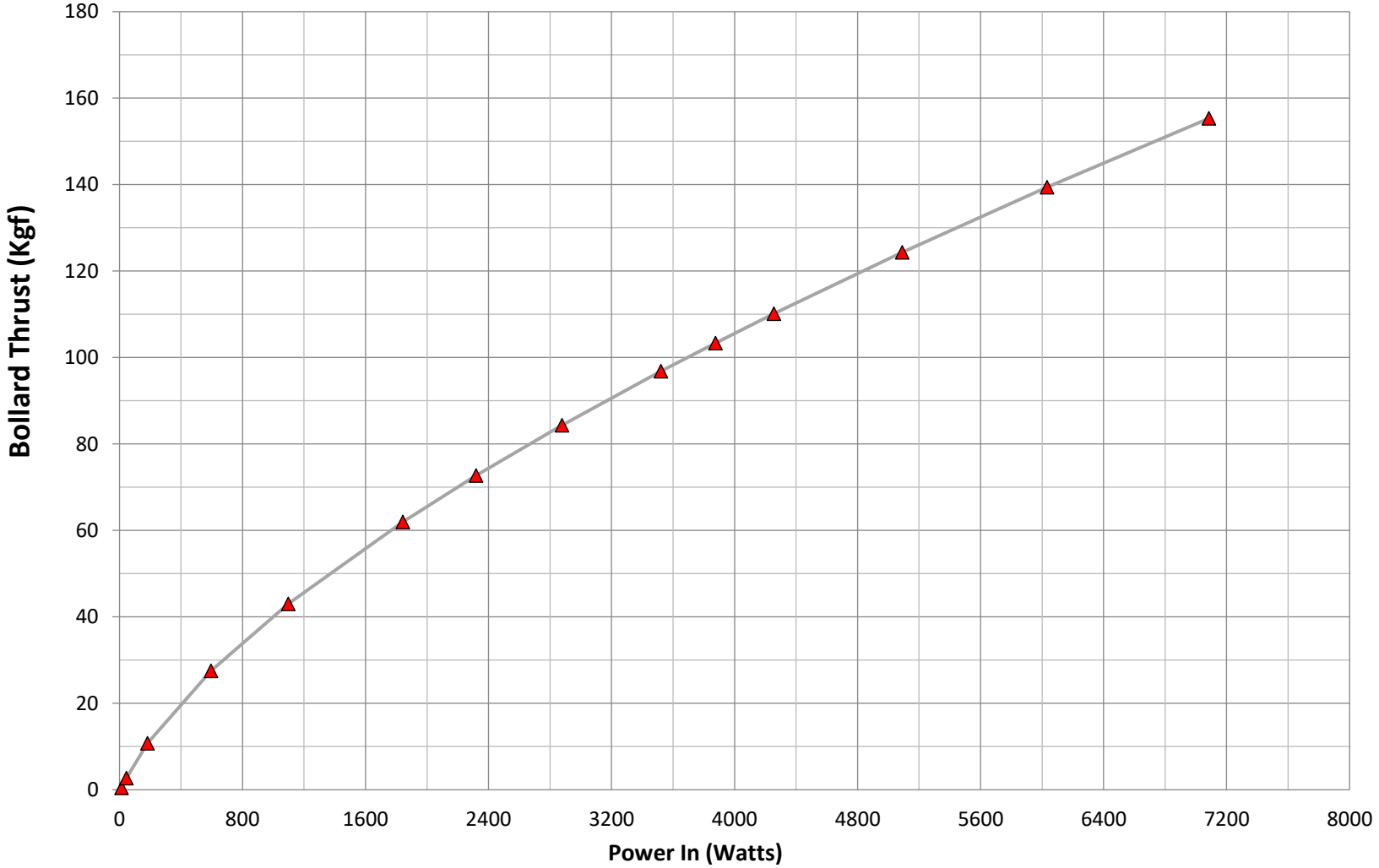
1002H-14150R Hexscreen Electric Thruster
Thrust (Kgf) vs Power In (Watts)



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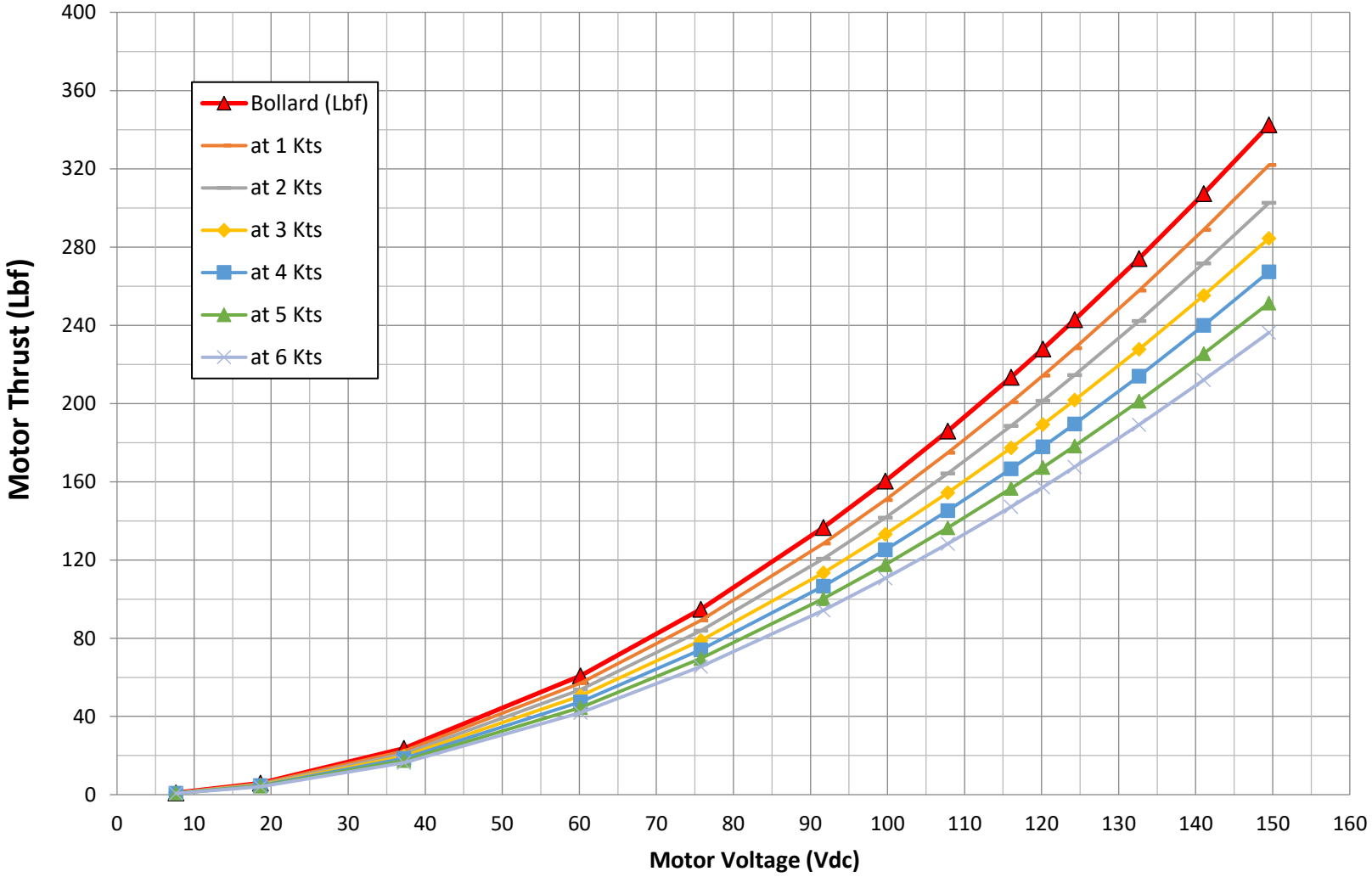
1002H-14150R Hexscreen Electric Thruster
Thrust (Lbf) vs Voltage (Vdc)



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.

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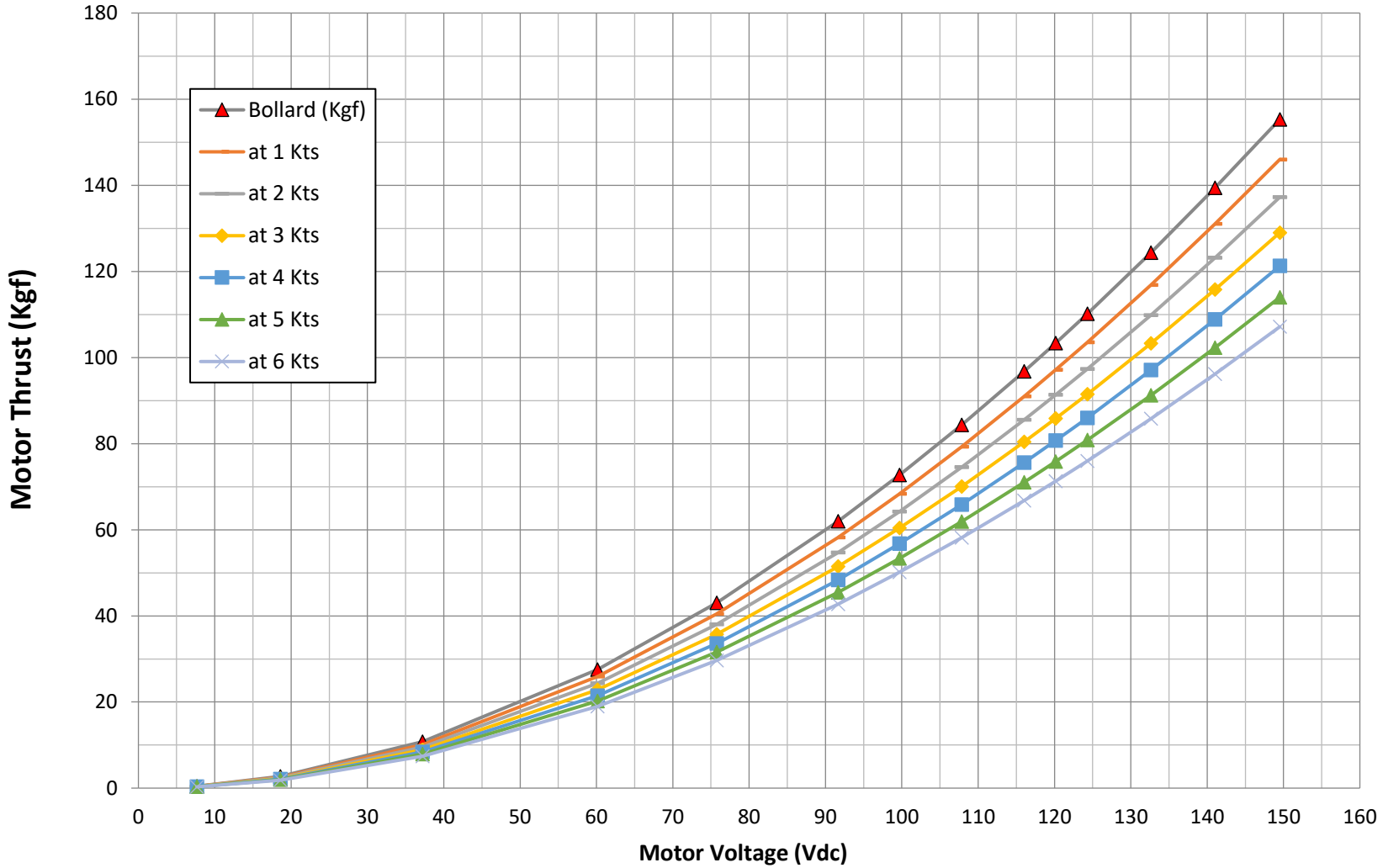
Thrust (Kgf) vs Voltage (Vdc)



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.