PRACTICAL LIFT FOR CENTRIFUGAL CONTINUED

Altitude Feet Above Sea Level	Practical Pump Lift in feet Temperature of Water in °F															
	140	145	150	155	160	165	170	175	180	185	190	195	200	205	---	---
0	3.0	4.0	5.0	6.0	7.0	8.5	10.0	11.0	12.0	13.0	14.0	15.5	17.0	18.0	---	---
500	3.5	4.6	5.8	6.8	7.8	9.3	10.8	11.6	12.5	13.6	14.8	16.1	17.5	---	---	---
1,000	4.0	5.3	6.5	7.5	8.5	10.0	11.5	12.3	13.0	14.3	15.5	16.8	18.0	---	---	---
1,500	4.5	5.9	7.3	8.3	9.3	10.8	12.3	12.9	13.5	14.9	16.3	17.4	---	---	---	---
2,000	5.0	6.5	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.5	17.0	18.0	---	---	---	---
2,500	5.8	7.1	8.5	9.5	10.5	11.5	12.5	13.6	14.8	16.1	17.5	---	---	---	---	---
3,000	6.5	7.8	9.0	10.0	11.0	12.0	13.0	14.3	15.5	16.8	18.0	---	---	---	---	---
3,500	7.3	8.4	9.5	10.5	11.5	12.5	13.5	14.9	16.3	17.4	---	---	---	---	---	---
4,000	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.5	17.0	18.0	---	---	---	---	---	---
4,500	8.5	9.5	10.5	11.5	12.5	13.6	14.8	16.1	17.5	---	---	---	---	---	---	---
5,000	9.0	10.0	11.0	12.0	13.0	14.3	15.5	16.8	18.0	---	---	---	---	---	---	---
5,500	9.5	10.5	11.5	12.5	13.5	14.9	16.3	17.4	---	---	---	---	---	---	---	---
6,000	10.0	11.0	12.0	13.0	14.0	15.5	17.0	18.0	---	---	---	---	---	---	---	---
6,500	10.5	11.5	12.5	13.5	14.5	16.0	17.5	---	---	---	---	---	---	---	---	---
7,000	11.0	12.0	13.0	14.0	15.0	16.5	18.0	---	---	---	---	---	---	---	---	---
7,500	11.5	12.5	13.5	14.5	15.5	17.0	---	---	---	---	---	---	---	---	---	---
8,000	12.0	13.0	14.0	15.0	16.0	17.5	---	---	---	---	---	---	---	---	---	---
8,500	12.5	13.5	14.5	15.5	16.5	18.0	---	---	---	---	---	---	---	---	---	---
9,000	13.0	14.0	15.0	16.0	17.0	---	---	---	---	---	---	---	---	---	---	---
9,500	13.5	14.5	15.5	16.5	17.5	---	---	---	---	---	---	---	---	---	---	---
10,000	14.0	15.0	16.0	17.0	18.0	---	---	---	---	---	---	---	---	---	---	---

PRACTICAL LIFT FOR RECIPROCATING PUMPS

Pumping Water At Various Altitudes And Temperatures

Altitude Feet Above Sea Level	Practical Pump Lift in feet Temperature of Water in °F															
	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135
0	-22.0	-21.0	-20.0	-18.5	-17.0	-16.0	-15.0	-14.0	-13.0	-12.0	-11.0	-9.5	-8.0	-7.0	-6.0	-5.0
500	-21.3	-20.3	-19.3	-17.9	-16.5	-15.5	-14.5	-13.5	-12.5	-11.4	-10.3	-8.9	-7.5	-6.5	-5.5	-4.5
1,000	-20.5	-19.5	-18.5	-17.3	-16.0	-15.0	-14.0	-13.0	-12.0	-10.8	-9.5	-8.3	-7.0	-6.0	-5.0	-4.0
1,500	-19.8	-18.8	-17.8	-16.6	-15.5	-14.5	-13.5	-12.5	-11.5	-10.1	-8.8	-7.6	-6.5	-5.5	-4.5	-3.5
2,000	-19.0	-18.0	-17.0	-16.0	-15.0	-14.0	-13.0	-12.0	-11.0	-9.5	-8.0	-7.0	-6.0	-5.0	-4.0	-3.0
2,500	-18.5	-17.5	-16.5	-15.5	-14.5	-13.4	-12.3	-11.3	-10.3	-8.9	-7.5	-6.5	-5.5	-4.4	-3.3	-2.3
3,000	-18.0	-17.0	-16.0	-15.0	-14.0	-12.8	-11.5	-10.5	-9.5	-8.3	-7.0	-6.0	-5.0	-3.8	-2.5	-1.5
3,500	-17.5	-16.5	-15.5	-14.5	-13.5	-12.1	-10.8	-9.8	-8.8	-7.6	-6.5	-5.5	-4.5	-3.1	-1.8	-0.8
4,000	-17.0	-16.0	-15.0	-14.0	-13.0	-11.5	-10.0	-9.0	-8.0	-7.0	-6.0	-5.0	-4.0	-2.5	-1.0	0.0
4,500	-16.5	-15.5	-14.5	-13.5	-12.5	-11.0	-9.5	-8.5	-7.5	-6.5	-5.5	-4.5	-3.5	-2.0	-0.5	0.5
5,000	-16.0	-15.0	-14.0	-13.0	-12.0	-10.5	-9.0	-8.0	-7.0	-6.0	-5.0	-4.0	-3.0	-1.5	0.0	1.0
5,500	-15.5	-14.5	-13.5	-12.5	-11.5	-10.0	-8.5	-7.5	-6.5	-5.5	-4.5	-3.5	-2.5	-1.0	0.5	1.5
6,000	-15.0	-14.0	-13.0	-12.0	-11.0	-9.5	-8.0	-7.0	-6.0	-5.0	-4.0	-3.0	-2.0	-0.5	1.0	2.0
6,500	-14.5	-13.5	-12.5	-11.5	-10.5	-9.0	-7.5	-6.5	-5.5	-4.5	-3.5	-2.5	-1.5	0.0	1.5	2.5
7,000	-14.0	-13.0	-12.0	-11.0	-10.0	-8.5	-7.0	-6.0	-5.0	-4.0	-3.0	-2.0	-1.0	0.5	2.0	3.0
7,500	-13.5	-12.5	-11.5	-10.5	-9.5	-8.0	-6.5	-5.5	-4.5	-3.5	-2.5	-1.5	-0.5	1.0	2.5	3.5
8,000	-13.0	-12.0	-11.0	-10.0	-9.0	-7.5	-6.0	-5.0	-4.0	-3.0	-2.0	-1.0	0.0	1.5	3.0	4.0
8,500	-12.5	-11.5	-10.5	-9.5	-8.5	-7.0	-5.5	-4.5	-3.5	-2.5	-1.5	-0.5	0.5	1.9	3.3	4.4
9,000	-12.0	-11.0	-10.0	-9.0	-8.0	-6.5	-5.0	-4.0	-3.0	-2.0	-1.0	0.0	1.0	2.3	3.5	4.8
9,500	-11.5	-10.5	-9.5	-8.5	-7.5	-6.0	-4.5	-3.5	-2.5	-1.5	-0.5	0.5	1.5	2.6	3.8	5.1
10,000	-11.0	-10.0	-9.0	-8.0	-7.0	-5.5	-4.0	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.5
	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	
0	-4.0	-3.0	-2.0	-1.0	0.0	1.5	3.0	4.0	5.0	6.0	7.0	8.5	10.0	11.0	12.0	---
500	-3.5	-2.4	-1.3	-0.3	0.8	2.3	3.8	4.6	5.5	6.6	7.8	9.1	10.5	11.6	12.8	---
1,000	-3.0	-1.8	-0.5	0.5	1.5	3.0	4.5	5.3	6.0	7.3	8.5	9.8	11.0	12.3	13.5	---
1,500	-2.5	-1.1	0.3	1.3	2.3	3.8	5.3	5.9	6.5	7.9	9.3	10.4	11.5	12.9	14.3	---
2,000	-2.0	-0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.5	10.0	11.0	12.0	13.5	15.0	---
2,500	-1.3	0.1	1.5	2.5	3.5	4.5	5.5	6.6	7.8	9.1	10.5	11.5	12.5	---	---	---
3,000	-0.5	0.8	2.0	3.0	4.0	5.0	6.0	7.3	8.5	9.8	11.0	12.0	13.0	---	---	---
3,500	0.3	1.4	2.5	3.5	4.5	5.5	6.5	7.9	9.3	10.4	11.5	12.5	13.5	---	---	---
4,000	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.5	10.0	11.0	12.0	13.0	14.0	---	---	---
4,500	1.5	2.5	3.5	4.5	5.5	6.6	7.8	9.1	10.5	11.5	12.5	13.5	14.5	---	---	---
5,000	2.0	3.0	4.0	5.0	6.0	7.3	8.5	9.8	11.0	12.0	13.0	14.0	15.0	---	---	---
5,500	2.5	3.5	4.5	5.5	6.5	7.9	9.3	10.4	11.5	12.5	13.5	14.5	15.5	---	---	---
6,000	3.0	4.0	5.0	6.0	7.0	8.5	10.0	11.0	12.0	13.0	14.0	15.0	16.0	---	---	---
6,500	3.5	4.5	5.5	6.5	7.5	9.0	10.5	11.5	12.5	13.5	14.5	---	---	---	---	---
7,000	4.0	5.0	6.0	7.0	8.0	9.5	11.0	12.0	13.0	14.0	15.0	---	---	---	---	---
7,500	4.5	5.5	6.5	7.5	8.5	10.0	11.5	12.5	13.5	14.5	15.5	---	---	---	---	---
8,000	5.0	6.0	7.0	8.0	9.0	10.5	12.0	13.0	14.0	15.0	16.0	---	---	---	---	---
8,500	5.5	6.5	7.5	8.5	9.5	11.0	12.5	13.5	14.5	15.5	16.5	---	---	---	---	---
9,000	6.0	7.0	8.0	9.0	10.0	11.5	13.0	14.0	15.0	16.0	17.0	---	---	---	---	---
9,500	6.5	7.5	8.5	9.5	10.5	12.0	13.5	14.5	15.5	16.5	17.5	---	---	---	---	---
10,000	7.0	8.0	9.0	10.0	11.0	12.5	14.0	15.0	16.0	17.0	18.0	---	---	---	---	---