

# ESP SERIES

ELECTRIC SUBMERSIBLE PUMP SYSTEM





## ESP PUMP SYSTEMS

Franklin Electric's submersible pumps feature proven hydraulic components. Designed for use with the proven Energy Service, CBM+, and Oil Stripper motors, these pumps are built to withstand the harsh conditions related to marginal gas wells. The patented floating stage system offers improved efficiency and performance while protecting against wear from coal fines and other debris.

### FEATURES

- Corrosion-resistant 300 series stainless steel hub and impeller eye ring are designed to maintain a positive seal with the impeller
- Phenolic washer provides downthrust protection between each stage
- Acetal impeller surrounded by PET diffuser cup and disc are proven in harsh applications to run efficiently by resisting abrasion, degradation, and dielectric corrosion by hydrocarbons
- Floating stage design allows the impeller to float independently from within the stage while minimizing the overall thrust load placed on the motor
- 122 °F/50 °C ambient temperature rating
- Ceramic shaft sleeves, supported by nitrile rubber bearings in both the top discharge and intermediate bearing sections, support and protect the shaft from vibration and abrasive wear
- Both the discharge head and motor bracket are cast from high-quality 300 series stainless steel, then precision machined to ensure corrosion resistance, durability, and long life
- 2" NPT discharge connection
- Tall motor bracket design offers 66% more intake area over standard 4" submersible pumps
- Round 1/16" (1.6 mm) diameter openings in the stainless steel screen prevent the entrance of performance-robbing abrasive particles
- Pressure-isolating intermediate bearing allows pumps to operate at higher output pressures and greater set depths

### MODEL NOMENCLATURE

#### 7 FS 3 S4 - PE

- 7 = Flow rate (options: 7, 10, 15, 20, 25 gpm)
- FS = Pump series (Franklin Submersible Centrifugal)
- 3 = Motor rating (options: 3, 5, 7, 10 hp)
- S4 = Submersible 4"
- PE = Pump end



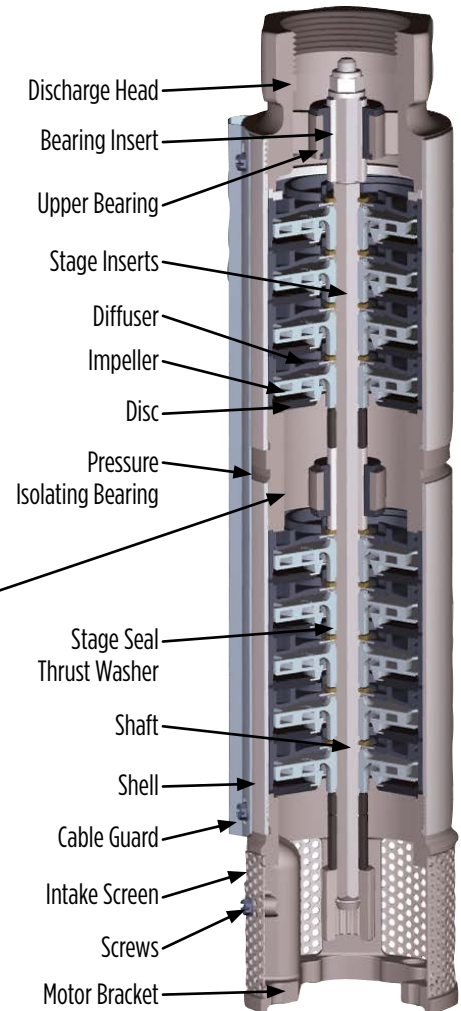
# ESP PUMP SYSTEMS

## ORDERING INFORMATION

US GPM	BPD	LPM	HP	kW	Stages	Order No.	Description
7	250	25	3	2.2	32	95150730	25FS3S4-PE
			5	3.7	52	95150735	25FS5S4-PE
10	350	35	3	2.2	24	95151030	35FS3S4-PE
			5	3.7	39	95151035	35FS5S4-PE
			7.5	5.5	59	95151040	35FS7S4-PE
			10	7.5	78	95151045	35FS10S4-PE
15	500	50	3	2.2	19	95151530	50FS3S4-PE
			5	3.7	52	95151535	50FS5S4-PE
			7.5	5.5	32	95151540	50FS7S4-PE
			10	7.5	52	95151545	50FS10S4-PE
20	700	70	5	3.7	26	95152035	70FS5S4-PE
			7.5	5.5	39	95152040	70FS7S4-PE
			10	7.5	52	95152045	70FS10S4-PE
25	900	90	5	3.7	23	95152535	90FS5S4-PE
			7.5	5.5	35	95152540	90FS7S4-PE
			10	7.5	44	95152545	90FS10S4-PE

## MATERIALS

Component	Material
Discharge Head	300 Series stainless steel
Upper Bearing	Nitrile rubber
Bearing Insert	Ceramic
Impeller	Acetal
Diffuser	PET
Disc	PET
Stage Inserts	300 Series stainless steel
Stage Seal/Thrust Washer	Carbon/phenolic
Pressure Isolating Bearing	300 Series stainless steel
Shaft	17-4 Series stainless steel
Shell	300 Series stainless steel
Motor Bracket	300 Series stainless steel
Intake Screen	300 Series stainless steel
Cable Guard	300 Series stainless steel
Screws	300 Series stainless steel

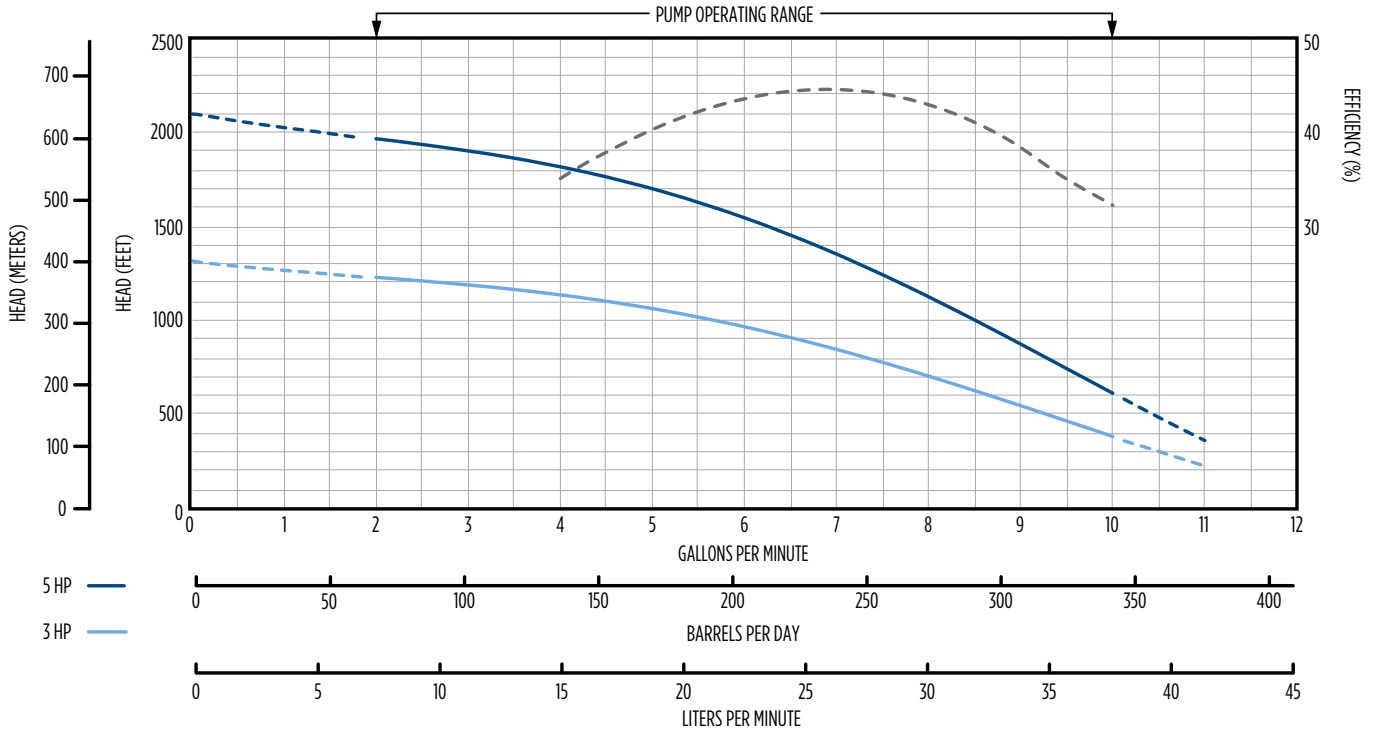


By isolating each pump section, the intermediate bearing protects the pump's stages from experiencing excessive hydraulic pressure differentials. This allows Franklin Electric to build electric submersible pumps with extended range and higher output pressure.

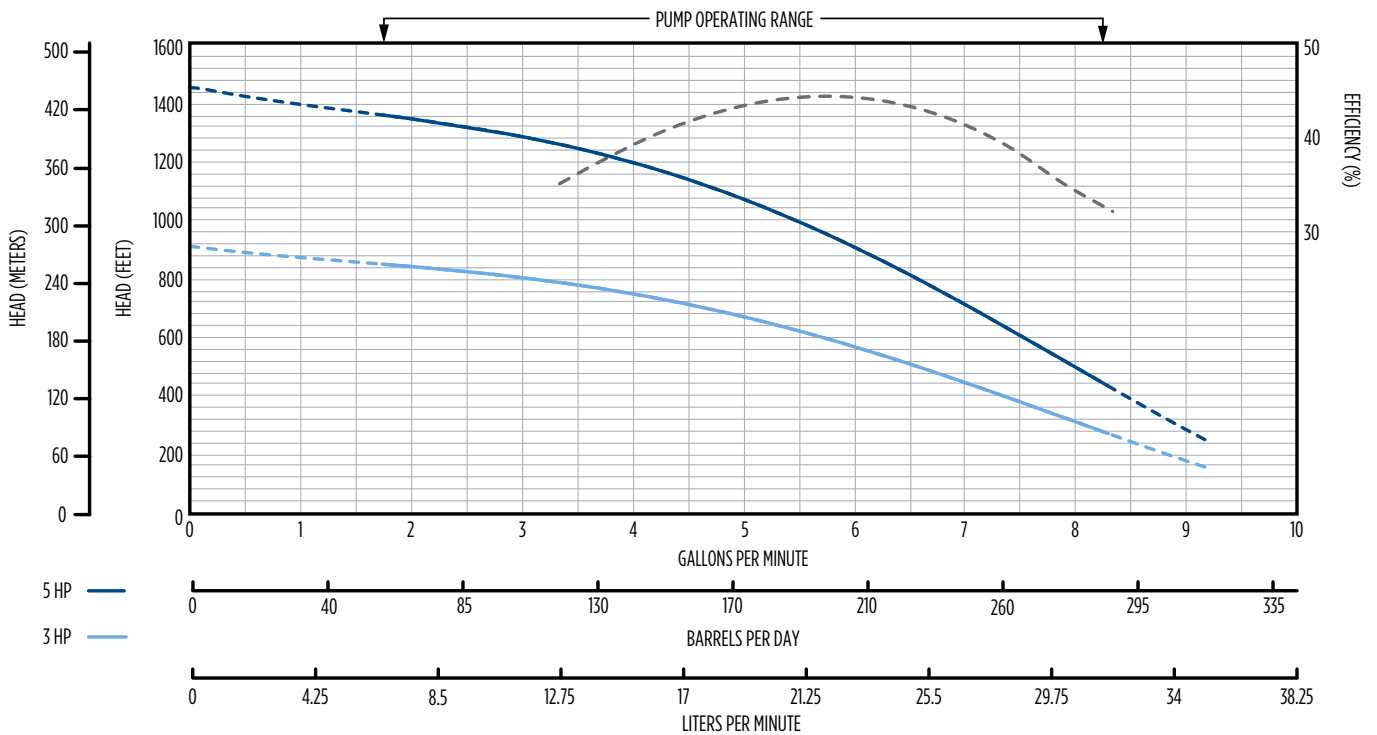


# ESP PUMP SYSTEMS

60 HZ PERFORMANCE: 250 BPD (7 GPM, 25 LPM)



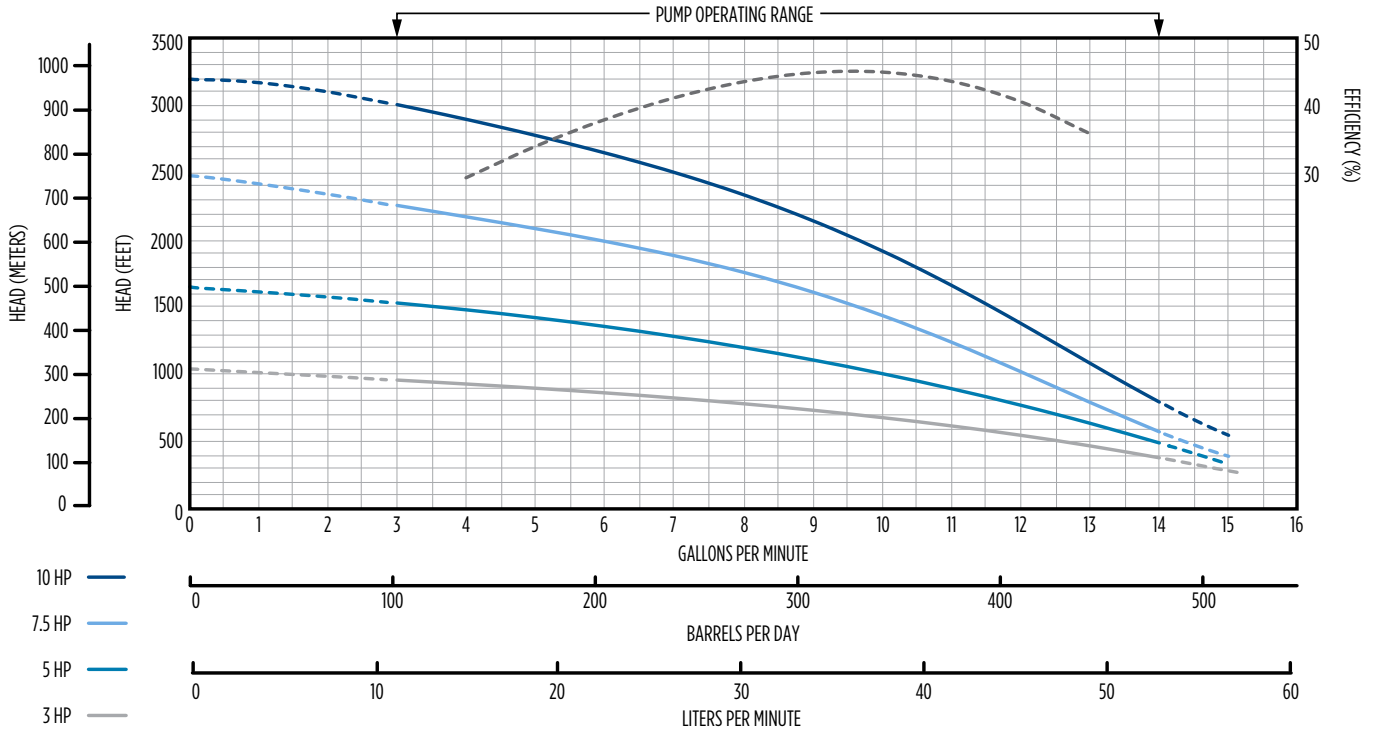
50 HZ PERFORMANCE: 250 BPD (7 GPM, 25 LPM)



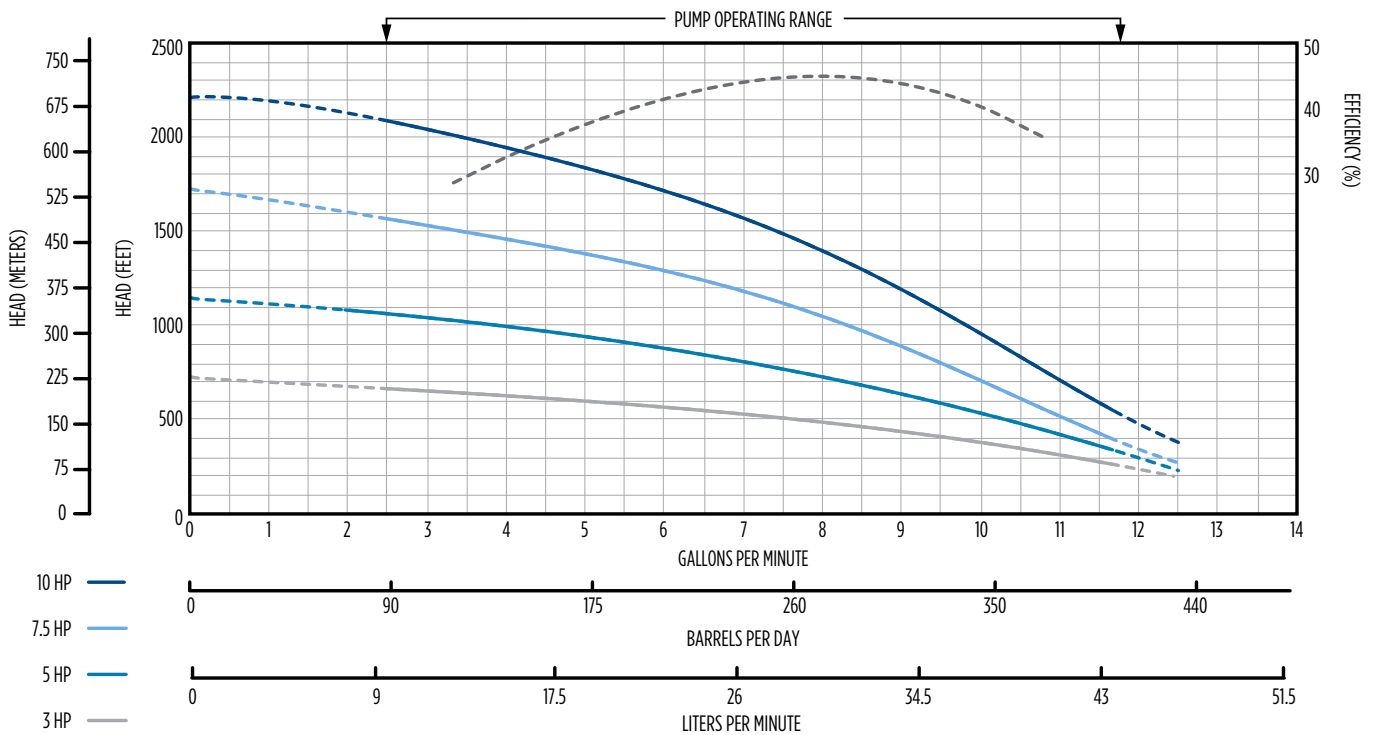


# ESP PUMP SYSTEMS

60 HZ PERFORMANCE: 350 BPD (10 GPM, 35 LPM)



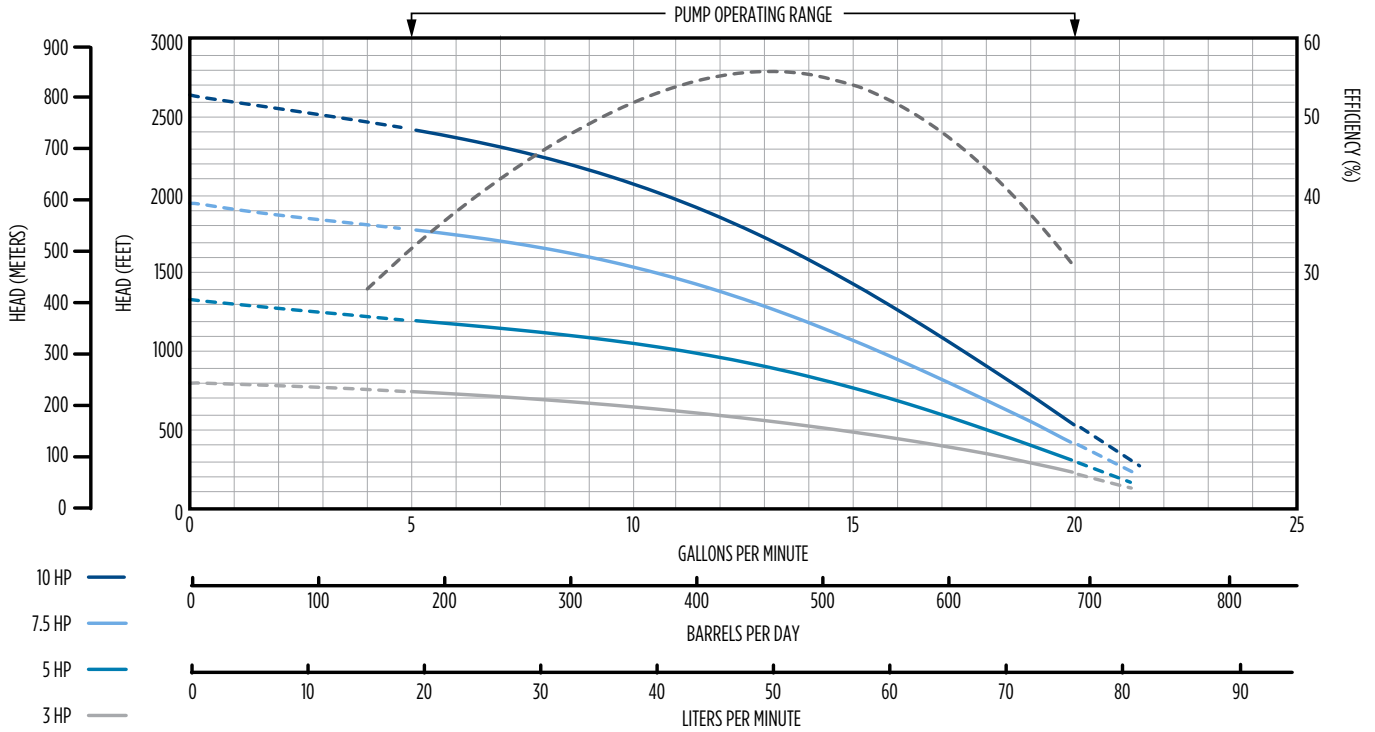
50 HZ PERFORMANCE: 350 BPD (10 GPM, 35 LPM)



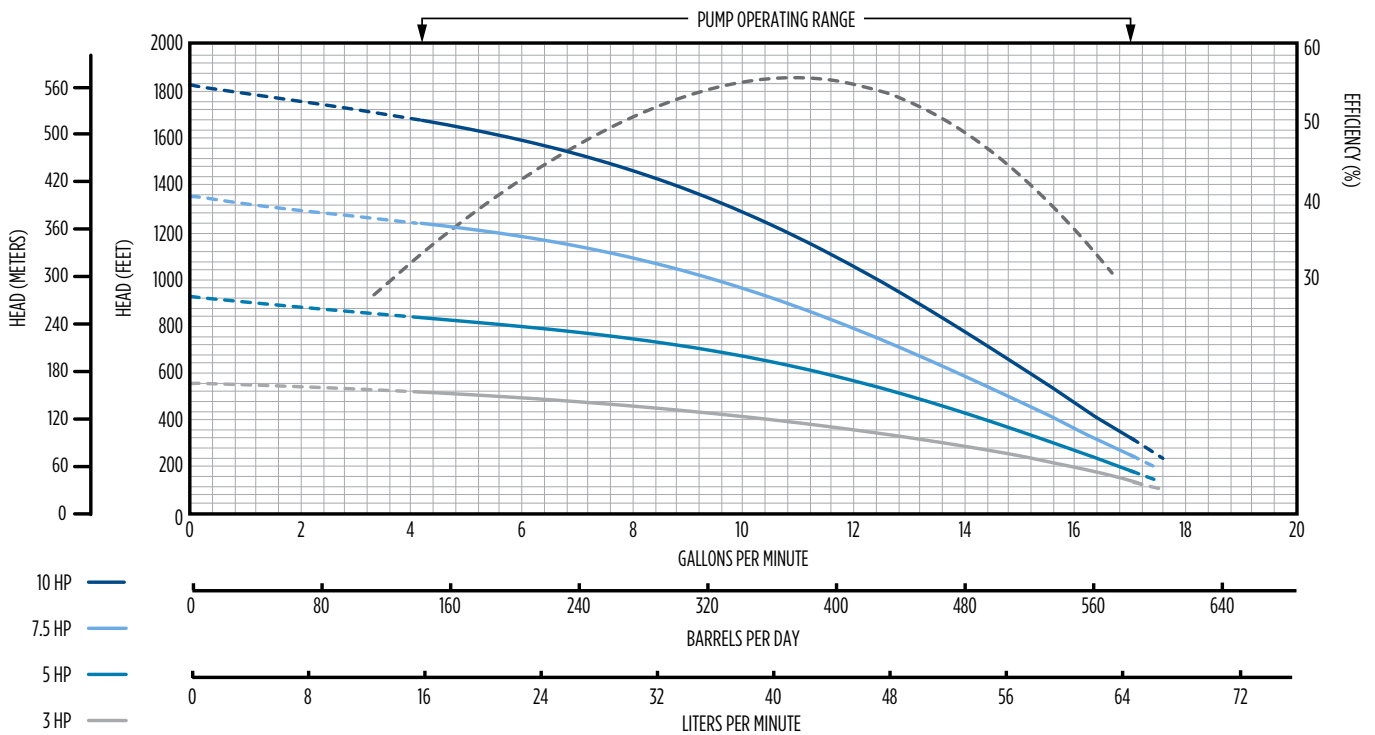


# ESP PUMP SYSTEMS

60 HZ PERFORMANCE: 500 BPD (15 GPM, 50 LPM)

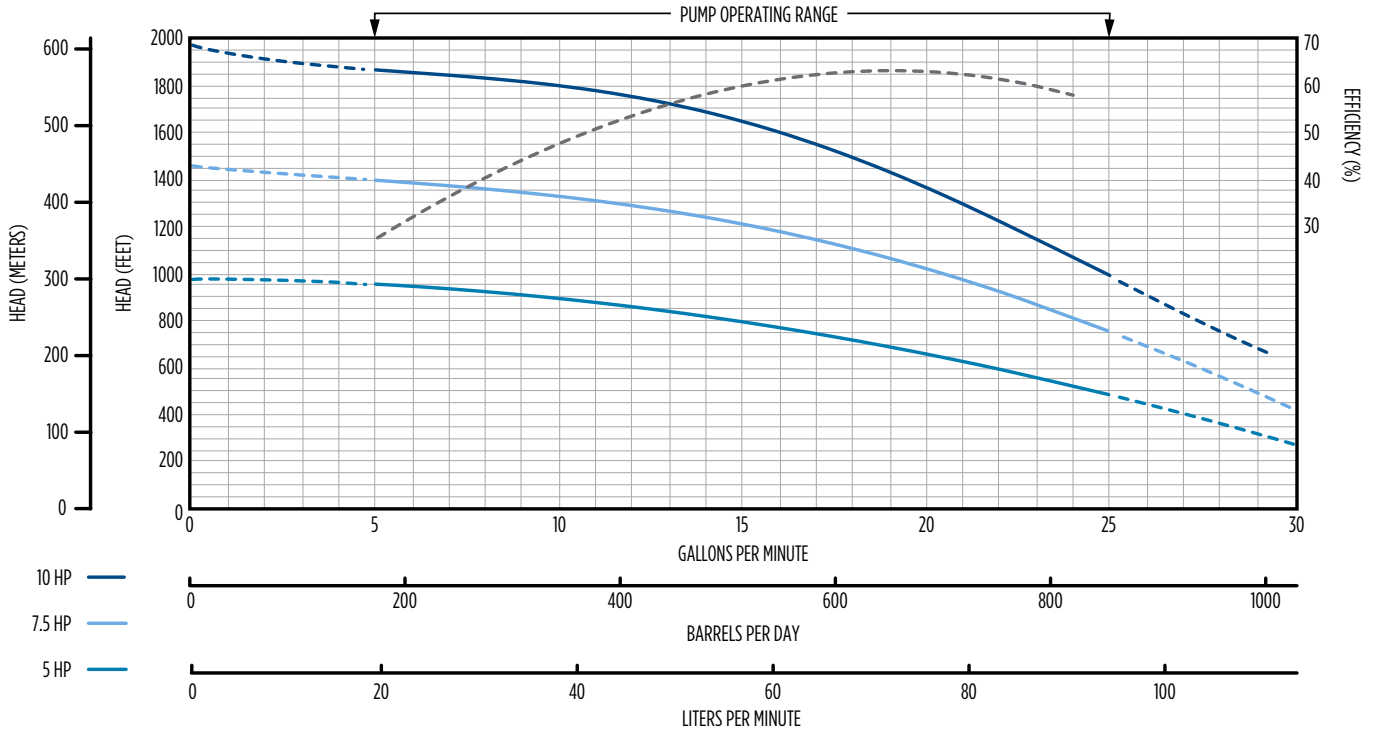


50 HZ PERFORMANCE: 500 BPD (15 GPM, 50 LPM)

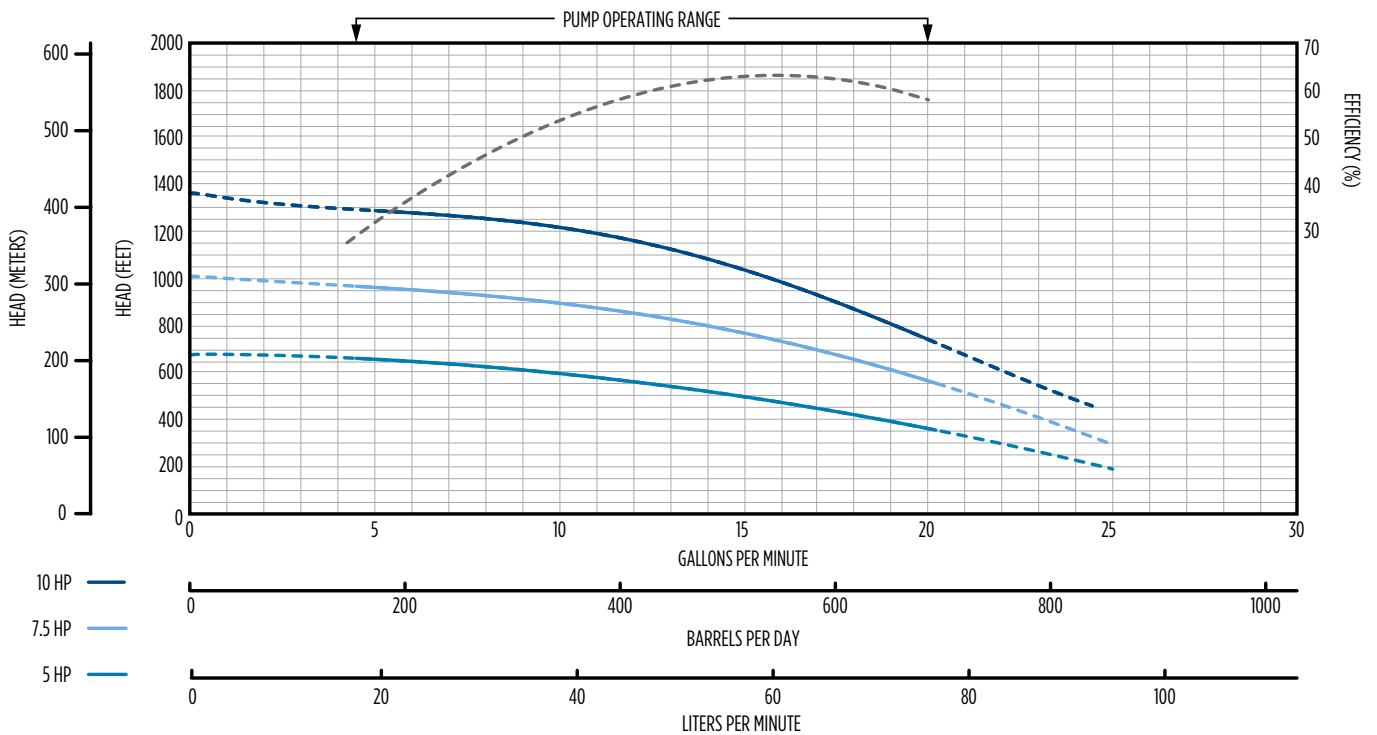


# ESP PUMP SYSTEMS

60 HZ PERFORMANCE: 700 BPD (20 GPM, 70 LPM)



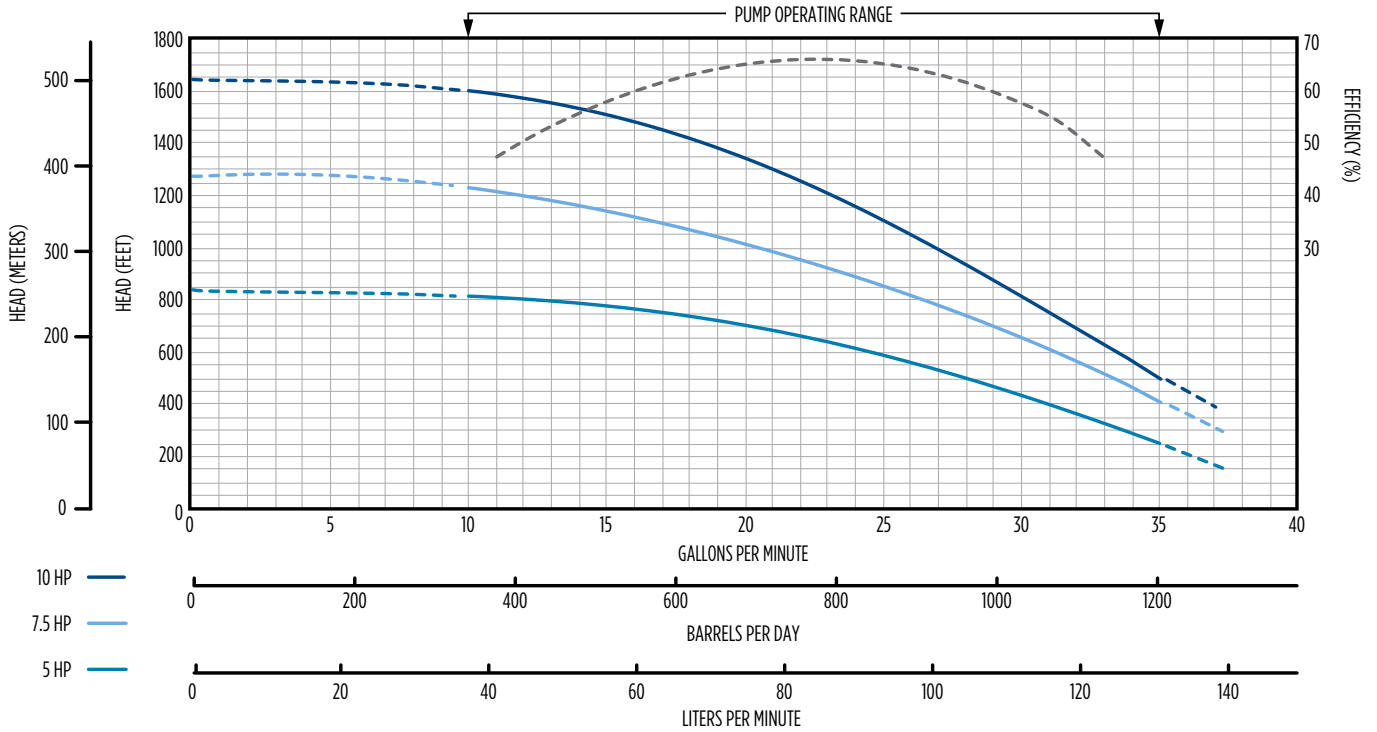
50 HZ PERFORMANCE: 700 BPD (20 GPM, 70 LPM)



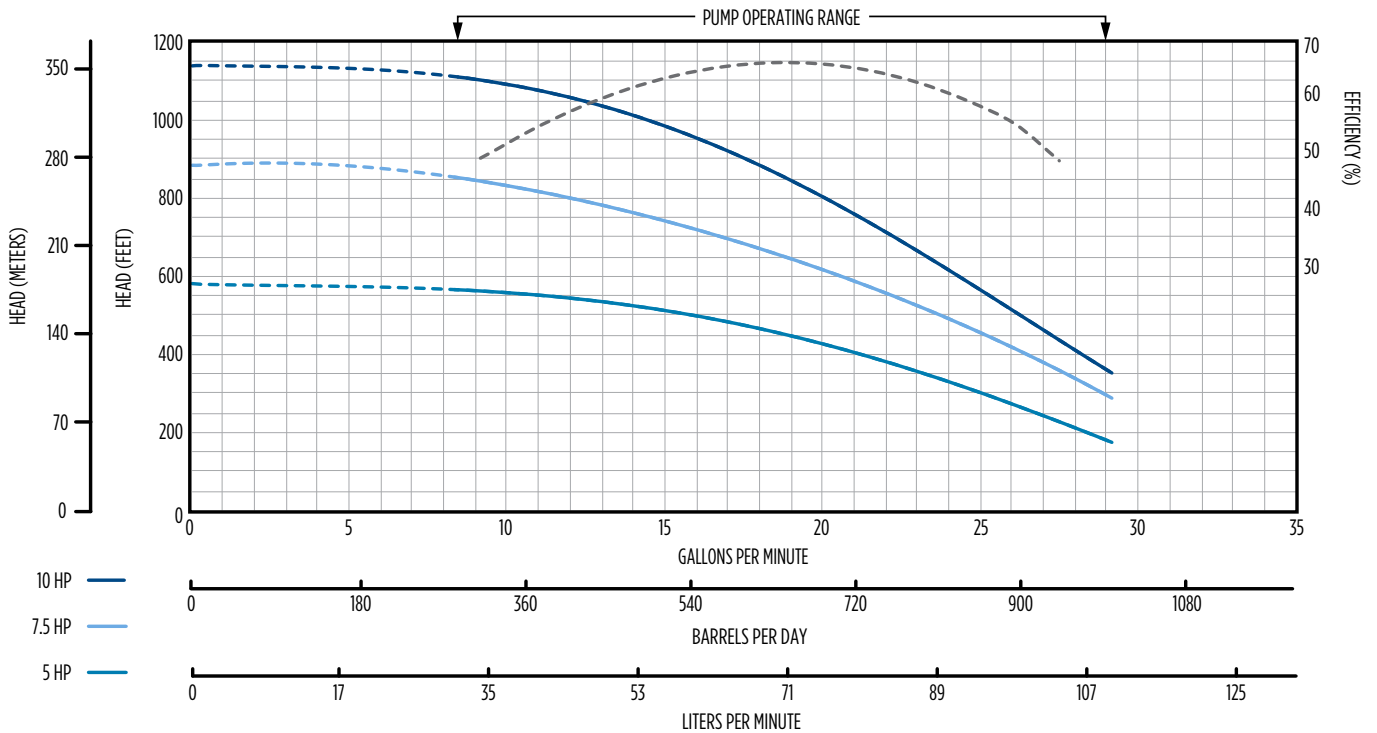


# ESP PUMP SYSTEMS

60 HZ PERFORMANCE: 900 BPD (25 GPM, 90 LPM)



50 HZ PERFORMANCE: 900 BPD (25 GPM, 90 LPM)





# ESP PUMP SYSTEMS

## DIMENSIONS

250-900 BPD Pump Ends									
US GPM	BPD	LPM	HP	kW	"Lp" Dimensions		Discharge Head NPT (in)	Shipping Wt.	
					in	mm		lbs	kg
7	250	25	3	2.2	35	889	2	22	10
			5	3.7	53	1346	2	38	17
10	350	35	3	2.2	30	762	2	20	9
			5	3.7	44	1118	2	26	12
			7.5	5.5	66	1676	2	43	20
			10	7.5	85	2159	2	56	25
15	500	50	3	2.2	24	610	2	15	7
			5	3.7	37	940	2	23	10
			7.5	5.5	52	1321	2	36	16
20	700	70	10	7.5	68	1727	2	45	20
			5	3.7	40	1016	2	23	10
			7.5	5.5	58	1473	2	33	15
25	900	90	10	7.5	78	1981	2	50	23
			5	3.7	37	940	2	22	10
			7.5	5.5	53	1346	2	31	14
			10	7.5	64	1626	2	36	16

4" Energy Service Submersible Motors - Three-Phase					
HP	kW	Length (LM)		Shipping Wt.	
		in	mm	lbs	kg
5	3.7	23.19	589	56	25.4
7.5	5.5	29.19	741	71	32.2
10	7.5	32.19	818	77	34.9

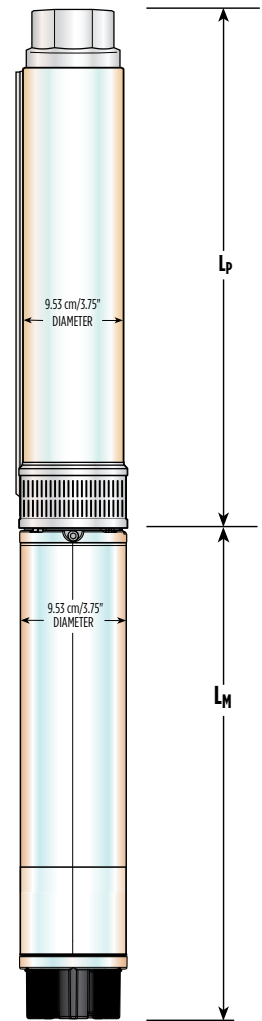
NOTE: Dimensions and weights are for estimating purposes only; please see the individual motor brochures for full motor specifications

4" CBM+ Submersible Motors - Three-Phase					
HP	kW	Length (LM)		Shipping Wt.	
		in	mm	lbs	kg
5	3.7	22.90	582	59	26.8
7.5	5.5	27.80	706	74	33.6
10	7.5	30.90	785	80	36.3
15	11.2	47.50	1207	115	52.2

NOTE: Dimensions and weights are for estimating purposes only; please see the individual motor brochures for full motor specifications

4" Oil Stripper Submersible Motors - Three-Phase					
HP	kW	Length (LM)		Shipping Wt.	
		in	mm	lbs	kg
5	3.7	23.68	601	56	25.4
7.5	5.5	29.68	754	71	32.2
10	7.5	32.68	830	77	34.9

NOTE: Dimensions and weights are for estimating purposes only; please see the individual motor brochures for full motor specifications







**ARTIFICIAL LIFT USA** | Franklin Electric Headquarters | 9255 Coverdale Road | Fort Wayne, IN 46809 | Tel. 1.888.885.9248  
**ARTIFICIAL LIFT CHINA** | Franklin Electric Shanghai | Unit 1002-03 Shanghai Centra Plaza | No 227, Huang Pi Bei Road | Shanghai, 200003, CHINA | Tel. 86.21.6327.0909  
**SOUTH AFRICA** | Franklin Electric (Pty) Ltd. | 13 Engwena Road, Sebenza | Edenvale 1610 | Republic of South Africa | Tel. +27 11 723 6500

