

# PENTAIR STA-RITE

## 90 GPM Series

Stainless Steel 4" Hi-Flo Submersible Pumps



### APPLICATIONS

**Water Systems...**for residential, industrial, commercial, multiple housing, and farm use.

### SPECIFICATIONS

**Discharge:** 300 grade stainless steel with 2" NPT Threads

**Top Bearing:** Nylatron®

**Top Bearing Journal:** 300 grade stainless steel

**Diffuser Assembly:** Noryl® (20% glass filled)

**Impellers:** Noryl (20% glass filled)

**Bowls:** Noryl (20% glass filled)

**Diffuser Bearing:** Nylatron

**Diffuser Bearing Journal:** 300 grade stainless steel

**Shaft:** 300 grade stainless steel, 7/16" hex stock

**Coupling:** 300 grade stainless steel

**Shell:** 300 grade stainless steel

**Motor Adapter:** 300 grade stainless steel

**Suction Screen:** 300 grade stainless steel

**Cable Guard:** 300 grade stainless steel

**Fastener:** 300 grade stainless steel

### FEATURES

**Discharge:** Heavy-duty 300 grade stainless steel construction provides smooth water passage to column pipe. Large wrench flats and rope hole.

**Top Bearing:** Self-lubricated top bearing ensures long bearing life.

**Impellers:** 20% glass-reinforced Noryl to resist abrasives and provide smooth water passage for minimal friction loss.

**Diffuser Bearing:** Bearings at each stage provide radial protection and stability, and excellent resistance to sand damage.

**Motor Bracket:** 300 grade precision cast stainless steel. Incorporates an efficient hydraulic design for maximum volume and access to motor mounting nuts.

**Shaft:** 300 grade "treated" stainless steel pump shaft is corrosion-resistant. The hex shape offers generous impeller drive surfaces.

**Motor Coupling:** Pressed-on, sintered 300 grade stainless steel for maximum corrosion resistance provides trouble-free transfer of power between motor and pump shaft.

**Shell:** Heavy-gauge, 300 series stainless steel pump shell is durable and offers high corrosion resistance.

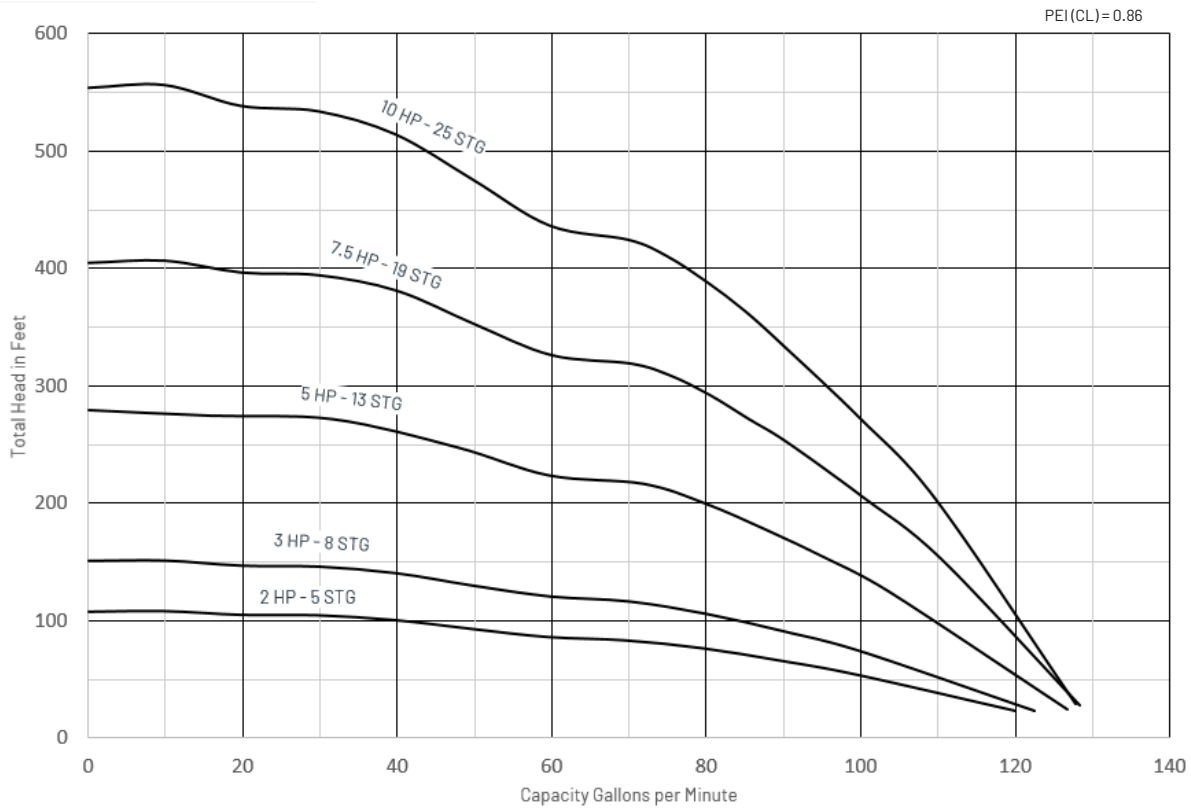
**Intake Screen:** 300 series stainless steel material offers maximum corrosion resistance and protects against damaging solids entering the pump.

The 90 GPM Stainless Steel 4" High-Flo Submersible Pumps deliver efficient and dependable performance even in rough, aggressive water. New stack design delivers better efficiency and head per stage than previous model.

## 90 GPM Series

Stainless Steel 4" Hi-Flo Submersible Pumps

### PUMP PERFORMANCE



Tested and rated in accordance with Water Systems Council Standards.

Pumps installed with a Pro-Source<sup>®</sup> tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

Check valve sold separately.

# 90 GPM Series

Stainless Steel 4" Hi-Flo Submersible Pumps

PUMP PERFORMANCE (Capacity in gallons per minute)																								
HP	PSI	PUMPING DEPTH IN FEET																			SHUT-OFF HEAD			
		20	40	60	80	100	125	150	175	200	225	250	275	300	325	350	375	400	425	540	475	500	FEET	PSI
2	0	-	110	94	75	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107	46	
	20	90	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	30	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
3	0	-	115	107	96	84	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	151	65	
	20	104	93	80	53	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	30	91	78	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	40	75	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	50	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
5	0	-	-	119	115	110	104	97	89	80	59	46	-	-	-	-	-	-	-	-	-	279	120	
	20	-	113	108	103	98	90	81	63	48	32	-	-	-	-	-	-	-	-	-	-			
	30	112	108	102	97	91	82	69	49	34	-	-	-	-	-	-	-	-	-	-	-			
	40	107	102	96	90	83	72	50	36	-	-	-	-	-	-	-	-	-	-	-	-			
	50	100	95	89	82	73	51	37	-	-	-	-	-	-	-	-	-	-	-	-	-			
	60	94	87	81	70	52	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
7-1/2	0	-	-	-	121	119	115	111	106	101	96	91	84	78	61	51	43	-	-	-	-	407	176	
	20	-	-	118	115	111	107	102	97	92	85	79	68	52	44	-	-	-	-	-	-			
	30	-	117	114	111	107	103	98	92	86	80	71	53	45	31	-	-	-	-	-	-			
	40	117	114	110	107	103	98	93	87	81	72	53	46	33	-	-	-	-	-	-	-			
	50	113	110	106	103	98	93	87	81	73	54	46	34	-	-	-	-	-	-	-	-			
	60	109	106	101	98	94	88	81	74	55	47	35	-	-	-	-	-	-	-	-	-			
10	0	-	-	-	-	121	118	116	113	110	107	103	100	96	92	87	83	77	69	56	50	44	556	240
	20	-	-	-	118	116	113	110	109	104	100	96	92	88	83	78	71	57	51	45	37	-		
	30	-	-	118	116	114	111	108	104	100	96	92	88	84	79	72	57	51	46	38	-	-		
	40	-	118	116	114	111	108	104	101	97	92	89	84	79	73	58	51	46	39	-	-	-		
	50	118	115	113	111	108	105	101	97	93	89	84	80	73	58	52	47	40	-	-	-	-		
	60	115	113	110	108	105	101	98	93	89	85	80	74	59	53	47	40	-	-	-	-	-		

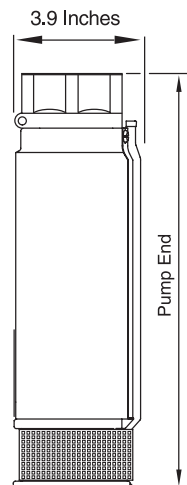
CAUTION: DO NOT use pump at flow rates indicated by the symbol '—'. To do so can cause premature failure of unit. Pump warranty void when failure occurs under these conditions.

## ORDERING INFORMATION

MOTOR TYPE	HP	STGS.	PH	VOLT	PUMP END			MOTOR		CONTROL BOX	
					CATALOG NUMBER	LENGTH INCHES*	WEIGHT POUNDS*	CATALOG NUMBER	WEIGHT POUNDS*	CATALOG NUMBER	WEIGHT POUNDS*
3 WIRE	2	5	1	230	L90HF20-01	22	15	P43B0020A2	31	SMC-CR2021	7
			3	230	L90HF20-01	22	15	P43B0020A3	28		
			3	460	L90HF20-01	22	15	P43B0020A4	28		
	3	8	1	230	L90HF30-01	32-1/8	17	P43B0030A2	40	SMC-CR3021	7
			3	230	L90HF30-01	32-1/8	17	P43B0030A3	32		
			3	460	L90HF30-01	32-1/8	17	P43B0030A4	32		
	5	13	1	230	L90HF50-01	48-7/8	22	P43B0050A2	70	SMC-CR5021	8
			3	230	L90HF50-01	48-7/8	22	P43B0050A3	55		
			3	460	L90HF50-01	48-7/8	22	P43B0050A4	55		
	7-1/2	19	3	230	L90HF75-01	69-1/8	33	P43B0075A3	70		
			3	460	L90HF75-01	69-1/8	33	P43B0075A4	70		
	10	25	3	460	L90HF100-01	89-3/8	46	P43B0100A4	78		

\*Length and Weight are approximate. NOTE: Pump end and motor purchased separately. Check valve sold separately.

## OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

For lengths, refer to Ordering Information table.



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