



ELECTRIC MOTOR KILOWATTS REQUIRED TO DRIVE HYDRAULIC PUMP

PUMP PRESSURE (BAR)																
LPM	30	40	50	60	70	80	90	100	125	150	175	200	225	250	275	300
1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6
2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2
3	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.9	1.0	1.2	1.3	1.4	1.6	1.7
4	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.8	1.0	1.2	1.3	1.5	1.7	1.9	2.1	2.3
5	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.7	1.9	2.2	2.4	2.6	2.9
6	0.3	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.7	2.0	2.3	2.6	2.9	3.2	3.5
7	0.4	0.5	0.7	0.8	0.9	1.1	1.2	1.3	1.7	2.0	2.4	2.7	3.0	3.4	3.7	4.0
8	0.5	0.6	0.8	0.9	1.1	1.2	1.4	1.5	1.9	2.3	2.7	3.1	3.5	3.8	4.2	4.6
9	0.5	0.7	0.9	1.0	1.2	1.4	1.6	1.7	2.2	2.6	3.0	3.5	3.9	4.3	4.8	5.2
10	0.6	0.8	1.0	1.2	1.3	1.5	1.7	1.9	2.4	2.9	3.4	3.8	4.3	4.8	5.3	5.8
11	0.6	0.8	1.1	1.3	1.5	1.7	1.9	2.1	2.6	3.2	3.7	4.2	4.8	5.3	5.8	6.3
12	0.7	0.9	1.2	1.4	1.6	1.8	2.1	2.3	2.9	3.5	4.0	4.6	5.2	5.8	6.3	6.9
13	0.7	1.0	1.2	1.5	1.7	2.0	2.2	2.5	3.1	3.7	4.4	5.0	5.6	6.2	6.9	7.5
14	0.8	1.1	1.3	1.6	1.9	2.2	2.4	2.7	3.4	4.0	4.7	5.4	6.1	6.7	7.4	8.1
15	0.9	1.2	1.4	1.7	2.0	2.3	2.6	2.9	3.6	4.3	5.0	5.8	6.5	7.2	7.9	8.7
20	1.2	1.5	1.9	2.3	2.7	3.1	3.5	3.8	4.8	5.8	6.7	7.7	8.7	9.6	10.6	11.5
25	1.4	1.9	2.4	2.9	3.4	3.8	4.3	4.8	6.0	7.2	8.4	9.6	10.8	12.0	13.2	14.4
30	1.7	2.3	2.9	3.5	4.0	4.6	5.2	5.8	7.2	8.7	10.1	11.5	13.0	14.4	15.9	17.3
35	2.0	2.7	3.4	4.0	4.7	5.4	6.1	6.7	8.4	10.1	11.8	13.5	15.1	16.8	18.5	20.2
40	2.3	3.1	3.8	4.6	5.4	6.2	6.9	7.7	9.6	11.5	13.5	15.4	17.3	19.2	21.1	23.1
50	2.9	3.8	4.8	5.8	6.7	7.7	8.7	9.6	12.0	14.4	16.8	19.2	21.6	24.0	26.4	28.8
60	3.5	4.6	5.8	6.9	8.1	9.2	10.4	11.5	14.4	17.3	20.2	23.1	26.0	28.8	31.7	34.6
70	4.0	5.4	6.7	8.1	9.4	10.8	12.1	13.5	16.8	20.2	23.5	26.9	30.3	33.6	37.0	40.4
80	4.6	6.2	7.7	9.2	10.8	12.3	13.8	15.4	19.2	23.1	26.9	30.8	34.6	38.4	42.3	46.1
90	5.2	6.9	8.7	10.4	12.1	13.8	15.6	17.3	21.6	26.0	30.3	34.6	38.9	43.3	47.6	51.9
100	5.8	7.7	9.6	11.5	13.5	15.4	17.3	19.2	24.0	28.8	33.6	38.4	43.3	48.1	52.9	57.7
125	7.2	9.6	12.0	14.4	16.8	19.2	21.6	24.0	30.0	36.0	42.1	48.1	54.1	60.1	66.1	72.1
150	8.7	11.5	14.4	17.3	20.2	23.1	26.0	28.8	36.0	43.3	50.5	57.7	64.9	72.1	79.3	86.5
175	10.1	13.5	16.8	20.2	23.5	26.9	30.3	33.6	42.1	50.5	58.9	67.3	75.7	84.1	92.5	100.9
200	11.5	15.4	19.2	23.1	26.9	30.8	34.6	38.4	48.1	57.7	67.3	76.9	86.5	96.1	105.7	115.3
225	13.0	17.3	21.6	26.0	30.3	34.6	38.9	43.3	54.1	64.9	75.7	86.5	97.3	108.1	118.9	129.8
250	14.4	19.2	24.0	28.8	33.6	38.4	43.3	48.1	60.1	72.1	84.1	96.1	108.1	120.1	132.2	144.2
275	15.9	21.1	26.4	31.7	37.0	42.3	47.6	52.9	66.1	79.3	92.5	105.7	118.9	132.2	145.4	158.6
300	17.3	23.1	28.8	34.6	40.4	46.1	51.9	57.7	72.1	86.5	100.9	115.3	129.8	144.2	158.6	173.0

This chart is based on the formula $kW = \frac{LPM \times BAR}{612 \times EFFICIENCY}$
 For the purposes of this chart, pump efficiency was assumed to be 85%