



# 4" submersible pumps – 10, 15, 20, and 30 gpm



*Precision-engineered, corrosion-resistant Series J Composite Pumps in 10, 15, 20 and 30 GPM deliver efficient, dependable performance even in rough, aggressive water. Heads to over 650 feet and capacities to 45 GPM. Built to deliver long-term, trouble-free service.*

*These pumps feature the SignaSeal™ staging system. Floating impeller design resists sand and reduces sand locking.*

## APPLICATIONS

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

## SPECIFICATIONS

- Shell** – Stainless steel
- Diameter** – 3-7/8"
- Discharge** – Fiberglass-reinforced thermoplastic
- Discharge Bearing** – Nylatron®
- Intermediate Bearing** – (On larger units) Polycarbonate, nitrile rubber and stainless steel
- Impellers** – Acetal
- Diffusers** – Polycarbonate
- Suction Caps** – Polycarbonate with stainless steel insert
- Thrust Pads** – Proprietary spec.
- Shaft and Coupling** – Stainless steel
- Intake** – Fiberglass-reinforced thermoplastic
- Intake Screen** – Polypropylene
- Cable Guard** – Stainless steel
- Check Valve** – Acetal
- Agency Listings** – CSA

## SERIES J COMPOSITE

### FEATURES

**Staging System** – Our proven SignaSeal™ staging system incorporates a harder-than-sand ceramic wear surface that when incorporated with our floating impeller design, greatly reduces problems with abrasives, sand lock-up and running dry.

**Discharge** – Corrosion-resistant fiberglass reinforced thermoplastic for durability in aggressive water. Large octagon wrench area for ease of installation.

**Discharge Bearing** – Exclusive self-lubricating Nylatron® bearing resists wear from sand.

**Intake** – Corrosion-resistant fiberglass reinforced thermoplastic for durability in aggressive water.

**Shaft** – Positive drive from 7/16" hexagonal heavy-duty 300 grade stainless steel.

**Coupling** – Stainless steel press fit to pump shaft. Couples to all standard NEMA motors.

**Shell** – Heavy-walled corrosion-resistant stainless steel. Threaded for easy servicing.

**Hardware** – All screws, washers and nuts are corrosion-resistant 300 grade stainless steel.

**Check Valve** – Durable internal poppet type check valve.

**Cable Guard** – Corrosion-resistant stainless steel guard protects motor leads. Tapered ends prevent pump from catching on well.

**Intake Screen** – Corrosion-proof polypropylene.

**PENTEK® XE Motor** – 2 and 3 wire NEMA standard all stainless construction water-filled motors.

Nylatron® is a registered trademark of Polymer Corp. PENTEK® is a registered trademark of Pentair Water. PRO-Source™, SignaSeal™, and TrimLine™ are trademarks of Pentair Water.

In order to provide the best products possible, specifications are subject to change.



# 4" submersible pumps – 10, 15, 20, and 30 gpm

## ORDERING INFORMATION

GPM	Motor Type	HP	Stgs.	PH	Volt	Assembled Pump			Pump End			Motor		Control Box		
						Catalog Number	Length Inches*	Weight Pounds*	Catalog Number	Length Inches*	Weight Pounds*	Catalog Number	Weight Pounds*	Catalog Number	Weight Pounds*	
10**	2 Wire	1/2	6	1	115	B10P4JP05121	22	27	SL10P4CJ	12	8-1/2	P42B0005A1	19			
		1/2	6	1	230	B10P4JP05221	22	27	SL10P4CJ	12	8-1/2	P42B0005A2	19			
		3/4	8	1	230	B10P4JP07221	25	30	SL10P4DJ	13-3/4	9-1/2	P42B0007A2	23			
		1	10	1	230	B10P4JP10221	28	34	SL10P4EJ	15-1/2	10-1/4	P42B0010A2	25			
		1-1/2	14	1	230	B10P4JP15221	34	41	SL10P4FJ	19	12	P42B0015A2	29			
		1-1/2	14	3	230				SL10P4FJ	19	12	P42B0015A3	23			
	3 Wire	1/2	6	1	115	B10P4JP05131	22	27	SL10P4CJ	12	8-1/2	P43B0005A1	19	SMC-IR0511	4	
		1/2	6	1	230	B10P4JP05231	22	27	SL10P4CJ	12	8-1/2	P43B0005A2	18	SMC-CR0521	4	
		3/4	8	1	230	B10P4JP07231	25	30	SL10P4DJ	13-3/4	9-1/2	P43B0007A2	21	SMC-CR0721	4	
		1	10	1	230	B10P4JP10231	28	34	SL10P4EJ	15-1/2	10-1/4	P43B0010A2	23	SMC-CR1021	4	
		1-1/2	14	1	230	B10P4JP15231	32-3/4	41	SL10P4FJ	19	12	P43B0015A2	27	SMC-CR1521	7	
		1-1/2	14	3	460				SL10P4FJ	19	12	P43B0015A3	23			
	15**	2 Wire	1/2	5	1	115	B15P4JP05121	22-1/4	27	SL15P4CJ	12-1/4	9	P42B0005A1	19		
			1/2	5	1	230	B15P4JP05221	22-1/4	27	SL15P4CJ	12-1/4	9	P42B0005A2	19		
3/4			7	1	230	B15P4JP07221	25-3/4	31	SL15P4DJ	14-1/2	10	P42B0007A2	23			
1			9	1	230	B15P4JP10221	29-1/4	35	SL15P4EJ	16-3/4	11	P42B0010A2	25			
1-1/2			12	1	230	B15P4JP15221	35-1/4	43	SL15P4FJ	20-1/4	13	P42B0015A2	29			
1-1/2			12	3	230				SL15P4FJ	20-1/4	13	P42B0015A3	23			
3 Wire		1/2	5	1	115	B15P4JP05131	22-1/4	27	SL15P4CJ	12-1/4	9	P43B0005A1	19	SMC-IR0511	4	
		1/2	5	1	230	B15P4JP05231	22-1/4	27	SL15P4CJ	12-1/4	9	P43B0005A2	18	SMC-CR0521	4	
		3/4	7	1	230	B15P4JP07231	25-3/4	31	SL15P4DJ	14-1/2	10	P43B0007A2	21	SMC-CR0721	4	
		1	9	1	230	B15P4JP10231	29-1/4	35	SL15P4EJ	16-3/4	11	P43B0010A2	23	SMC-CR1021	4	
		1-1/2	12	1	230	B15P4JP15231	33-3/4	41	SL15P4FJ	20-1/4	13	P43B0015A2	27	SMC-CR1521	7	
		1-1/2	12	3	460				SL15P4FJ	20-1/4	13	P43B0015A3	23			
20**		2 Wire	3/4	5	1	230	B20P4JP07221	23-3/4	30	SL20P4DJ	12-1/2	8-1/2	P42B0007A2	23		
			1	7	1	230	B20P4JP10221	27-1/4	34	SL20P4EJ	14-3/4	9-3/4	P42B0010A2	25		
	1-1/2		9	1	230	B20P4JP15221	32	39	SL20P4FJ	16-3/4	10-3/4	P42B0015A2	29			
	1-1/2		9	3	230				SL20P4FJ	16-3/4	10-3/4	P42B0015A3	23			
	3 Wire	3/4	5	1	230	B20P4JP07231	23-3/4	30	SL20P4DJ	12-1/2	8-1/2	P43B0007A2	21	SMC-CR0721	4	
		1	7	1	230	B20P4JP10231	27-1/4	34	SL20P4EJ	14-3/4	9-3/4	P43B0010A2	23	SMC-CR1021	4	
		1-1/2	9	1	230	B20P4JP15231	30-1/2	39	SL20P4FJ	16-3/4	10-3/4	P43B0015A2	27	SMC-CR1521	7	
		1-1/2	9	3	230				SL20P4FJ	16-3/4	10-3/4	P43B0015A3	23			
		1-1/2	9	3	460				SL20P4FJ	16-3/4	10-3/4					
		2	12	1	230				SL20P4GJ	20-1/4	12-1/2	P43B0020A2	31	SMC-CR2021	7	
	30**	2 Wire	1	5	1	230	B30P4JP10221	26-1/2	35	SL30P4EJ	14	10	P42B0010A2	25		
			1-1/2	6	1	230	B30P4JP15221	30-1/2	39	SL30P4FJ	15-1/4	11	P42B0015A2	29		
		3 Wire	1	5	1	230	B30P4JP10231	26-1/2	35	SL30P4EJ	14	10	P43B0010A2	23	SMC-CR1021	4
			1-1/2	6	1	230	B30P4JP15231	29	39	SL30P4FJ	15-1/4	11	P43B0015A2	27	SMC-CR1521	4
1-1/2			6	3	230				SL30P4FJ	15-1/4	11	P43B0015A3	23			
1-1/2			6	3	460				SL30P4FJ	15-1/4	11					
2			8	1	230				SL30P4GJ	18-1/4	12	P43B0020A2	31	SMC-CR2021	7	
2			8	3	230				SL30P4GJ	18-1/4	12	P43B0020A3	23			
2		8	3	460				SL30P4GJ	18-1/4	12						

\*Length and Weight are approximate.

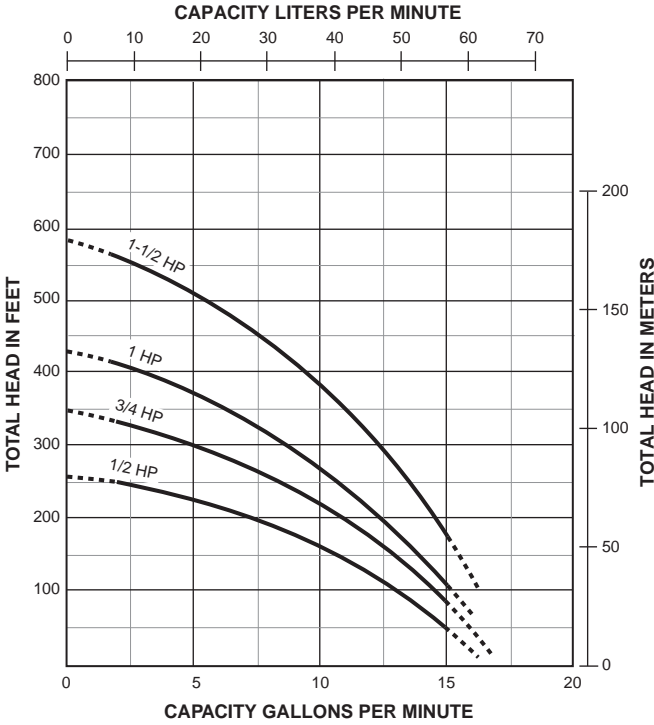
\*\*For 10 GPM, 15 GPM, 20 GPM, and 30 GPM discharge is 1-1/4" NPT.

**NOTE:** On 2 HP and larger pumps – Motor, Control Box or Magnetic Starter must be ordered separately.

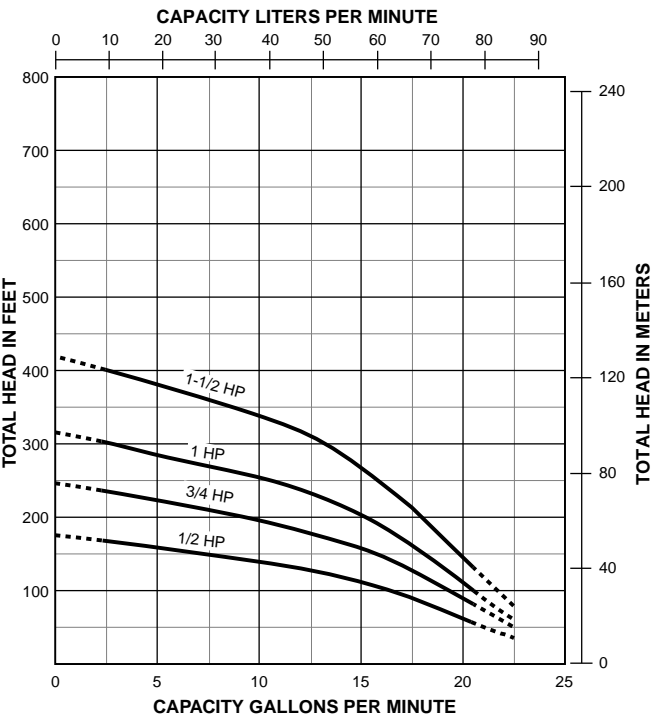


# 4" submersible pumps – 10, 15, 20, and 30 gpm

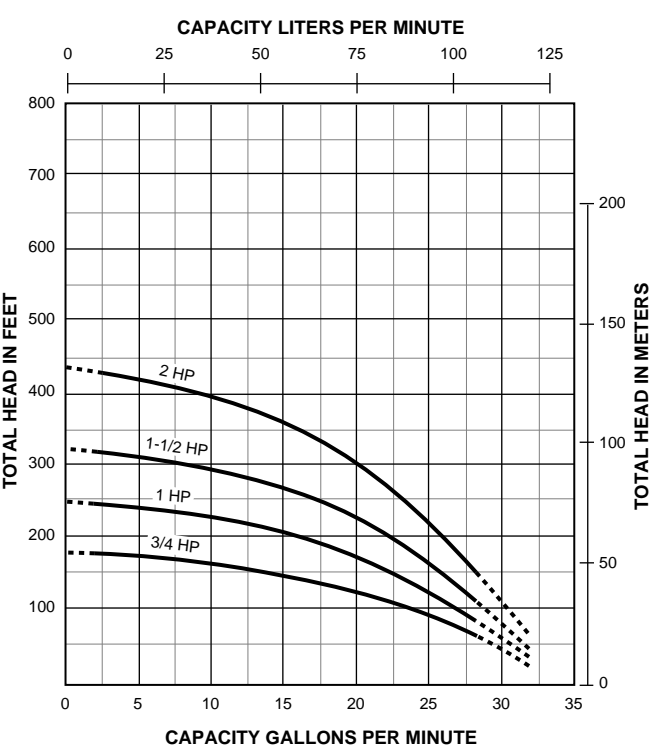
**PUMP PERFORMANCE – 10 GPM**



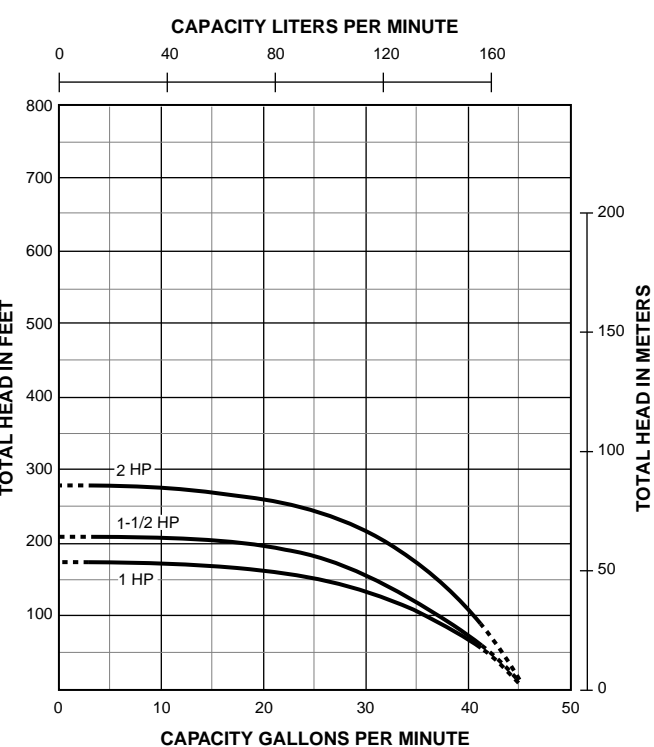
**PUMP PERFORMANCE – 15 GPM**



**PUMP PERFORMANCE – 20 GPM**



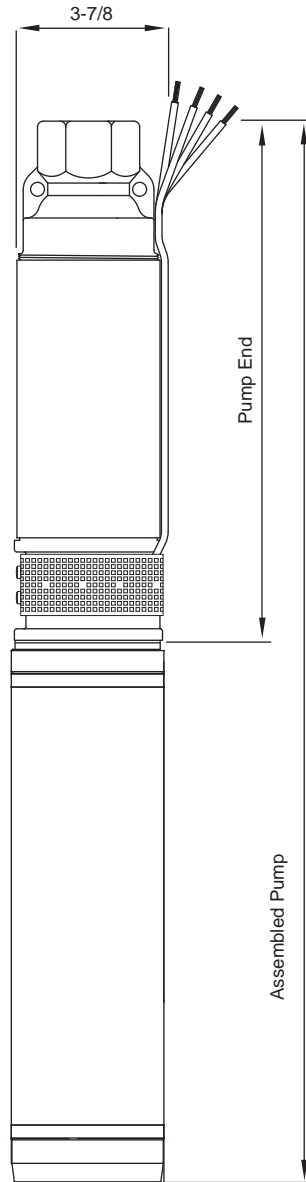
**PUMP PERFORMANCE – 30 GPM**





# 4" submersible pumps – 10, 15, 20, and 30 gpm

## OUTLINE DIMENSIONS



Discharge	
10 GPM	1-1/4" NPT
15 GPM	1-1/4" NPT
20 GPM	1-1/4" NPT
30 GPM	1-1/4" NPT

For lengths, refer to Ordering Information tables.

Dimensions (in inches) are for estimating purposes only.



# 4" submersible pumps – 10, 15, 20, and 30 gpm

PUMP PERFORMANCE (Capacity in Gallons Per Minute)																							
10 GALLONS PER MINUTE																							
HP	PSI	Pumping Depth in Feet																Shutoff Head					
		20	40	60	80	100	125	150	175	200	250	300	350	400	450	500	550	600	Feet	PSI			
1/2	0	—	—	14.1	13.5	12.8	12.0	10.8	9.5	7.4	4.7								255	110			
	20	14.0	13.3	12.7	12.0	11.0	9.6	7.8	5.2	1.4													
	30	13.2	12.6	11.8	10.9	9.8	8.0	5.5	1.7														
	40	12.4	11.7	10.8	9.7	8.2	8.8	2.0															
	50	11.5	10.5	9.4	7.8	5.8	2.2																
	60	10.4	9.2	7.5	5.4	2.8																	
3/4	0	—	—	—	14.8	14.4	13.8	13.0	12.0	11.0	8.4	4.7							340	147			
	20	—	14.7	14.3	13.7	13.0	12.2	11.2	9.9	8.6	5.0												
	30	14.4	14.2	13.7	13.0	12.3	11.2	10.0	8.8	7.2	3.0												
	40	14.2	13.5	12.9	12.1	11.3	10.2	8.9	7.4	5.3													
	50	13.4	12.7	12.0	11.0	10.2	8.9	7.4	5.5	3.2													
	60	12.6	11.9	11.0	10.0	9.1	7.5	5.7	4.4	1.4													
1	0	—	—	—	—	15.8	15.3	14.7	14.0	13.3	11.7	9.5	6.9	4.2					425	184			
	20	—	—	15.7	15.3	14.8	14.2	13.4	12.6	11.8	9.8	7.2	3.8										
	30	—	15.6	15.2	14.7	14.2	13.5	12.8	11.8	10.8	8.5	5.8	2.0										
	40	15.6	15.1	14.6	14.1	13.5	12.9	11.9	10.9	9.8	7.4	4.2											
	50	15.1	14.5	14.0	13.4	12.9	11.9	10.9	9.9	8.8	5.9	2.2											
	60	14.4	13.9	13.3	12.8	12.0	11.0	10.0	8.8	7.5	4.5												
1-1/2	0	—	—	—	—	—	—	15.7	15.3	14.8	13.8	12.7	11.5	10.1	8.6	6.6	4.2		595	258			
	20	—	—	—	—	15.8	15.4	14.9	14.4	13.9	12.8	11.6	10.3	8.7	6.9	4.4							
	30	—	—	—	15.7	15.4	14.9	14.5	13.9	13.4	12.3	11.0	9.6	7.9	5.8	2.9							
	40	—	16.0	15.6	15.3	15.0	14.5	14.0	13.5	12.9	11.7	10.4	8.9	7.1	4.6	1.0							
	50	15.9	15.5	15.3	14.9	14.5	14.0	13.5	12.9	12.4	11.0	9.7	8.0	6.0	3.2								
	60	15.5	15.2	14.8	14.4	14.0	13.5	13.0	12.4	11.7	10.5	9.0	7.3	4.7	1.2								

**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. Tested and rated in accordance with Water Systems Council Standards.

**NOTE:** Pumps installed with a PRO-Source™ 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.



# 4" submersible pumps – 10, 15, 20, and 30 gpm

## PUMP PERFORMANCE (Capacity in Gallons Per Minute)

15 GALLONS PER MINUTE																		
HP	PSI	Pumping Depth in Feet														Shutoff Head		
		20	40	60	80	100	125	150	175	200	250	300	350	400	450	500	Feet	PSI
1/2	0	—	21.5	20.0	18.7	16.9	13.1	7.4	0.2								175	76
	20	19.7	18.3	16.3	13.0	8.8	1.5											
	30	18.0	15.6	12.4	7.9	2.0												
	40	15.2	11.9	7.0	1.3													
	50	11.2	5.8	0.1														
	60	4.8																
3/4	0	—	22.5	21.2	20.2	19.3	17.8	16.0	13.2	9.6						245	106	
	20	20.9	19.9	19.0	17.7	16.4	13.7	10.0	4.9									
	30	19.8	18.8	17.6	16.1	14.0	10.7	5.5	0.7									
	40	18.6	17.5	15.9	13.5	10.9	6.0	0.8										
	50	17.2	15.4	13.1	10.0	6.4	1.1											
	60	15.0	12.7	9.7	5.5	1.8												
1	0	—	—	22.1	21.8	20.4	19.4	18.4	17.2	15.5	10.3	2.7				318	138	
	20	21.9	20.9	20.2	19.3	18.7	17.5	15.8	13.4	10.9	3.2							
	30	20.8	20.0	19.1	18.5	17.6	16.0	13.7	11.1	7.5								
	40	19.8	19.0	18.3	17.4	16.2	13.9	11.3	8.1	3.7								
	50	18.9	18.2	17.1	15.8	14.0	11.4	8.2	4.0	0.3								
	60	18.0	17.0	15.6	13.7	11.7	8.4	4.4	0.6									
1-1/2	0	—	—	—	22.1	21.4	20.5	19.9	19.3	18.4	16.4	13.1	8.3	2.8		420	182	
	20	—	21.8	21.2	20.5	20.0	19.3	18.6	17.6	16.5	13.5	9.1	3.2					
	30	21.7	21.1	20.3	19.9	19.3	18.7	17.7	16.6	15.4	11.7	6.3	0.1					
	40	21.0	20.2	19.8	19.2	18.7	17.9	16.7	15.5	13.7	9.4	3.6						
	50	20.2	19.7	19.2	18.6	18.0	16.8	15.6	13.8	11.9	6.7	0.5						
	60	19.6	19.0	18.5	17.7	16.9	15.7	13.9	12.0	9.7	3.8							

**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.

Tested and rated in accordance with Water Systems Council Standards.

**NOTE:** Pumps installed with a PRO-Source™ 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.



# 4" submersible pumps – 10, 15, 20, and 30 gpm

## PUMP PERFORMANCE (Capacity in Gallons Per Minute)

### 20 GALLONS PER MINUTE

HP	PSI	Pumping Depth in Feet														Shutoff Head	
		20	40	60	80	100	125	150	175	200	250	300	350	400	450	Feet	PSI
3/4	0	—	—	29.2	26.9	23.5	19.0	13.7	1.8							180	78
	20	28.5	25.8	22.5	18.5	14.5	3.4										
	30	25.2	22.0	18.3	13.9	4.5											
	40	21.3	17.6	13.0	3.0												
	50	17.2	11.4	1.8													
	60	10.2															
1	0	—	—	31.0	29.6	28.0	25.3	22.4	18.8	15.5					251	109	
	20	30.5	29.2	27.4	25.1	22.8	19.5	16.1	10.1								
	30	28.8	27.2	24.9	22.5	19.8	16.5	10.6									
	40	27.0	24.5	22.0	19.4	16.8	11.6	2.6									
	50	24.2	21.5	19.0	16.3	12.5	3.3										
	60	21.3	18.6	16.0	11.1	3.7											
1-1/2	0	—	—	—	30.9	29.8	28.2	26.4	24.0	21.6	16.4	5.4			323	140	
	20	—	30.5	29.4	28.2	26.8	24.4	22.0	19.5	16.8	6.8						
	30	30.3	29.3	28.0	26.5	24.7	22.2	19.6	17.1	13.9							
	40	29.1	27.8	26.2	24.3	22.3	19.8	17.3	14.2	8.0							
	50	27.5	26.0	24.1	22.1	20.0	17.5	14.5	8.3								
	60	25.6	23.9	21.9	19.8	17.5	14.8	9.1	2.2								
2	0	—	—	—	31.5	30.7	29.7	28.6	27.3	26.0	23.2	20.2	16.2	8.5	435	188	
	20	—	31.3	30.5	29.7	28.8	27.5	26.1	24.9	23.4	20.6	16.7	9.5				
	30	31.1	30.3	29.5	28.7	27.6	26.2	25.0	23.5	22.1	19.1	13.8	4.8				
	40	30.2	29.4	28.5	27.5	26.4	25.1	23.7	22.2	20.8	17.2	10.1					
	50	29.3	28.3	27.2	26.1	25.1	23.8	22.3	20.9	19.3	14.0	5.7					
	60	28.1	27.1	26.0	25.0	23.9	22.4	21.0	19.4	17.3	10.8						

## PUMP PERFORMANCE (Capacity in Gallons Per Minute)

### 30 GALLONS PER MINUTE

HP	PSI	Pumping Depth in Feet														Shutoff Head	
		20	40	60	80	100	125	150	175	200	250	300	350	400	450	Feet	PSI
1	0	44.0	42.5	40.9	39.1	36.8	32.5	26.0	8.0						175	76	
	20	40.4	38.8	36.0	32.4	27.7	13.3										
	30	38.0	35.3	31.7	26.3	14.3											
	40	35.0	31.4	25.9	12.1												
	50	30.2	24.0	3.0													
	60	21.9															
1-1/2	0	44.2	43.1	41.9	39.9	37.5	34.1	30.9	26.9	17.0					210	91	
	20	41.2	39.1	36.5	34.0	31.5	27.8	21.5									
	30	38.9	36.1	33.8	31.0	27.9	21.8										
	40	36.0	33.5	30.8	27.7	20.2											
	50	32.9	30.1	26.8	21.5												
	60	29.5	25.9	18.1													
2	0	44.9	43.9	43.0	41.8	40.5	38.8	36.8	34.7	31.6	23.7				280	121	
	20	42.7	41.3	40.1	38.7	37.1	34.9	32.1	29.0	24.8							
	30	41.2	40.0	38.5	37.0	35.0	32.2	29.1	24.9	15.2							
	40	39.9	38.3	36.6	34.8	32.7	29.8	25.1	16.1								
	50	38.0	36.3	34.5	32.1	30.0	25.3	17.5									
	60	36.0	34.0	31.9	29.1	26.0	18.0										

**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. Tested and rated in accordance with Water Systems Council Standards.

**NOTE:** Pumps installed with a PRO-Source™ 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.

