

Submersible Pumps

4" High Capacity Pump - Features

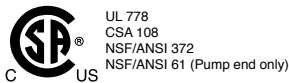


FPS 4400

Features:

- 4 performance ranges - 35, 45, 60, and 90 gpm.
- Stainless steel discharge head and motor bracket.
- High flow impellers and stages are glass-filled Noryl® for maximum efficiency.
- Ceramic shaft sleeve and rubber discharge bearing eliminates sand wear.
- Intermediate bearing for increased shaft stability.
- Floating eye and hub seals for improved performance and efficiency.
- Stainless steel hex pump shaft, shell, and shaft coupling.
- High capacity upthrust assembly for protection during start-up and operation (45, 60, and 90 gpm models).
- Powered by Franklin's corrosion-resistant 4" submersible motors.
- 2" NPT discharge.
- Check valve must be ordered separately. See page 76.

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Submersible Pumps

4" High Capacity Pumps - Ordering Information

1 - 10 HP 4" Pump Ends						
GPM	HP	Stages	Ordering Info.		Dimensions	Wt.
			Model No.	Order No.	Pump End Only	
35	1	6	35FA1S4-PE	93613506	15.00	9
	1.5	8	35FA15S4-PE	93613508	17.50	10
	2	10	35FA2S4-PE	93613510	20.00	11
	3	14	35FA3S4-PE	93613514	25.00	13
	5	22	35FA5S4-PE	93613522	35.00	17
	7.5	34	35FA7S4-PE	93613534	52.17	25
	10	42	35FA10S4-PE	93613542	62.23	31
45	1.5	6	45FA15S4-PE	93614506	21.00	15
	2	8	45FA2S4-PE	93614508	25.50	16
	3	11	45FA3S4-PE	93614511	32.25	19
	5	18	45FA5S4-PE	93614518	47.75	25
	7.5	26	45FA7S4-PE	93614526	65.25	33
	10	31	45FA10S4-PE	93614531	78.30	38
60	2	6	60FA2S4-PE	93616006	21.00	15
	3	8	60FA3S4-PE	93616008	25.50	17
	5	13	60FA5S4-PE	93616013	36.75	21
	7.5	17	60FA7S4-PE	93616017	45.25	25
	10	24	60FA10S4-PE	93616024	61.00	31
90	2	5	90FA2S4-PE	93619005	22.56	15
	3	7	90FA3S4-PE	93619007	28.56	17
	5	12	90FA5S4-PE	93619012	43.56	21
	7.5	19	90FA7S4-PE	93619019	64.50	27
	10	24	90FA10S4-PE	93619020	79.25	31

Notes: All dimensions are in inches. Discharge is 2" NPT. Maximum diameter across cable guard is 3.90" on all models. Weight in pounds.

1 - 1.5 HP Single-Phase Units									
GPM	HP	Stages	Volts	2-Wire			3-Wire		
				Model No.	Order No.	Wt.	Model No.	Order No.	Wt.
35	1	6	230	35FA1S4-2W230	93613606	33	35FA1S4-3W230	93613706	33
	1.5	8	230	35FA15S4-2W230	93613608	41	35FA15S4-3W230	93613708	39
45	1.5	6	230	45FA15S4-2W230	93614606	46	45FA15S4-3W230	93614706	44

Notes: All listed above have 2" NPT discharge. Order check valve separately.
Pump and motor will be individually cartoned and require assembly.
Weight in pounds.

Submersible Pumps

4" High Capacity Pumps - 35 GPM

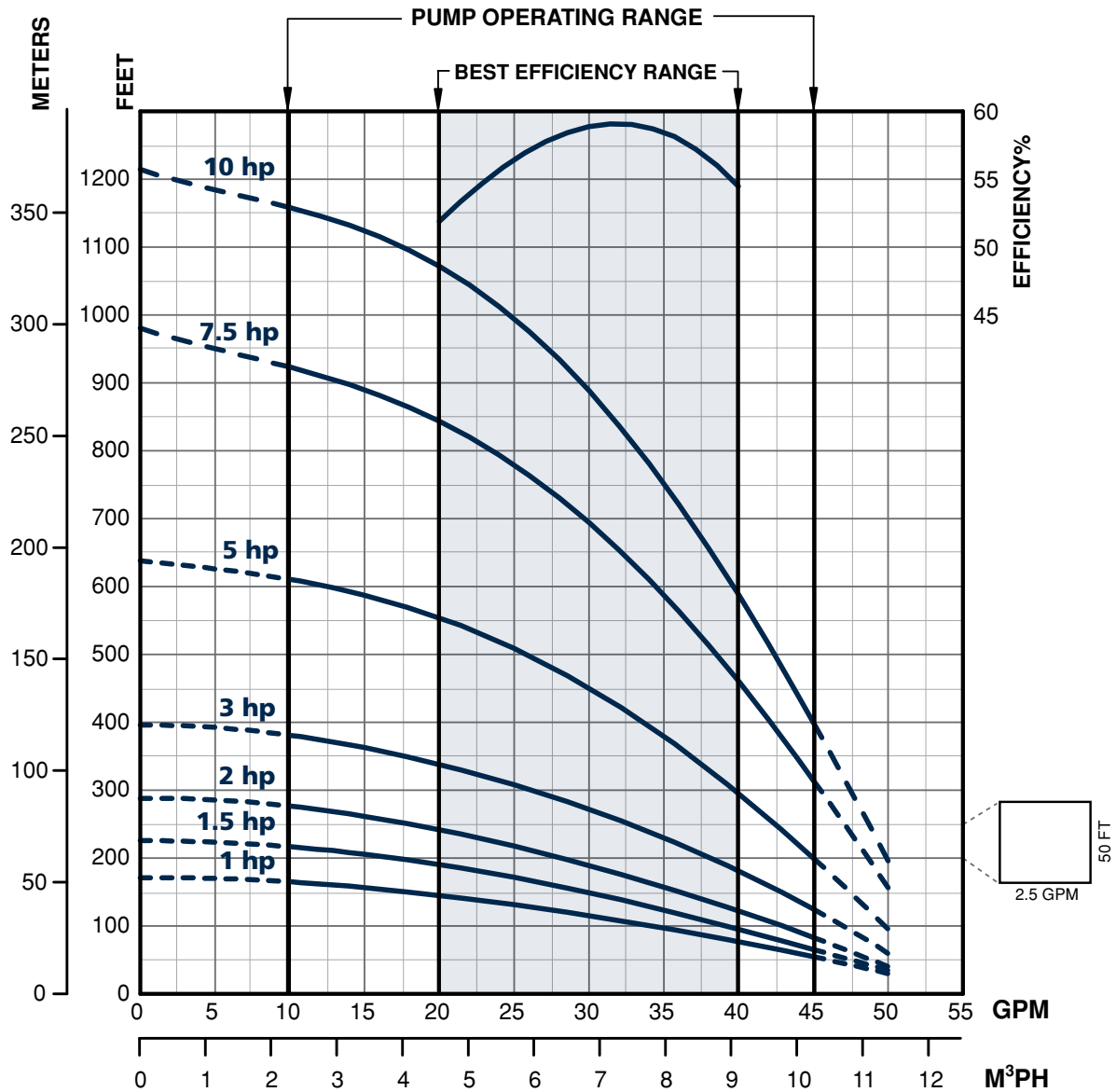
Capacities in U.S. Gallons per Minute

HP	PSI	Depth to Pumping Water Level, or Lift, in Feet. Shaded Areas Indicate Most Efficient Performance																	
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600
1	0			44	40	34	28	22	13										
	10		43	39	33	27	21	11											
	20	43	38	32	26	20													
	30	37	31	26	19														
	40	30	25	18															
	50	24	16																
	60	14																	
	70																		
	80																		
Shut-off PSI		65	57	48	39	31	22	13	5										
1.5	0			45	43	40	36	31	27	23	18								
	10		45	42	39	35	31	27	23	16									
	20	45	42	38	34	30	26	22	15										
	30	41	38	34	30	26	21	14											
	40	37	33	29	25	20	12												
	50	32	29	24	19	10													
	60	28	24	18															
	70	23	17																
	80	16																	
Shut-off PSI		89	81	72	63	55	46	37	29	20	11								
2	0			45	43	41	38	34	31	28	19								
	10		45	43	40	37	34	31	27	24	11								
	20		45	43	40	37	33	30	27	24	20								
	30	44	42	39	36	33	30	26	23	19	12								
	40	42	39	36	32	29	26	22	18	11									
	50	39	35	32	29	25	22	17	10										
	60	35	31	28	25	21	16												
	70	31	28	24	21	15													
	80	27	24	20	14														
Shut-off PSI		116	107	99	90	81	73	64	55	47	38	16							
3	0					45	44	42	41	38	32	28	18						
	10				45	44	42	40	38	36	29	23	12						
	20				45	43	42	40	37	35	32	30	24	13					
	30			45	43	42	40	37	35	32	30	24	13						
	40		44	43	41	39	37	34	32	29	27	20							
	50	44	43	41	39	37	34	32	29	27	24	14							
	60	43	41	39	36	34	31	29	26	24	21								
	70	40	38	36	33	31	28	26	23	20	15								
	80	38	35	33	30	28	25	23	19	15									
Shut-off PSI		163	154	145	137	128	120	111	102	94	85	63	42	20					
5	0									45	43	40	37	33	30	26	21	12	
	10									45	44	42	39	35	32	28	24	18	
	20							45	45	44	43	40	37	34	30	26	21	13	
	30						45	45	44	43	42	39	35	32	28	24	18		
	40					45	44	44	43	42	41	37	34	30	27	22	14		
	50				45	44	44	43	42	40	39	36	32	29	25	19			
	60			45	44	43	42	41	40	39	38	34	31	27	22	15			
	70		45	44	43	42	41	40	39	37	36	32	29	25	19				
	80	45	44	43	42	41	40	38	37	36	34	31	27	23	15				
Shut-off PSI		268	259	250	242	233	224	216	207	198	190	168	146	125	103	81	60	38	16
7.5	0								44	42	40	38	36	34	32	30	27	24	13
	10								45	43	41	39	38	36	33	31	29	26	10
	20								44	42	40	39	37	35	32	30	27	24	
	30						45	43	41	40	38	36	34	31	29	26	22	17	
	40						44	42	41	39	37	35	33	30	27	24	20	14	
	50					45	43	42	40	38	36	34	32	29	25	22	18	11	
	60				45	44	43	41	39	37	35	33	30	28	24	20	15		
	70		45	45	44	43	42	40	38	36	34	32	29	26	23	18	12		
	80	45	45	44	43	41	39	37	35	33	31	28	25	21	15				
Shut-off PSI		373	364	355	347	338	316	295	274	251	230	208	186	165	143	121	100	78	35
10	0					45	44	43	41	40	38	36	35	33	31	30	28	25	11
	10					45	43	42	41	39	37	36	34	32	31	29	26	24	
	20				45	44	43	41	40	38	37	35	33	32	30	28	25	22	
	30				45	43	42	41	39	38	36	34	32	31	29	27	24	20	
	40				45	44	43	41	40	38	37	35	33	32	30	28	25	22	
	50				45	44	42	41	39	38	36	34	33	31	29	27	24	20	
	60		45	44	43	42	40	39	37	35	34	32	30	28	26	23	18	13	
	70		45	44	42	41	39	38	36	34	33	31	29	27	24	21	16		
	80	45	44	43	42	40	38	37	35	34	32	30	28	26	23	19	13		
Shut-off PSI		439	418	396	374	353	331	309	288	266	245	223	201	180	158	136	115	93	28

Notes: 1. Performance shown does not include friction loss in the drop pipe.
2. All performance data is based on rated motor nameplate voltage.

Submersible Pumps

4" High Capacity Pumps - 35 GPM



Submersible Pumps

4" High Capacity Pumps - 45 GPM

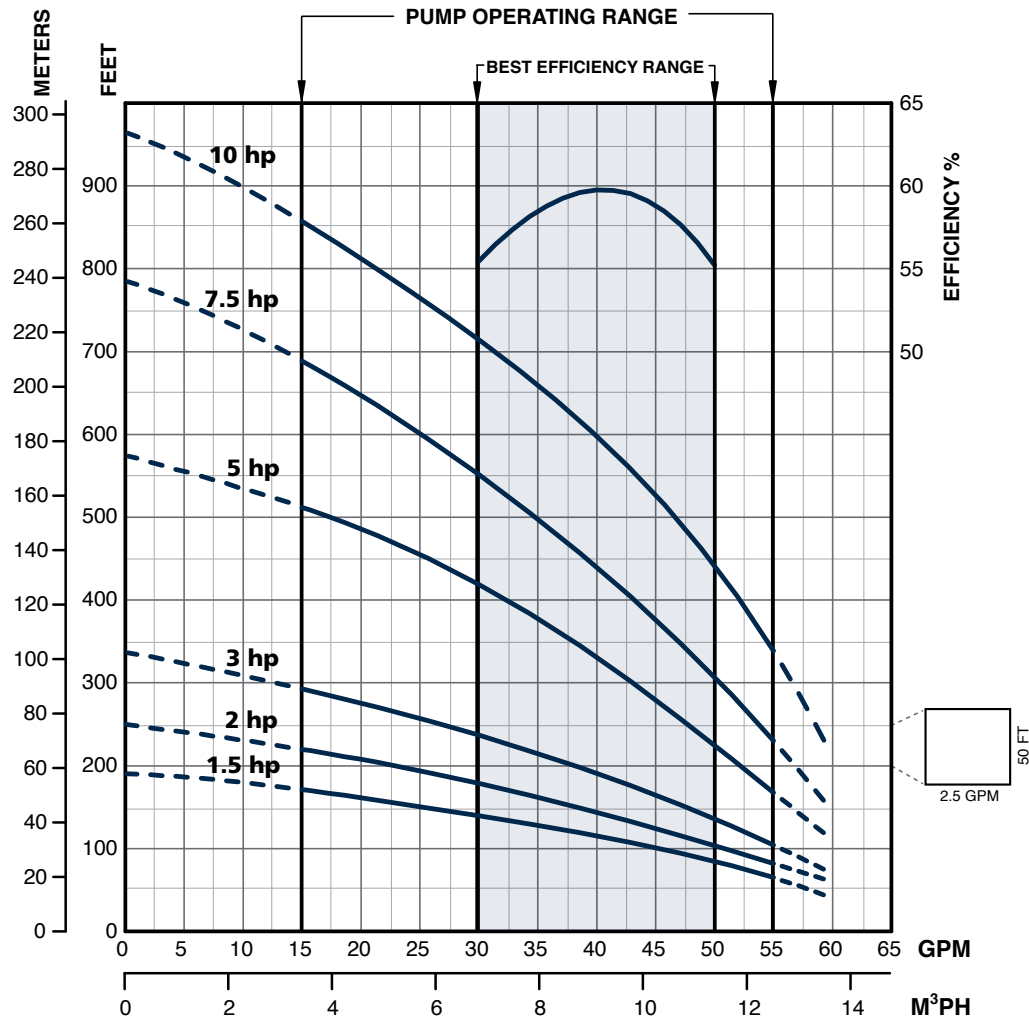
Capacities in U.S. Gallons per Minute

HP	PSI	Depth to Pumping Water Level, or Lift, in Feet. Shaded Areas Indicate Most Efficient Performance																			
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	650	
1.5	0				52	46	38	30	21												Shut-off 190 ft
	10		55	51	45	37	26	20													
	20	54	50	43	35	27	18														
	30	49	42	34	26	16															
	40	41	33	24	15																
	50	32	23																		
	60	22																			
Shut-off PSI		74	65	56	48	39	30	22	13												
2	0				55	51	46	41	36	30	23										Shut-off 250 ft
	10			55	50	45	40	35	29	22											
	20		54	49	44	39	34	28	21												
	30	53	49	44	38	33	27	19													
	40	48	43	38	32	26	18														
	50	42	37	31	24	17															
	60	36	30	23	16																
Shut-off PSI		99	91	82	74	65	56	48	39	30	22										
3	0						53	49	46	42	38	27									Shut-off 337 ft
	10				55	52	49	45	41	37	33	21									
	20			55	52	48	45	41	37	32	26										
	30		54	51	48	44	40	36	32	27	22										
	40	54	51	47	44	40	35	31	26	21	15										
	50	50	47	43	39	35	30	25	20												
	60	46	42	38	34	30	25	19													
	70	42	38	33	29	24	18														
	80	37	33	28	23	17															
	90	32	27	22	16																
	100	27	21	16																	
Shut-off PSI		137	129	120	111	103	94	85	77	68	60	38									
5	0								54	52	48	43	38	32	26	17					Shut-off 575 ft
	10							55	54	52	50	46	41	36	30	22					
	20						55	53	52	50	48	43	38	33	26	18					
	30					55	53	51	50	48	46	41	36	30	23						
	40				55	53	51	49	47	46	44	39	33	27	19						
	50			54	53	51	49	47	45	43	42	36	31	23							
	60		54	52	51	49	47	45	43	41	39	34	27	19							
	70	54	52	50	48	47	45	43	41	39	37	31	24	15							
	80	52	50	48	46	44	43	41	39	36	34	28	20								
	90	50	48	46	44	42	40	38	36	34	31	25	16								
	100	48	46	44	42	40	38	36	34	31	28	21									
	110	45	44	42	40	38	35	33	31	28	25	17									
	120	43	41	39	37	35	33	30	28	25	21										
	130	41	39	37	35	32	30	27	24	21	17										
	140	39	37	34	32	29	27	24	20	17											
	150	36	34	32	29	26	23	20	16												
	160	28	25	22	18																
Shut-off PSI		240	232	223	214	206	197	188	180	171	162	141	119	97	76	54	32				
7.5	0										55	54	51	47	43	39	35	30	25	20	Shut-off 786 ft
	10									55	54	51	47	44	39	35	30	28	23	17	
	20								55	54	53	49	46	42	37	33	28	23	17		
	30							55	54	52	51	48	44	40	35	31	26	21	15		
	40							55	53	52	51	49	46	42	38	33	29	24	18		
	50						54	53	52	51	49	48	44	40	36	31	26	21	15		
	60					54	53	52	50	49	48	46	42	38	34	29	24	18			
	70			55	54	53	52	50	49	47	46	44	40	36	32	27	21	16			
	80		55	54	53	52	50	49	47	46	44	40	36	32	27	21	16				
	90	55	54	53	51	50	49	47	46	44	43	38	34	29	24	19					
	100	54	52	51	50	48	47	45	44	42	41	36	32	27	22	16					
	110	52	51	50	48	47	45	44	42	40	39	34	30	25	19						
	120	51	49	48	47	45	43	42	40	39	37	32	27	22	17						
	130	49	48	46	45	43	42	40	38	37	35	30	25	20							
	140	48	46	45	43	41	40	38	36	34	33	28	23	17							
	150	46	44	43	41	39	38	38	34	32	30	26	20								
	160	40	39	37	35	33	31	30	28	26	24	18									
Shut-off PSI		331	323	314	305	297	288	279	271	262	254	232	210	189	167	145	124	102	80	59	

- Notes:**
1. Performance shown does not include friction loss in the drop pipe.
 2. All performance data is based on rated motor nameplate voltage.
 3. Performances for former XP models are the same as 45 gpm models.

Submersible Pumps

4" High Capacity Pumps - 45 GPM



Capacities in U.S. Gallons per Minute

HP	PSI	Depth to Pumping Water Level, or Lift, in Feet. Shaded Areas Indicate Most Efficient Performance																								
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	650	700	750	800	850		
10	0												55	53	50	48	45	42	39	35	31	27	22	16		
	10												54	52	49	47	44	41	37	33	29	24	19			
	20												53	51	48	45	42	39	36	32	27	22	16			
	30											54	52	49	47	44	41	37	34	30	25	19				
	40											53	51	48	45	43	39	36	32	27	22	17				
	50										55	52	50	47	44	41	38	34	30	25	20					
	60								55	55	54	51	48	46	43	40	36	32	28	23	17					
	70								55	54	53	52	50	47	44	41	38	34	30	26	20	14				
	80							55	54	53	52	51	49	46	43	40	36	32	28	23	18					
	90					55	54	53	52	51	50	47	45	42	38	35	31	26	21	15						
	100				55	54	53	52	51	50	49	46	43	40	37	33	28	24	18							
	110			55	54	53	52	51	50	49	48	45	42	39	35	31	26	21	15							
	120		55	54	53	52	51	50	49	47	46	43	40	37	33	29	24	19								
	130	54	53	52	51	50	49	48	47	46	45	42	39	35	31	27	22	16								
	140	53	52	51	50	49	48	47	46	45	44	41	37	33	29	24	19									
	150	52	51	50	49	48	47	46	45	44	42	39	36	32	27	22	16									
	160	49	48	46	45	44	43	42	40	39	38	34	30	25	20											
Shut-off PSI		410	402	393	385	376	367	359	350	341	333	311	289	268	246	224	201	179	158	136	115	93	71	50		
		Shut-off 965 ft																								

- Notes:**
1. Performance shown does not include friction loss in the drop pipe.
 2. All performance data is based on rated motor nameplate voltage.
 3. Performances for former XP models are the same as 45 gpm models.

Submersible Pumps

4" High Capacity Pumps - 60 GPM

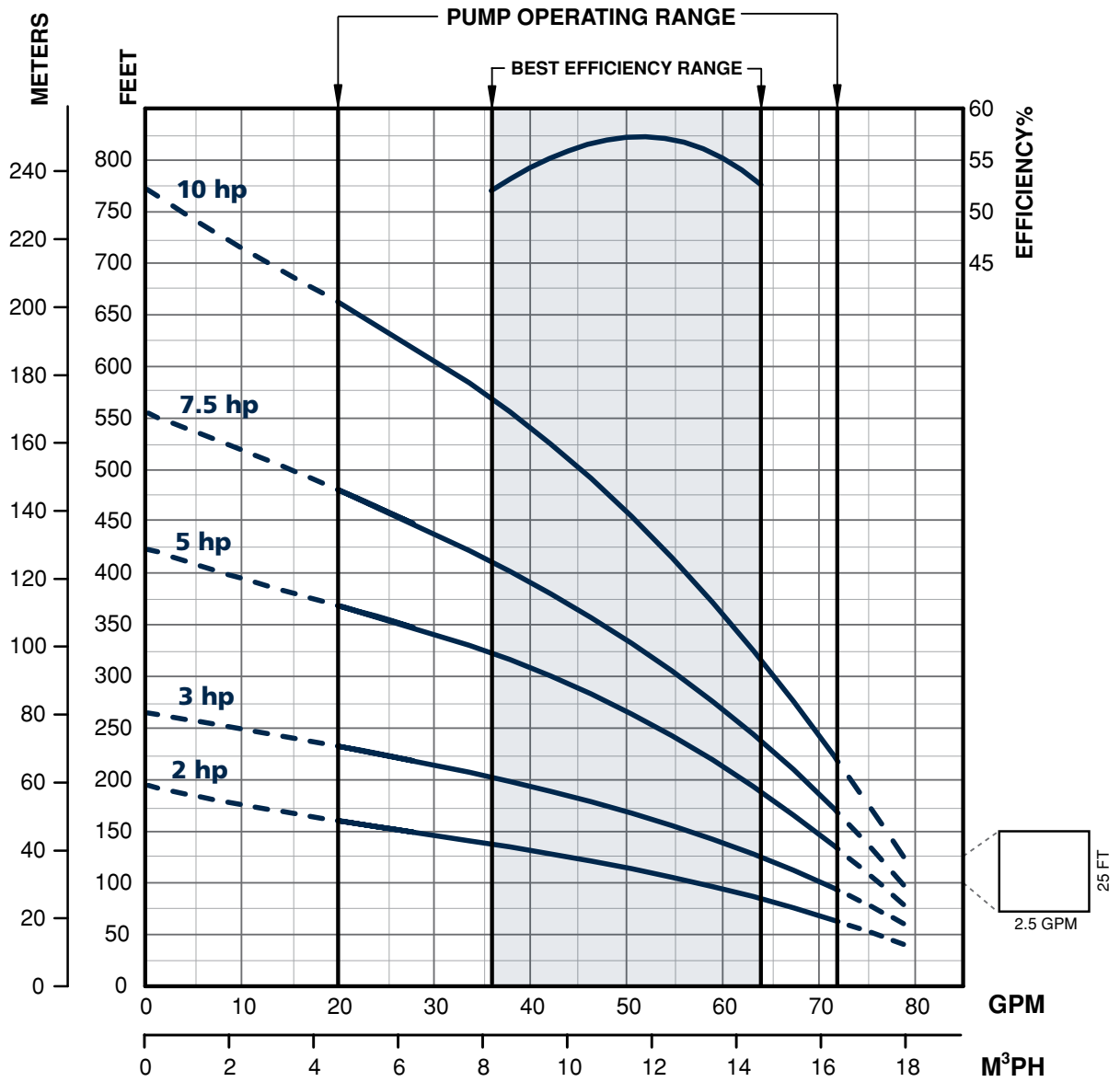
Capacities in U.S. Gallons per Minute

HP	PSI	Depth to Pumping Water Level, or Lift, in Feet. Shaded Areas Indicate Most Efficient Performance																			
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550			
2	0				66	57	47	35	21										Shut-off 195 ft		
	10			65	56	45	33	18													
	20	71	63	54	43	30															
	30	62	52	41	28																
	40	51	40	26																	
	50	38	24																		
	60	22																			
Shut-off PSI		76	67	58	50	41	32	24	15												
3	0					70	66	60	53	46	37							Shut-off 265 ft			
	10				69	65	59	62	44	35	25										
	20		73	69	64	56	51	43	34	24											
	30	72	68	63	57	50	42	32	22												
	40	67	62	56	49	40	31	20													
	50	61	55	48	39	29															
	60	54	46	37	28																
Shut-off PSI		106	97	89	80	71	63	54	45	37	28										
5	0							71	68	65	62	54	42	27				Shut-off 425 ft			
	10						70	68	65	62	59	49	36								
	20					70	67	64	61	58	54	43	28								
	30			72	69	67	64	61	57	54	50	37	20								
	40		72	69	68	63	60	57	53	49	44	29									
	50	71	69	66	63	60	56	53	48	43	38	21									
	60	68	65	62	59	56	52	48	43	37	31										
	70	65	62	59	55	51	47	42	36	30	23										
	80	61	58	55	51	46	41	35	28	21											
	90	58	54	50	45	40	34	27	20												
	100	54	49	45	39	33	26														
Shut-off PSI		175	167	158	149	141	132	123	115	106	97	76	54	32							
HP	PSI	20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	650	
7.5	0								71	68	63	56	48	38	27						Shut-off 555 ft
	10						72	70	68	66	59	52	43	33	22						
	20					72	70	68	65	63	56	48	39	28							
	30				72	70	67	65	63	60	53	44	34	23							
	40				71	69	67	65	62	60	57	49	40	29							
	50		71	69	67	64	62	59	56	53	45	35	24								
	60		71	69	66	64	61	59	56	53	49	40	30								
	70	70	68	66	64	61	58	55	52	48	45	36	25								
	80	68	66	63	61	58	55	52	48	45	41	31									
	90	65	63	60	57	54	51	48	44	41	37	26									
	100	62	60	57	54	51	47	44	40	36	32	20									
	110	59	57	53	50	47	43	39	35	31	26										
	120	56	53	50	46	43	39	35	30	26	21										
	130	52	49	46	42	38	34	30	25	20											
	140	49	45	41	37	33	29	24	19												
	150	45	41	37	33	28	24														
	160	31	26	21																	
Shut-off PSI		232	223	214	206	197	188	180	171	162	154	132	110	89	67	45					
10	0										69	65	61	57	51	45	39	31	22	Shut-off 772 ft	
	10									71	67	63	59	54	49	42	35	27			
	20							72	71	69	66	61	57	52	46	39	31	23			
	30						72	71	69	68	64	59	55	49	43	36	28				
	40					72	70	69	67	66	62	57	52	46	40	32	24				
	50				72	70	69	67	66	64	60	55	50	43	36	28					
	60			72	70	68	67	65	64	62	58	53	47	40	33	24					
	70		71	70	68	67	65	64	62	60	55	50	44	37	29	20					
	80		71	70	68	66	65	63	62	60	58	53	47	41	33	25					
	90	71	69	68	66	65	63	61	60	58	56	51	44	37	29	21					
	100	69	68	66	64	63	61	59	57	56	53	48	41	34	26						
	110	67	66	64	62	61	59	57	55	53	51	45	38	30	22						
	120	65	64	62	61	59	57	55	53	51	48	42	34	26							
	130	64	62	60	58	57	55	52	51	48	45	39	31	22							
	140	62	60	58	56	54	52	50	48	45	42	35	27								
	150	60	58	56	54	52	50	47	45	42	39	31	23								
	160	53	51	48	46	43	41	38	35	31	28										
Shut-off PSI		326	317	308	300	291	282	274	265	256	248	226	204	183	161	139	118	96	74	53	

- Notes:**
1. Performance shown does not include friction loss in the drop pipe.
 2. All performance data is based on rated motor nameplate voltage.
 3. Performances for former XP models are the same as 60 gpm models.

Submersible Pumps

4" High Capacity Pumps - 60 GPM



Submersible Pumps

4" High Capacity Pumps - 90 GPM

Capacities in U.S. Gallons per Minute

HP	PSI	Depth to Pumping Water Level, or Lift, in Feet. Shaded Areas Indicate Most Efficient Performance																				
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550				
2	0		113	92	67	48													Shut-off 120 ft			
	10	110	88	64	45																	
	20	84	61	40																		
	30	58	35																			
	40																					
	50																					
	60																					
Shut-off PSI		43	35	26	17	9																
3	0			110	96	79	64	49											Shut-off 167 ft			
	10		108	93	76	61	46															
	20	106	90	74	59	43																
	30	88	71	57	39																	
	40	69	55	35																		
	50	53	30																			
	60																					
Shut-off PSI		64	55	46	38	29	20	12														
5	0					113	106	96	85	74	64	41							Shut-off 285 ft			
	10				112	104	94	83	72	63	55											
	20			111	103	92	81	71	62	53	44											
	30		110	101	91	80	69	60	52	42												
	40	100	100	89	78	68	59	51	40													
	50	98	87	76	66	58	49	38														
	60	85	75	65	56	48	35															
	70	73	63	55	46	33																
	80	62	54	45	30																	
	90	53	43																			
	100	41																				
Shut-off PSI		115	106	97	89	80	71	63	54	45	37	15										
7.5	0						116	112	107	101	94	76	60	46					Shut-off 425 ft			
	10					115	111	108	100	93	86	68	54	38								
	20				115	110	105	99	92	85	77	61	47									
	30			114	109	104	98	91	83	76	70	55	40									
	40		113	109	103	96	90	82	75	69	62	49										
	50	113	108	102	95	88	81	74	68	61	56	41										
	60	107	101	94	87	80	73	67	61	55	50	31										
	70	100	93	86	79	72	66	60	54	49	42											
	80	92	85	78	71	65	59	53	48	41	33											
	90	84	77	70	64	58	53	47	40	31												
	100	76	69	63	57	52	46	39														
	110	68	62	56	51	45	38															
	120	61	55	50	44	36																
	130	55	49	43	35																	
	140	48	42	33																		
	150	41	32																			
	160																					
Shut-off PSI		175	167	158	149	141	132	123	115	106	97	76	54	32								
HP	PSI	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	480	500	550	600	
10	0					122	119	116	113	109	106	99	91	83	75	65	54	42	35	11		Shut-off 565 ft
	10				122	119	116	112	109	106	102	95	87	78	69	59	48	34	25			
	20			121	118	115	112	108	105	101	98	90	82	73	64	53	40	24	13			
	30		121	118	115	111	108	104	101	97	94	86	77	68	57	46	31	11				
	40	120	117	114	111	107	104	100	97	93	89	81	72	62	51	38	21					
	50	117	114	110	107	103	100	96	92	88	84	76	66	56	44	29	7					
	60	113	110	106	103	99	96	92	88	84	79	70	60	49	35	18						
	70	109	106	102	99	95	91	87	83	79	74	65	54	41	26	2						
	80	105	102	98	94	91	87	82	78	74	69	59	47	33	14							
Shut-off PSI		236	227	219	210	201	193	184	175	167	158	141	123	106	89	71	54	37	28	6		

- Notes:** 1. Performance shown does not include friction loss in the drop pipe.
2. All performance data is based on rated motor nameplate voltage.

Submersible Pumps

4" High Capacity Pumps - 90 GPM

