Standard Horsepower Chart

The Pumps with Nine Lives

Electric brake horsepower formula:

$$\text{Electric Brake Horsepower Required} = \frac{\text{GPM} \times \text{PSI}}{1460} \quad \text{(Standard 85\% Mech. Efficiency)}$$

Electric Horsepower at Selected Flows and Pressures for Triplex High Pressure Piston and Plunger Pumps

		PRESSURE PSI (bar)																		
FLOW		600	700	800	1000	1200	1500	1600	1800	2000	2200	2500	2700	3000	3200	3500	4000	5000	6000	7000
gpm	lpm	(45)	(50)	(55)	(70)	(85)	(105)	(110)	(125)	(140)	(155)	(175)	(190)	(210)	(220)	(245)	(275)	(345)	(415)	(485)
.30	(1.1)	.12	.14	.16	.20	.24	.30	.32	.36	.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
.50	(1.9)	.21	.24	.28	.34	.41	.51	.55	.62	.68	.75	.85	.92	1.0	1.1	1.2	N/A	N/A	N/A	N/A
1.0	(3.8)	.41	.48	.56	.69	.82	1.0	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.2	2.4	2.7	N/A	N/A	N/A
1.5	(5.7)	.61	.71	8.2	1.03	1.23	1.54	1.64	1.84	2.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.0	(7.6)	.82	.96	1.1	1.4	1.6	2.0	2.2	2.5	2.7	3.0	3.4	3.7	4.1	4.4	4.8	5.5	N/A	N/A	N/A
2.2	(8.3)	.90	1.0	1.2	1.5	1.8	2.3	2.4	2.7	3.0	3.3	3.8	4.1	4.5	4.8	5.3	6.0	N/A	N/A	N/A
2.3	(8.7)	.95	1.1	1.3	1.6	1.9	2.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.4	(9.0)	.99	1.15	1.32	1.64	2.0	2.5	2.6	3.0	3.3	3.6	4.0	4.4	4.9	5.3	5.8	6.6	N/A	N/A	N/A
2.5	(9.5)	1.0	1.2	1.4	1.7	2.1	2.6	2.7	3.1	3.4	3.8	4.3	4.6	5.1	5.5	6.0	6.8	N/A	N/A	N/A
2.7	(10.2)	1.1	1.3	1.5	1.8	2.2	2.8	3.0	3.3	3.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.85	(10.8)	1.2	1.36	1.56	2.0	2.3	2.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

		PRESSURE PSI (bar)																		
FLOW		600	700	800	1000	1200	1500	1600	1800	2000	2200	2500	2700	3000	3200	3500	4000	5000	6000	7000
GPM	(l/m)	(45)	(50)	(55)	(70)	(85)	(105)	(110)	(125)	(140)	(155)	(175)	(190)	(210)	(220)	(245)	(275)	(345)	(415)	(485)
3.0	(11.4)	1.23	1.4	1.6	2.05	2.5	3.1	3.3	3.7	4.1	4.5	5.2	5.5	6.2	6.6	7.2	8.2	10.3	N/A	N/A
3.1	(11.7)	1.27	1.48	1.69	2.12	2.55	3.2	3.4	3.8	4.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3.2	(12.1)	1.3	1.5	1.75	2.2	2.6	3.3	3.5	3.9	4.4	4.8	5.5	5.9	6.6	7.0	7.7	N/A	N/A	N/A	N/A
3.5	(13.2)	1.4	1.7	1.9	2.4	2.9	3.6	3.8	4.3	4.8	5.3	6.0	6.5	7.2	7.7	8.4	9.6	12.0	N/A	N/A
3.6	(13.6)	1.5	1.7	2.0	2.5	3.0	3.7	3.9	4.4	4.9	5.4	6.2	6.7	7.4	7.9	8.6	9.9	12.4	N/A	N/A
3.8	(14.4)	1.56	1.8	2.1	2.6	3.1	3.9	4.2	4.7	5.2	5.7	6.5	7.0	7.8	8.3	9.1	N/A	N/A	N/A	N/A
4.0	(15.0)	1.6	1.9	2.2	2.7	3.3	4.1	4.4	4.9	5.5	6.0	6.9	7.4	8.2	8.8	9.6	11.0	13.7	N/A	N/A
4.2	(15.9)	1.7	2.0	2.3	2.9	3.5	4.3	4.6	5.2	5.8	6.3	7.2	7.8	8.6	9.2	10.1	11.5	14.4	N/A	N/A
4.5	(17)	1.8	2.2	2.5	3.1	3.7	4.6	4.9	5.6	6.2	6.8	7.7	8.3	9.3	9.9	10.8	12.3	15.4	N/A	N/A
4.8	(18)	1.9	2.3	2.6	3.3	3.9	4.9	5.3	5.9	6.6	7.2	8.2	8.9	9.9	N/A	N/A	N/A	N/A	N/A	N/A

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		PRESSURE PSI (bar)																		
FLOW		600	700	800	1000	1200	1500	1600	1800	2000	2200	2500	2700	3000	3200	3500	4000	5000	6000	7000
GPM	(l/m)	(45)	(50)	(55)	(70)	(85)	(105)	(110)	(125)	(140)	(155)	(175)	(190)	(210)	(220)	(245)	(275)	(345)	(415)	(485)
5.0	(19)	2.0	2.4	2.7	3.4	4.1	5.1	5.5	6.2	6.9	7.5	8.6	9.2	10.3	11.0	12.0	13.7	17.1	N/A	N/A
5.5	(21)	2.3	2.6	3.0	3.8	4.5	5.7	6.0	6.8	7.5	8.3	9.4	10.2	11.3	12.1	13.2	15.1	18.9	N/A	N/A
6.0	(23)	2.5	2.9	3.3	4.1	4.9	6.2	6.6	7.4	8.2	9.0	10.3	11.1	12.4	13.2	14.4	16.4	20.6	N/A	N/A
6.7	(25)	2.8	3.2	3.7	4.6	5.5	6.9	7.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7.0	(27)	2.9	3.4	3.8	4.8	5.8	7.2	7.7	8.7	9.6	10.6	12.0	12.9	14.4	15.4	16.8	19.2	24.0	N/A	N/A
8.0	(30)	3.3	3.8	4.4	5.5	6.6	8.2	8.8	9.9	11.0	12.1	13.7	14.8	16.5	17.6	19.2	22.0	27.4	N/A	N/A
9.0	(34)	3.7	4.3	4.9	6.2	7.4	9.3	9.9	11.1	12.4	13.6	15.4	16.6	18.5	19.8	21.6	24.7	30.8	37.0	43.1
10.0	(38)	4.1	4.8	5.5	6.9	8.2	10.3	11.0	12.4	13.7	15.1	17.2	18.5	20.6	22.0	24.0	27.4	34.2	41.1	47.9
11.0	(42)	4.5	5.3	6.0	7.5	9.0	11.3	12.0	13.6	15.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	45.2	52.7
12.0	(45)	4.9	5.8	6.6	8.2	9.9	12.4	13.2	14.8	16.5	18.1	20.6	22.2	24.7	26.3	28.8	32.9	41.1	49.3	57.5

		PRESSURE PSI (bar)																		
FLOW		600	700	800	1000	1200	1500	1600	1800	2000	2200	2500	2700	3000	3200	3500	4000	5000	6000	7000
GPM	(l/m)	(45)	(50)	(55)	(70)	(85)	(105)	(110)	(125)	(140)	(155)	(175)	(190)	(210)	(220)	(245)	(275)	(345)	(415)	(485)
13.0	(49)	5.3	6.2	7.1	8.9	10.7	13.4	14.2	16.0	17.8	19.6	22.3	24.0	26.7	N/A	N/A	N/A	N/A	53.4	62.3
14.0	(53)	5.8	6.7	7.7	9.6	11.5	14.4	15.3	17.3	19.2	21.1	24.0	25.9	28.8	30.7	33.6	38.4	48.0	N/A	N/A
15.0	(57)	6.2	7.2	8.2	10.3	12.4	15.4	16.4	18.5	20.6	22.6	25.7	27.7	30.8	32.9	36.0	41.1	51.5	61.6	71.9
15.6	(59)	6.4	7.5	8.5	10.7	12.8	16.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18.0	(68)	7.4	8.6	9.9	12.3	14.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20.0	(76)	8.2	9.6	11.0	13.7	16.5	20.6	21.9	24.7	27.4	30.1	34.2	37.0	41.1	43.8	N/A	N/A	N/A	N/A	N/A
21.0	(80)	8.6	10.1	11.5	14.4	17.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
23.0	(87)	9.5	11.0	12.6	15.8	18.9	23.6	25.2	28.4	31.6	34.7	39.4	42.5	47.3	N/A	N/A	N/A	N/A	N/A	N/A
25.0	(95)	10.3	12.0	13.7	17.2	20.6	25.7	27.4	30.8	34.3	37.7	42.9	46.2	51.4	N/A	N/A	N/A	N/A	N/A	N/A
36.0	(136)	14.8	17.3	19.8	24.7	29.6	37.0	39.4	44.4	49.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

		PRESSURE PSI (bar)																		
FLOW		600	700	800	1000	1200	1500	1600	1800	2000	2200	2500	2700	3000	3200	3500	4000	5000	6000	7000
GPM	(l/m)	(45)	(50)	(55)	(70)	(85)	(105)	(110)	(125)	(140)	(155)	(175)	(190)	(210)	(220)	(245)	(275)	(345)	(415)	(485)
40.0	(151)	16.4	19.2	22.0	27.4	32.9	41.1	43.8	49.3	54.8	60.3	68.4	74.0	82.2	N/A	N/A	N/A	N/A	N/A	N/A
45.0	(170)	18.5	21.6	24.7	30.9	37.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
48.0	(182)	19.7	23.0	26.3	32.9	39.4	49.3	52.6	59.2	65.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
60.0	(227)	24.7	28.8	32.9	41.1	49.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
70.0	(265)	28.8	33.6	38.4	48.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
75.0	(284)	30.8	36.0	41.1	51.4	61.6	77.0	82.2	92.5	102.7	113.0	128.4	138.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
100.0	(379)	41.1	47.9	54.8	68.5	82.2	102.7	109.6	123.3	137.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
115.0	(435)	47.3	55.1	63.0	79.0	94.5	118.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
200.0	(758)	82.2	95.9	109.6	137.0	164.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
260.0	(984)	106.8	124.7	142.5	178.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
320.0	(1211)	131.5	153.4	175.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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