

# E3 PMM

## **Energy Efficient ESP Permanent Magnet Motor**

AlLift designs and manufacturers industry leading permanent magnet motors for use with electrical submersible pumps. Designed by an expert team with countless years of experience in the ESP industry, the E3 PMM solves many of the production challenges faced by operators while nullifying several industry misconceptions around permanent magnet technology.

### Standard VSD - Lower Lifting Cost - Increased Reliability

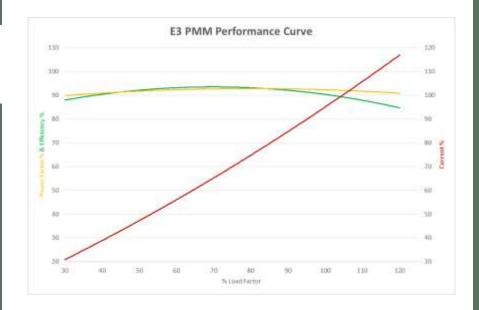
AlLift's mission is simple – deliver a robust permanent magnet motor at an economical price point that can reduce overall lifting cost to produce hydrocarbons. This objective was accomplished by creating the next generation permanent magnet motor – the E3 PMM. The E3 PMM offers similar advantages to conventional permanent magnet motors including a consistent power factor across the load curve and higher horsepower per rotor for an overall shorter motor. However, the patented E3 PMM establishes a new economic benchmark by eliminating the need for a special variable speed drive making it completely interchangeable with existing ESP surface equipment.

### E3 PMM Advantages

- Eliminate special VSD
- Reduce Power Costs
- Increase Efficiency
- Increase Power Factor
- Reduce Operating Temp
- Lower Voltage Drop
- Reduce Scale
- Handle Gas Slugs
- Lower Pump Set Depth
- Increase Production

#### E3 PMM Features

- 4 Pole (120Hz = 3600RPM)
- 204C Rated
- 400 Series up to 432HP
- 500 Series up to 1000HP
- 0.92+ Power Factor
- 92+% Efficient
- Optional Corrosion Resistant
- Standard Bolt Pattern
- Any downhole gauge





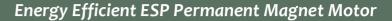
E3 PMM - 350 Series									
Power		Ler	igth	Wei	ight	Voltage by Current			
HP	kW	ft	m	lbs	kg	36 A	44 A		
40	29.8	7.81	2.38	198	90	570			
60	44.8	10.36	3.16	258	117	860			
80	59.7	12.89	3.93	329	149	1145			
100	74.6	15.45	4.71	390	177	1430			
120	89.5	18.01	5.49	452	205		1272		
140	104.4	20.57	6.27	523	237		1635		
160	119.4	23.09	7.04	587	266		1855		
180	134.3	25.65	7.82	655	297		2085		
200	149.2	28.04	8.55	723	328		2350		

4 Pole Construction

204C Rated

Standard Offering: Carbon Steel Head, Base & Housing

Corrossion Resistant: Stainless Steel Head & Base, 9Cr1Mo Housing





E3 PMM - 450 Series												
Power		Length		Weight		Voltage by Current						
HP	kW	ft	m	lbs	kg	32 A	42 A	50 A	59 A	72 A		
40	29.8	5.51	1.68	183	83	640	500	440				
60	44.7	6.79	2.07	243	110	960	765	650				
80	59.6	8.07	2.46	302	137	1280	1005	860				
100	74.6	9.35	2.85	362	164	1580	1245	1070				
120	89.5	10.63	3.24	421	191	1850	1455	1280	1055			
140	104.4	11.91	3.63	481	218	2145	1690	1490	1230			
160	119.3	13.15	4.01	540	245	2450	1920	1700	1405			
180	134.2	14.46	4.41	600	272	2750	2160	1910	1580			
200	149.2	15.71	4.79	659	299	3050	2400	2120	1755			
220	164.1	16.99	5.18	719	326	3350	2650	2325	1930			
260	193.9	19.55	5.96	838	380		3200	2745	2280			
300	223.8	22.11	6.74	957	434			3160	2630	2120		
340	253.6	24.67	7.52	1076	488				2950	2400		
380	283.4	27.26	8.31	1191	540				3315	2680		
420	313.3	29.82	9.09	1310	594				3641	2955		

4 Pole Construction

204C Rated

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Corrossion Resistant: Stainless Steel Head & Base, 9Cr1Mo Housing



# **Energy Efficient ESP Permanent Magnet Motor**

E3 PMM - 562 Series												
Power		Length		Weight		Voltage by Current						
HP	kW	ft	m	lbs	kg	41 A	48 A	58 A	73 A	96 A	142 A	
88	65.6	6.50	1.98	238	108	1062	910					
132	98.5	7.91	2.41	362	164	1592	1364					
176	131.3	9.35	2.85	505	229	2123	1818					
220	164.1	10.76	3.28	608	276		2273	1894				
264	196.9	12.20	3.72	732	332		2728	2273				
308	229.8	13.62	4.15	855	388			2651	2121			
352	262.6	15.39	4.69	979	444			3030	2424			
396	295.4	16.50	5.03	1102	500			-	2727	2045		
440	328.2	17.91	5.46	1226	556			-	3028	2272		
484	361.1	19.36	5.90	1349	612				3330	2498		
528	393.9	20.77	6.33	1473	668					2725	1817	
572	426.7	20.77	6.33	1596	724					2952	1968	
616	459.5	23.62	7.20	1720	780					3180	2120	
660	492.4	25.07	7.64	1843	836					3407	2271	
704	525.2	26.48	8.07	1967	892						2422	
748	558.0	27.92	8.51	2090	948						2573	
792	590.8	29.36	8.95	2213	1004						2724	
836	623.7	30.77	9.38	2337	1060						2875	
880	656.5	32.22	9.82	2460	1116						3026	
924	689.3	33.63	10.25	2584	1172						3177	
968	722.1	35.07	10.69	2707	1228						3328	

4 Pole Construction 204C Rated

Standard Offering: Carbon Steel Head, Base & Housing

Corrossion Resistant: Stainless Steel Head & Base, 9Cr1Mo Housing