

# Submersible Pumps

## 4" High Capacity Pumps

### Features & Ordering Information



# J-CLASS

## SandHandler

### 4" High Capacity

#### 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 corrosion-resistant 4" submersible motors
- 2" NPT discharge
- Check valve must be ordered separately. See page 78.

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# Submersible Pumps

## 4" High Capacity Pumps Features & Ordering Information

### Stainless Steel Units Ordering Information:

(See pgs. 2-3 for model number explanation)

1 - 10 HP 4" PUMP ENDS						
GPM	HP	STAGES	ORDERING INFO.		DIMENSIONS	WT.
			MODEL NO.	ORDER NO.	PUMP END ONLY	
35	1	6	35JS1S4-PE	92525807	15.00	9
	1.5	8	35JS15S4-PE	92525815	17.50	10
	2	10	35JS25S4-PE	92525823	20.00	11
	3	14	35JS3S4-PE	92525831	25.00	13
	5	22	35JS5S4-PE	92525849	35.00	17
	7.5	34	35JS7S4-PE	92525851	52.17	25
	10	42	35JS10S4-PE	92525853	62.23	31
45	1.5	6	45JS15S4-PE	92525856	21.00	15
	2	8	45JS2S4-PE	92525872	25.50	16
	3	11	45JS3S4-PE	92525898	32.25	19
	5	18	45JS5S4-PE	92525914	47.75	25
	7.5	26	45JS7S4-PE	92525922	65.25	33
	10	31	45JS10S4-PE	92525925	78.30	38
60	2	6	60JS2S4-PE	92525930	21.00	15
	3	8	60JS3S4-PE	92525948	25.50	17
	5	13	60JS5S4-PE	92525963	36.75	21
	7.5	17	60JS7S4-PE	92525971	45.25	25
	10	24	60JS10S4-PE	92525989	61.00	31
90	2	5	90JS2S4-PE	92526003	22.56	15
	3	7	90JS3S4-PE	92526011	28.56	17
	5	12	90JS5S4-PE	92526037	43.56	21
	7.5	19	90JS7S4-PE	92526045	64.50	27

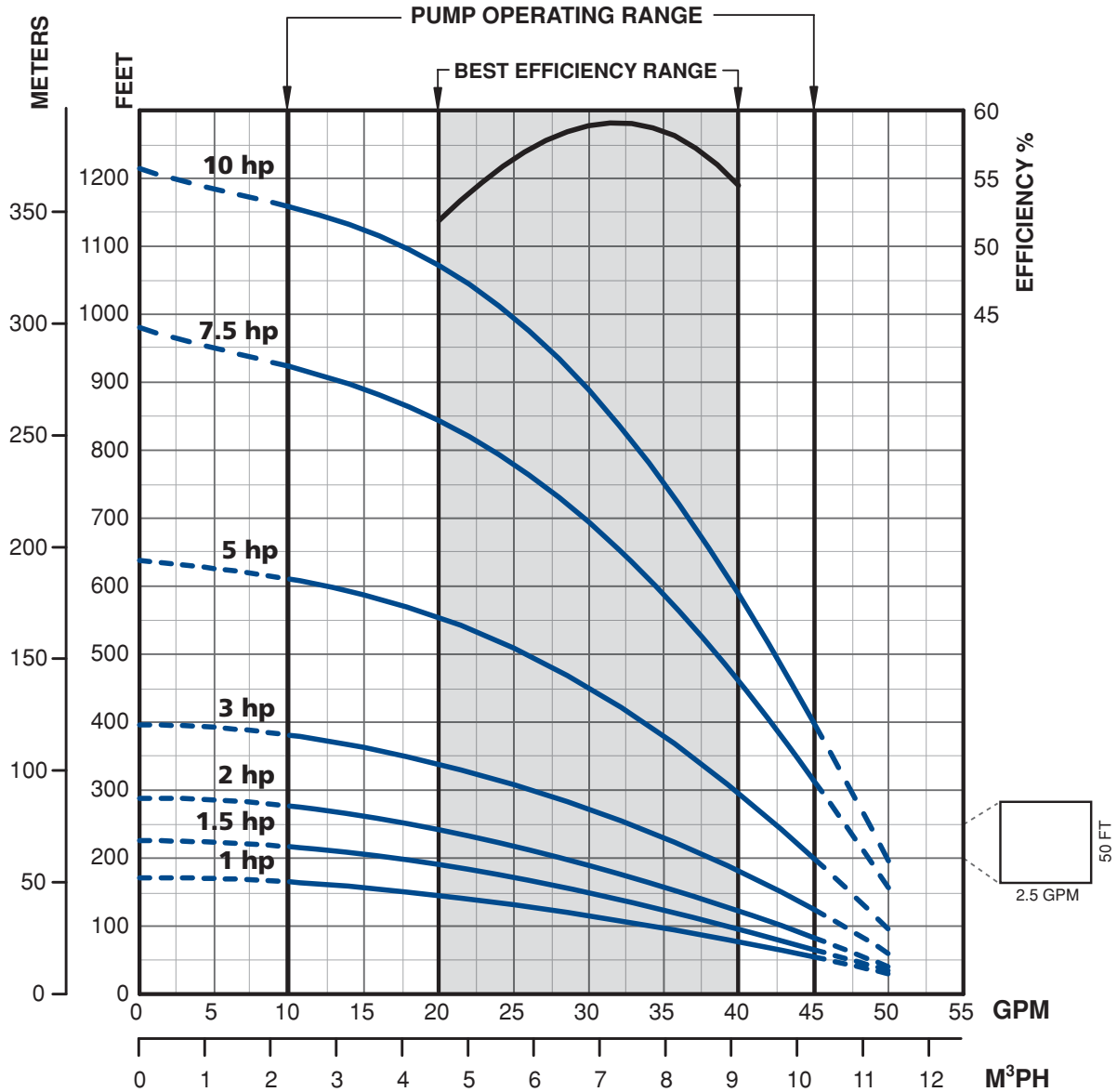
**Note:** All dimensions are in inches. Discharge is 2" NPT. Maximum diameter across cable guard is 3.90" on all models. All weights in pounds.

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	35JS1S4-2W230	92526128	33	35JS1S4-3W230	92526052	33
	1.5	8	230	35JS15S4-2W230	92526136	41	35JS15S4-3W230	92526060	39
45	1.5	6	230	45JS15S4-2W230	92526144	46	45JS15S4-3W230	92526086	44

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

# Submersible Pumps

## 4" High Capacity Pumps 35 gpm Performance



### 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											

# Submersible Pumps

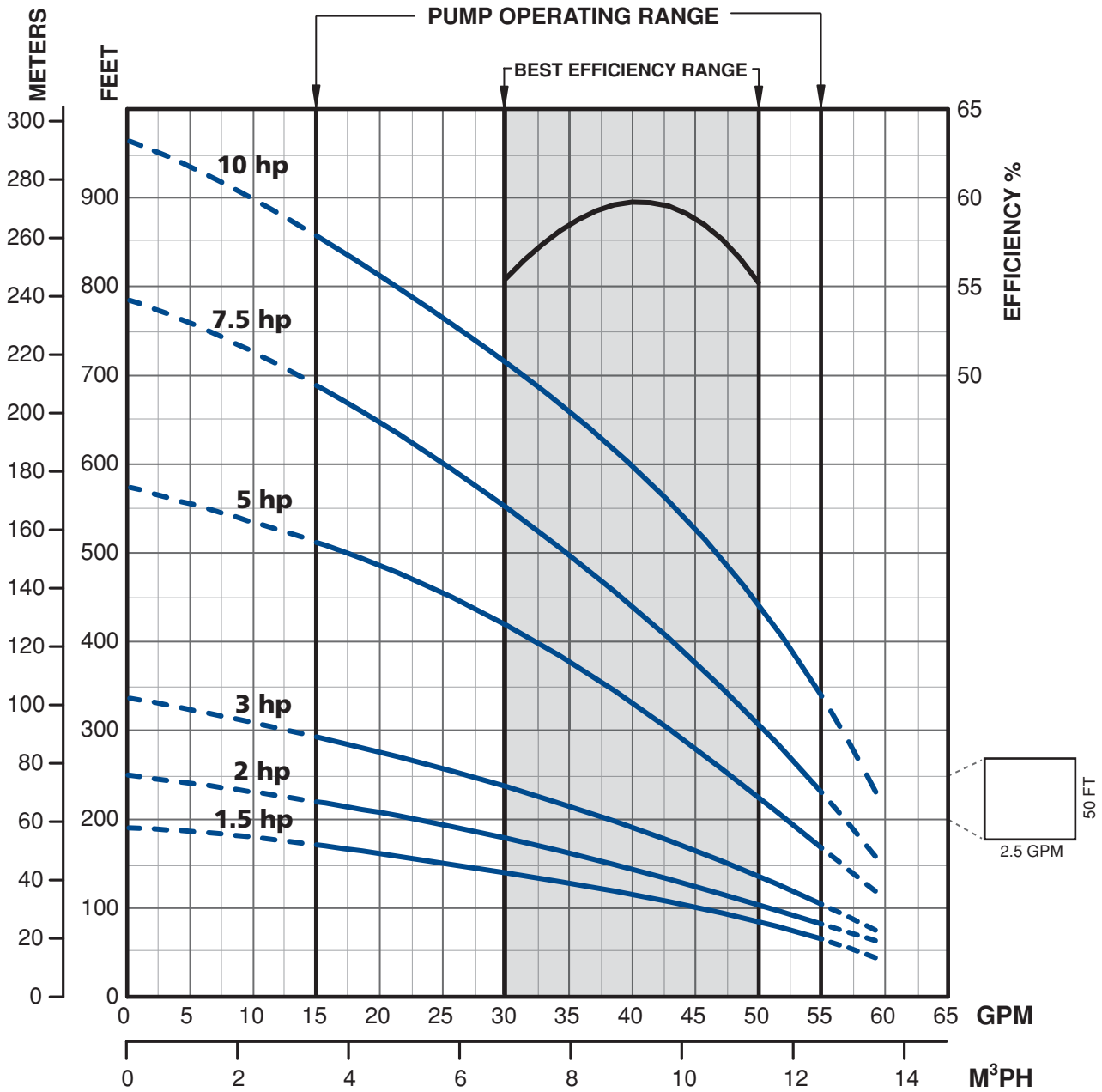
## 4" High Capacity Pumps 35 gpm Performance

HP	PSI	20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600			
1.5	0			45	43	40	36	31	27	23	18									Shut-off 226 ft		
	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									Shut-off 288 ft		
	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								Shut-off 396 ft		
	10				45	44	42	40	38	36	29	23	12									
	20			45	44	42	40	38	35	33	27	19										
	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		Shut-off 638 ft		
	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	19	13	Shut-off 980 ft	
	10							45	43	41	39	38	36	33	31	29	26	22	17	10		
	20							44	42	40	39	37	35	32	30	27	24	20	14			
	30					45	43	41	40	38	36	34	31	29	26	22	17	11				
	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	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	56	35		
10	0				45	44	43	41	40	38	36	35	33	31	30	28	25	22	17	11	Shut-off 1215 ft	
	10				45	43	42	41	39	37	36	34	32	31	29	26	24	20	15			
	20				45	44	43	41	40	38	37	35	33	32	30	28	25	22	18	12		
	30				45	43	42	41	39	38	36	34	32	31	29	27	24	20	15			
	40			45	44	43	41	40	38	37	35	33	32	30	28	25	22	18	12			
	50			45	44	42	41	39	38	36	34	33	31	29	27	24	20	16				
	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	71	50	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 45 gpm Performance





# Submersible Pumps

## 4" High Capacity Pumps 45 gpm Performance

**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
<b>1.5</b>	0				52	46	38	30	21											
	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											
<b>2</b>	0				55	51	46	41	36	30	23									
	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									
<b>3</b>	0						53	49	46	42	38	27								
	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								
<b>5</b>	0									54	52	48	43	38	32	26	17			
	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			

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

Continued on next page...

# Submersible Pumps

## 4" High Capacity Pumps 45 gpm Performance

### 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
7.5	0											54	51	47	43	39	35	30	25	20
	10										55	52	49	45	41	37	33	28	23	17
	20									55	54	51	47	44	39	35	30	26	20	
	30								55	54	53	49	46	42	37	33	28	23	17	
	40							55	54	52	51	48	44	40	35	31	26	21	15	
	50						55	53	52	51	49	46	42	38	33	29	24	18		
	60					54	53	52	51	49	48	44	40	36	31	26	21	15		
	70			55	54	53	52	50	49	48	46	42	38	34	29	24	18			
	80		55	54	53	51	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

Shut-off 786 ft

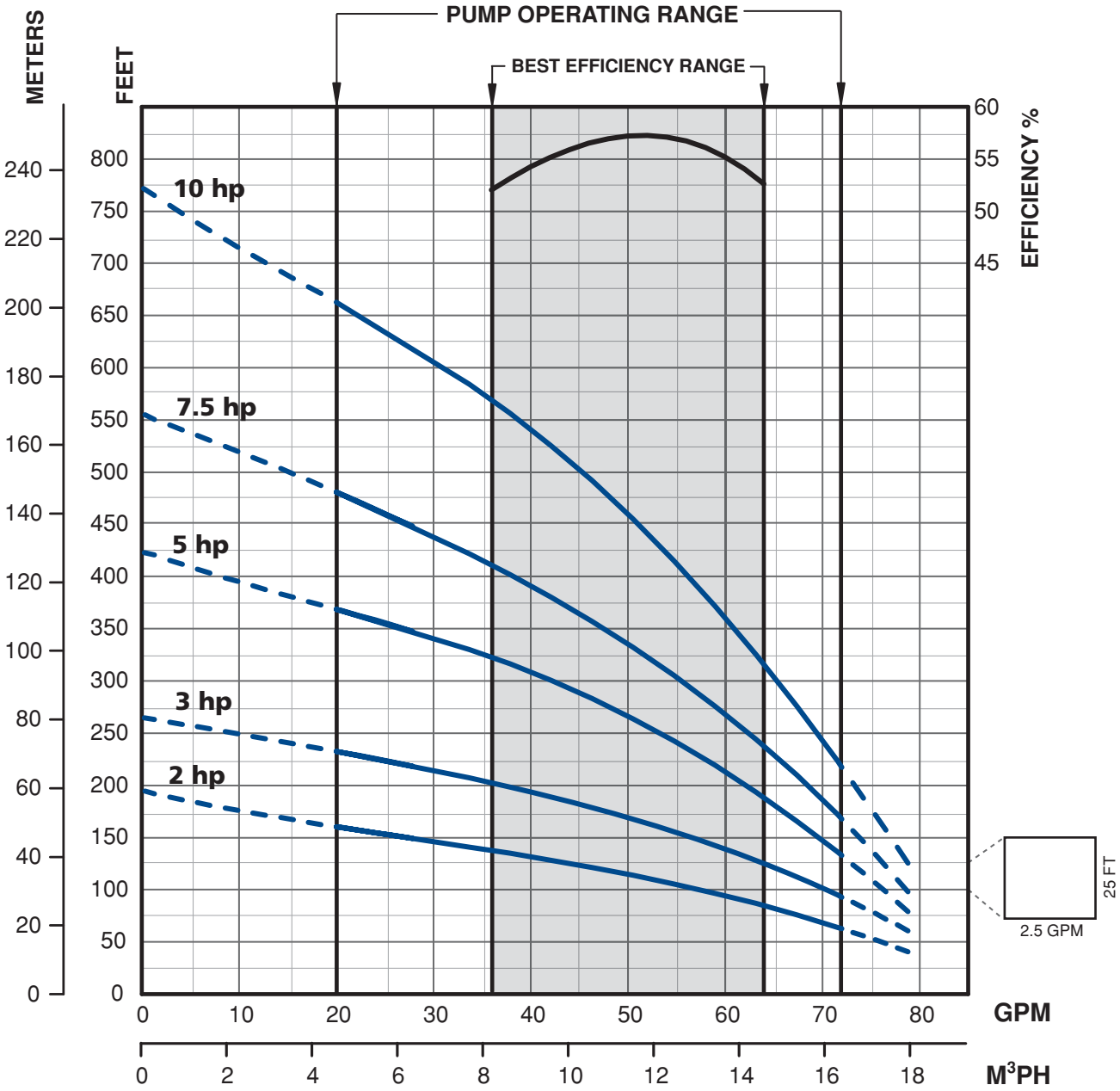
HP	PSI	20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	650	700	750	800	850
10	0												54	52	50	47	43	40	36	31	27	21	16	
	10												55	53	51	48	45	42	38	34	29	24	19	
	20												55	52	50	47	44	40	36	32	27	22	16	
	30												54	51	49	46	42	38	34	29	25	19		
	40											55	53	50	47	44	40	36	32	27	22	17		
	50											54	51	49	46	42	39	34	30	25	20			
	60										55	53	50	47	44	41	37	32	28	23	17			
	70									55	54	52	49	46	43	39	35	30	25	20	15			
	80						55	54	53	52	51	48	45	41	37	33	28	23	18					
	90						55	54	54	53	52	49	46	43	39	35	31	26	21	15				
	100						55	54	54	53	52	51	48	45	41	37	33	28	23	18				
	110					55	54	53	53	52	51	49	47	43	39	35	31	26	21	15				
	120				55	54	53	52	51	50	49	48	45	41	38	33	29	24	19					
	130			55	54	53	52	51	50	49	48	47	43	40	36	31	27	21	16					
	140	55	54	53	52	51	50	49	48	47	45	42	38	34	29	24	19							
	150	54	53	51	51	50	49	48	46	45	44	40	36	32	27	22	16							
	160	50	49	48	47	46	44	43	42	40	38	34	30	25	20									
Shut-off PSI		409	400	392	383	374	366	357	348	340	331	309	288	266	244	223	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 Performance





# Submersible Pumps

## 4" High Capacity Pumps

60 gpm Performance

### 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					

- 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 Performance

### Capacities in U.S. Gallons per Minute:

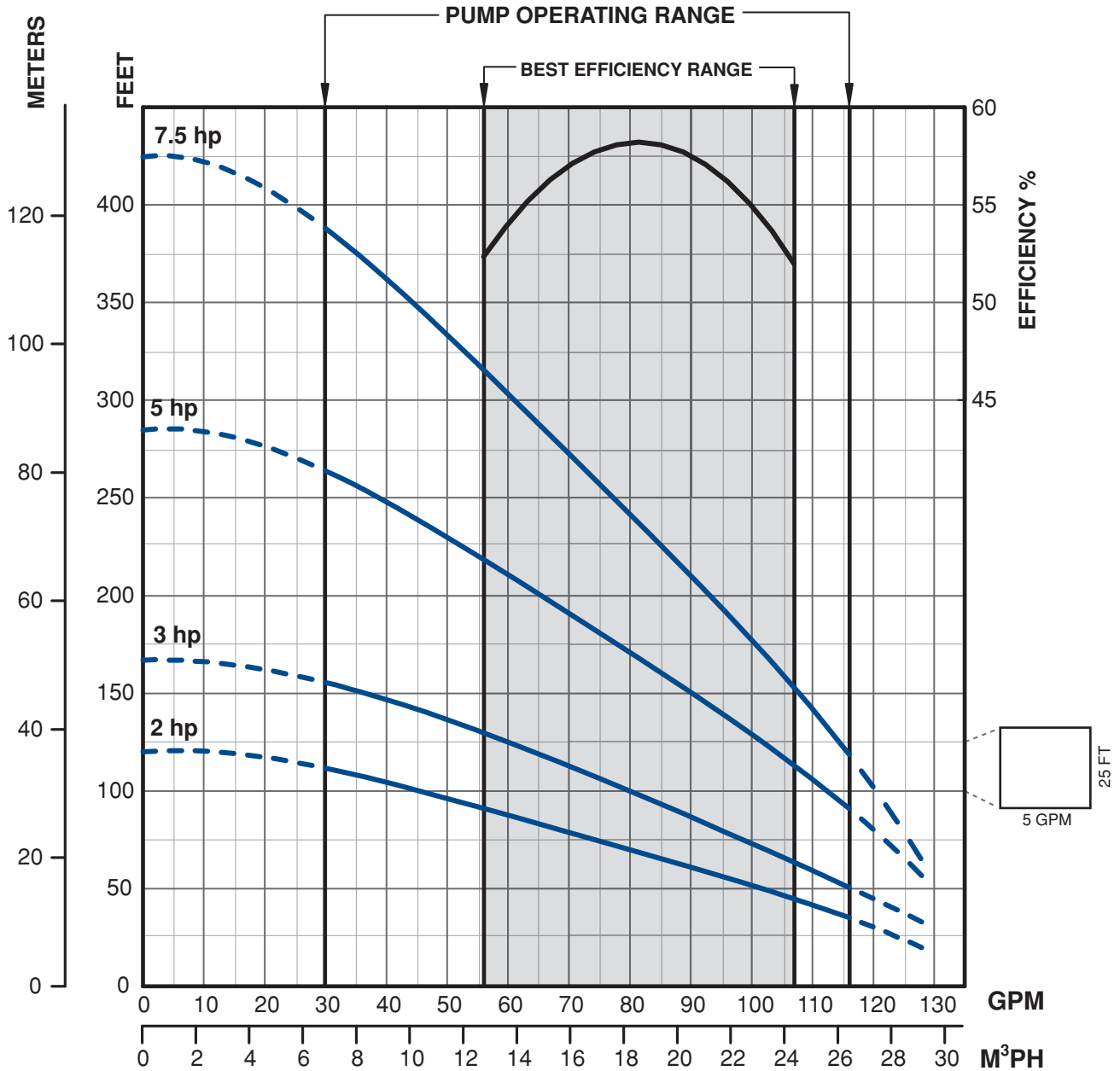
HP	PSI	DEPTH TO PUMPING WATER LEVEL, OR LIFT, IN FEET.																		
		SHADED AREAS INDICATE MOST EFFICIENT PERFORMANCE																		
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	650
<b>7.5</b>	0									71	68	63	56	48	38	27				
	10							72	70	68	66	59	52	43	33	22				
	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				
<b>10</b>	0										69	65	61	57	51	45	39	31	22	
	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

90 gpm Performance





# Submersible Pumps

## 4" High Capacity Pumps 90 gpm Performance

**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					

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