

Edl, Michele

From: Patrick.Weissinger@pentairwater.com on behalf of Info@STARITEwater.com
Sent: Wednesday, December 05, 2007 3:11 PM
To: Edl, Michele
Subject: Re: Sta-Rite Water - STA-RITE submersible pump info
Attachments: Sub Data_10-15-20-30-50.pdf

Michele,

Attached is the data you requested. For the 50 gpm 5 hp pump you have, data is on pages 6 and 11.

Technical Support Group
Sta-Rite Water Systems - Submersible, Centrifugal, Jet
Sta-Rite SES, Sump-Effluent-Sewage
Berkeley Pump Company - Commercial
Tech Line 888-782-7483, 7:30 AM-5:30 PM M-F CDT
Pentair Water - Delavan Wisconsin
www.starite.com
www.berkeleypump.com

michele.edl@idwr.idaho.gov

To info@staritewater.com

cc

12/05/2007 04:07 PM

Subject Sta-Rite Water - STA-RITE submersible pump info

Name: Michele Edl

Address1:

Address2:

City: Boise

State: ID

Zip:

Home_Phone:

Work_Phone:

Fax:

12/7/2007

Subject1: STA-RITE submersible pump info

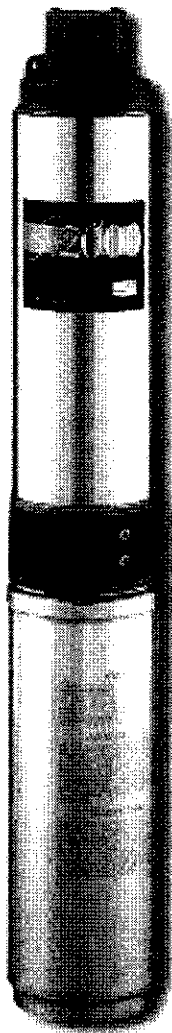
Comments: I am trying to perfect a water right without all the information I need to establish flow rate and volume. I know that at 5 hp Sta-rite pump was installed. Model number I50P4JH-03. Could you send me the pump performance information/curves?

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12/7/2007



4" submersible pumps – 10, 15, 20, 30, and 50 gpm



Precision-engineered, high-quality, rugged Signature 2000® Stainless Steel Series Pumps deliver efficient, dependable performance even in rough, aggressive water. Heads to 1,950 feet and capacities to 65 GPM. Built to deliver long-term, trouble-free service. Floating impeller design resists sand and reduces sand locking. These pumps feature the patented SignaSeal™ staging system.

APPLICATIONS

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

SPECIFICATIONS

Shell – Stainless steel
Diameter – 3-7/8"
Discharge – Stainless steel
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 – Stainless steel
Intake Screen – Polypropylene
CableGuard – Stainless steel
Check Valve – Acetal†
Agency Listings – UL and CSA

UL Classified to
ANSI/NSF
Standard 61,
Drinking Water Systems
Components – Health Effects



Flomatic® is a registered trademark of Flomatic Corporation. Nylatron® is a registered trademark of Polymer Corp. Signature 2000® is a registered trademark of WICOR Industries. PRO-Source™, SignaSeal™, and TrimLine™ are trademarks of WICOR Industries.

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

Signature
2000

STAINLESS STEEL

FEATURES

Patented 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 300 grade stainless steel 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 300 grade stainless steel 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 – Highest grade, 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 spring-loaded check valve.

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

Intake Screen – Corrosion-proof.

Franklin Electric Motor – 2 and 3 wire NEMA standard super stainless series water-filled motors.

†Except where noted.



4" submersible pumps – 10, 15, 20, 30, and 50 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	10SP4C01H	22	27	L10P4CH	12	8-1/2	P218-1079C	22		
		1/2	6	1	230	10SP4C02H	22	27	L10P4CH	12	8-1/2	P218-1080C	22		
		3/4	8	1	230	10SP4D02H	25	30	L10P4DH	13-3/4	9-1/2	P218-1081C	26		
		1	11	1	230	10SP4E02H	28	34	L10P4EH	15-1/2	10-1/4	P218-1082C	29		
		1-1/2	15	1	230	10SP4F02H	34	41	L10P4FH	19	12	P218-1327C	39		
	3 Wire	1/2	6	1	115	10P4C01H	22	27	L10P4CH	12	8-1/2	P218-1072C	21	P217-809	3
		1/2	6	1	230	10P4C02H	22	27	L10P4CH	12	8-1/2	P218-1073C	21	P217-810	3
		3/4	8	1	230	10P4D02H	25	30	L10P4DH	13-3/4	9-1/2	P218-1074C	25	P217-811	3
		1	11	1	230	10P4E02H	28	34	L10P4EH	15-1/2	10-1/4	P218-1075C	28	P217-812	3
		1-1/2	15	1	230	10P4F02H	32-3/4	41	L10P4FH	19	12	P218-1076C	31	P217-813	6
		1-1/2	15	3	230				L10P4FH	19	12	P218-1330C	33	1095-K41	6
		1-1/2	15	3	460				L10P4FH	19	12	P218-1279C	33	1096-K33	6
		2	19	1	230				L10P4GH	21-1/2	13-1/2	P218-1328C	43	P217-814	8
		2	19	3	230				L10P4GH	21-1/2	13-1/2	P218-1331C	47	1095-K43	6
		2	19	3	460				L10P4GH	21-1/2	13-1/2	P218-1274C	47	1096-K33	6
		3	26	1	230				L10P4HH	27-1/2	16-1/2	P218-1450C	53	P217-815	9
		3	26	3	230				L10P4HH	27-1/2	16-1/2	P218-1441C	53	1095-K52	6
		3	26	3	460				L10P4HH	27-1/2	16-1/2	P218-1452C	53	1096-K37	6
		5	43	1	230				L10P4JH	42-3/4	25	P218-1329C	67	P217-910	10
		5	43	3	230				L10P4JH	42-3/4	25	P218-1333C	67	1095-K61	6
		5	43	3	460				L10P4JH	42-3/4	25	P218-1278C	67	1096-K49	6
15"	2 Wire	1/2	5	1	115	15SP4C01H	22-1/4	27	L15P4CH	12-1/4	9	P218-1079C	22		
		1/2	5	1	230	15SP4C02H	22-1/4	27	L15P4CH	12-1/4	9	P218-1080C	22		
		3/4	7	1	230	15SP4D02H	25-3/4	31	L15P4DH	14-1/2	10	P218-1081C	26		
		1	9	1	230	15SP4E02H	29-1/4	35	L15P4EH	16-3/4	11	P218-1082C	29		
		1-1/2	12	1	230	15SP4F02H	35-1/4	43	L15P4FH	20-1/4	13	P218-1327C	39		
	3 Wire	1/2	5	1	115	15P4C01H	22-1/4	27	L15P4CH	12-1/4	9	P218-1072C	21	P217-809	3
		1/2	5	1	230	15P4C02H	22-1/4	27	L15P4CH	12-1/4	9	P218-1073C	21	P217-810	3
		3/4	7	1	230	15P4D02H	25-3/4	31	L15P4DH	14-1/2	10	P218-1074C	25	P217-811	3
		1	9	1	230	15P4E02H	29-1/4	35	L15P4EH	16-3/4	11	P218-1075C	28	P217-812	3
		1-1/2	12	1	230	15P4F02H	33-3/4	41	L15P4FH	20-1/4	13	P218-1076C	31	P217-813	6
		1-1/2	12	3	230				L15P4FH	20-1/4	13	P218-1330C	33	1095-K41	6
		1-1/2	12	3	460				L15P4FH	20-1/4	13	P218-1279C	33	1096-K33	6
		2	15	1	230				L15P4GH	23-1/2	15	P218-1328C	43	P217-814	8
		2	15	3	230				L15P4GH	23-1/2	15	P218-1331C	47	1095-K43	6
		2	15	3	460				L15P4GH	23-1/2	15	P218-1274C	47	1096-K33	6
		3	22	1	230				L15P4HH	31-1/4	18	P218-1450C	53	P217-815	9
		3	22	3	230				L15P4HH	31-1/4	18	P218-1441C	53	1095-K52	6
		3	22	3	460				L15P4HH	31-1/4	18	P218-1452C	53	1096-K37	6

* Length and Weight are approximate.

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

*** For 30 GPM and 50 GPM discharge is 2" NPT.

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

*Check Valve not included on 5 HP, 7-1/2 HP and 10 HP models. Check valve not included on 50 GPM models.

TrimLine™ version maximum outside diameter 3-3/4". Standard version maximum outside diameter on all models is 3-7/8".



4" submersible pumps – 10, 15, 20, 30, and 50 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*
20**	2 Wire	3/4	5	1	230	20SP4D02H	23-3/4	30	L20P4DH	12-1/2	8-1/2	P218-1081C	26		
		1	7	1	230	20SP4E02H	27-1/4	34	L20P4EH	14-3/4	9-3/4	P218-1082C	29		
		1-1/2	9	1	230	20SP4F02H	32	39	L20P4FH	16-3/4	10-3/4	P218-1327C	39		
	3 Wire	3/4	5	1	230	20P4D02H	23-3/4	30	L20P4DH	12-1/2	8-1/2	P218-1074C	25	P217-811	3
		1	7	1	230	20P4E02H	27-1/4	34	L20P4EH	14-3/4	9-3/4	P218-1075C	28	P217-812	3
		1-1/2	9	1	230	20P4F02H	30-1/2	39	L20P4FH	16-3/4	10-3/4	P218-1076C	31	P217-813	6
		1-1/2	9	3	230				L20P4FH	16-3/4	10-3/4	P218-1330C	33	1095-K41	6
		1-1/2	9	3	460				L20P4FH	16-3/4	10-3/4	P218-1279C	33	1096-K33	6
		2	12	1	230				L20P4GH	20-1/4	12-1/2	P218-1328C	43	P217-814	8
		2	12	3	230				L20P4GH	20-1/4	12-1/2	P218-1331C	47	1095-K43	6
		2	12	3	460				L20P4GH	20-1/4	12-1/2	P218-1274C	47	1096-K33	6
		3	17	1	230				L20P4HH	25-3/4	15	P218-1450C	53	P217-815	9
		3	17	3	230				L20P4HH	25-3/4	15	P218-1441C	53	1095-K52	6
		3	17	3	460				L20P4HH	25-3/4	15	P218-1452C	53	1096-K37	6
		5	28	1	230				L20P4JH	38	21	P218-1329C	67	P217-910	10
		5	28	3	230				L20P4JH	38	21	P218-1333C	67	1095-K61	6
		5	28	3	460				L20P4JH	38	21	P218-1278C	67	1095-K49	6
		7-1/2	40	3	230				L20P4KH	53-3/4	30	P218-937C	69	1095-K67	6
		7-1/2	40	3	460				L20P4KH	53-3/4	30	P218-1321C	69	1096-K55	6
		10	54	3	460				L20P4LH	71	41	P218-982C	80	1100-K58	6
30***	2 Wire	1	5	1	230	30SP4E02H	26-1/2	35	L30P4EH	14	9-3/4	P218-1082C	29		
		1-1/2	6	1	230	30SP4F02H	30-1/2	39	L30P4FH	15-1/4	10-3/4	P218-1327C	39		
	3 Wire	1	5	1	230	30P4E02H	26-1/2	35	L30P4EH	14	10	P218-1075C	28	P217-812	3
		1-1/2	6	1	230	30P4F02H	29	39	L30P4FH	15-1/4	11	P218-1076C	31	P217-813	6
		1-1/2	6	3	230				L30P4FH	15-1/4	11	P218-1330C	33	1095-K41	6
		1-1/2	6	3	460				L30P4FH	15-1/4	11	P218-1279C	33	1096-K33	6
		2	8	1	230				L30P4GH	18-1/4	12	P218-1328C	43	P217-814	8
		2	8	3	230				L30P4GH	18-1/4	12	P218-1331C	47	1095-K43	6
		2	8	3	460				L30P4GH	18-1/4	12	P218-1274C	47	1096-K33	6
		3	12	1	230				L30P4HH	24	15	P218-1450C	53	P217-815	9
		3	12	3	230				L30P4HH	24	15	P218-1441C	53	1095-K52	6
		3	12	3	460				L30P4HH	24	15	P218-1452C	53	1096-K37	6
		5	20	1	230				L30P4JH	35-3/4	20	P218-1329C	67	P217-910	10
		5	20	3	230				L30P4JH	35-3/4	20	P218-1333C	67	1095-K61	6
		7-1/2	28	3	230				L30P4KH	50	27	P218-937C	69	1095-K67	6
		7-1/2	28	3	460				L30P4KH	50	27	P218-1321C	69	1096-K55	6
		10	38	3	460				L30P4LH	65-1/2	35	P218-982C	80	1100-K58	6

* Length and Weight are approximate.

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

*** For 30 GPM and 50 GPM discharge is 2" NPT.

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

† Check Valve not included on 5 HP, 7-1/2 HP and 10 HP models. Check valve not included on 50 GPM models.

TrimLine™ version maximum outside diameter 3-3/4". Standard version maximum outside diameter on all models is 3-7/8".



4" submersible pumps – 10, 15, 20, 30, and 50 gpm

ORDERING INFORMATION

GPM	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*
50***	2 Wire	1-1/2	4	1	230	L50P4FH	15-1/4	10	P218-1327C	39		
	3 Wire	1-1/2	4	1	230	L50P4FH	15-1/4	10	P218-1076C	31	P217-813	6
		1-1/2	4	3	230	L50P4FH	15-1/4	10	P218-1330C	33	1095-K41	6
		1-1/2	4	3	460	L50P4FH	15-1/4	10	P218-1279C	33	1096-K33	6
		2	6	1	230	L50P4GH	19-1/4	12	P218-1328C	43	P217-814	8
		2	6	3	230	L50P4GH	19-1/4	12	P218-1331C	47	1095-K43	6
		2	6	3	460	L50P4GH	19-1/4	12	P218-1274C	47	1096-K33	6
		3	8	1	230	L50P4HH	23-1/4	15	P218-1450C	53	P217-815	9
		3	8	3	230	L50P4HH	23-1/4	15	P218-1441C	53	1095-K52	6
		3	8	3	460	L50P4HH	23-1/4	15	P218-1452C	53	1096-K37	6
		5	13	1	230	L50P4JH	33-1/2	20	P218-1329C	67	P217-910	10
		5	13	3	230	L50P4JH	33-1/2	20	P218-1333C	67	1095-K61	6
		5	13	3	460	L50P4JH	33-1/2	20	P218-1278C	67	1096-K49	6
		7-1/2	20	3	230	L50P4KH	47-1/2	25	P218-937C	69	1095-K67	6
		7-1/2	20	3	460	L50P4KH	47-1/2	25	P218-1321C	69	1096-K55	6
		10	25	3	460	L50P4LH	57-3/4	35	P218-982C	80	1096-K58	6

* Length and Weight are approximate.

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

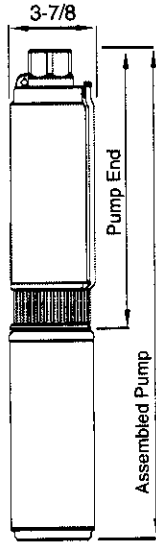
*** For 30 GPM and 50 GPM discharge is 2" NPT.

NOTE: Pump, Motor, Control Box or Magnetic Starter must be ordered separately.
Check valve not included on 50 GPM models.



4" submersible pumps – 10, 15, 20, 30, and 50 gpm

OUTLINE DIMENSIONS – 10, 15, 20, AND 30 GPM

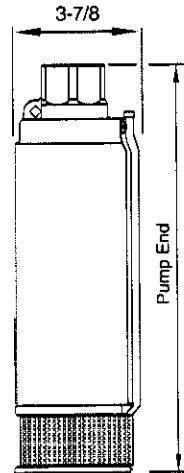


Discharge	
10 GPM	1-1/4" NPT
15 GPM	1-1/4" NPT
20 GPM	1-1/4" NPT
30 GPM	2" NPT

For lengths, refer to Ordering Information tables.

Dimensions (in inches) are for estimating purposes only.

OUTLINE DIMENSIONS – 50 GPM

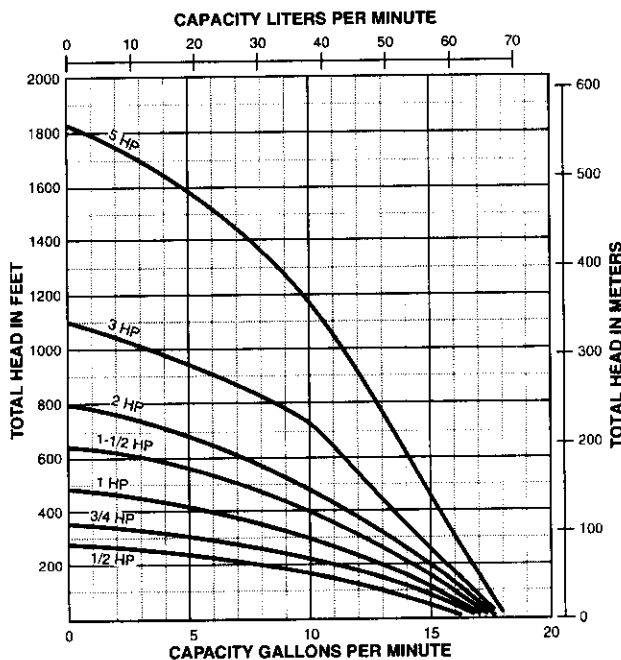


Discharge	
50 GPM	2" NPT

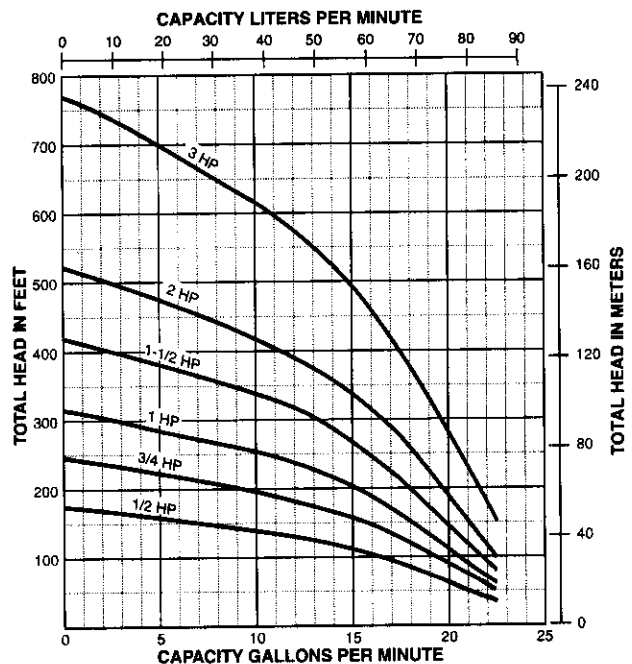
Pump diameter is 3-7/8". For lengths, refer to Ordering Information tables.

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE – 10 GPM



PUMP PERFORMANCE – 15 GPM



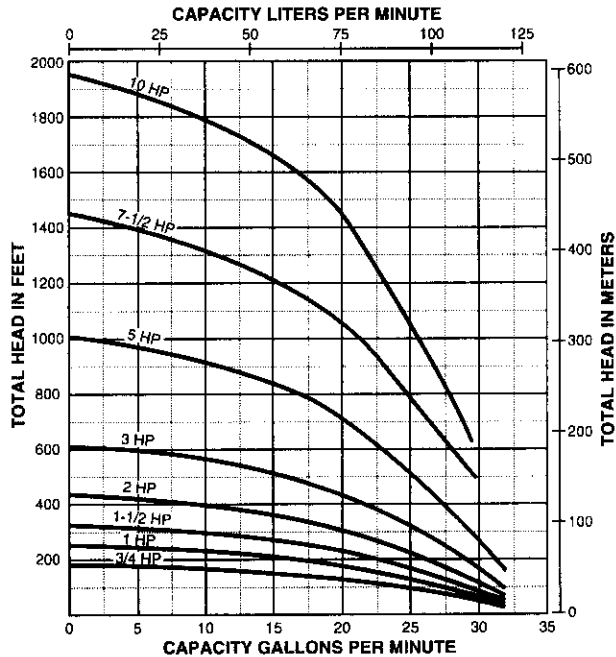
Tested and rated in accordance with Water Systems Council standards.

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.

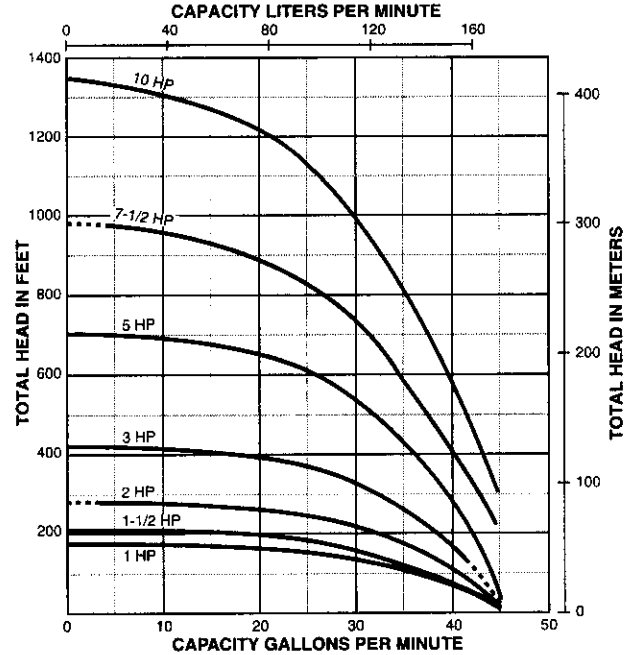


4" submersible pumps – 10, 15, 20, 30, and 50 gpm

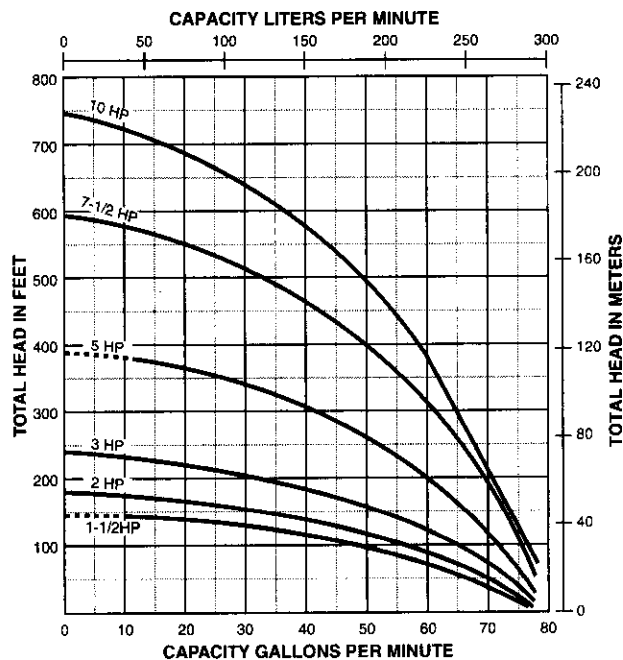
PUMP PERFORMANCE – 20 GPM



PUMP PERFORMANCE – 30 GPM



PUMP PERFORMANCE – 50 GPM





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, 30, and 50 gpm

15 Gallons per Minute					PUMP PERFORMANCE <i>(Capacity in Gallons Per Minute)</i>																			
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	650	700	750	800	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													
2	0	—	—	—	—	22.1	21.3	20.7	20.2	19.6	18.3	16.9	14.4	11.6	7.4	2.7						525	227	
	20	—	22.5	21.9	21.2	20.9	20.2	19.7	19.1	18.4	17.0	14.7	11.8	7.8	3.2									
	30	22.4	21.8	21.2	20.8	20.3	19.7	19.1	18.5	17.9	16.1	13.5	10.2	5.5	0.8									
	40	21.7	21.1	20.6	20.2	19.8	19.2	18.6	17.9	17.1	14.9	12.0	8.1	3.4										
	50	21.1	20.6	20.1	19.7	19.2	18.6	17.9	17.1	16.2	13.6	10.8	6.0	1.1										
	60	20.5	20.1	19.6	19.1	18.7	18.0	17.2	16.2	15.1	12.2	8.6	3.7											
3	0	—	—	—	—	—	22.0	21.6	21.0	20.2	19.5	18.7	17.8	16.6	15.0	13.0	10.8	8.0	4.9	1.6	1.6	770	333	
	20	—	—	—	—	22.0	21.7	21.1	20.8	20.3	19.5	18.8	17.9	16.7	15.1	13.2	11.1	8.3	5.2	1.9	1.4			
	30	—	—	22.5	22.0	21.7	21.2	20.8	20.3	19.9	19.2	18.3	17.4	16.1	14.3	12.2	10.4	7.0	3.5	3.6	0.4			
	40	—	22.4	21.9	21.6	21.2	20.9	20.4	19.9	19.6	18.8	18.0	16.8	15.2	13.4	11.2	8.4	5.4	2.1					
	50	22.3	21.9	21.6	21.1	20.9	20.4	20.0	19.7	19.2	18.4	17.5	16.2	14.4	12.3	10.5	7.1	3.8	0.6					
	60	21.8	21.4	21.1	20.8	20.5	20.0	19.7	19.3	18.9	18.0	16.9	15.3	13.5	11.4	8.8	5.5	2.4						

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.



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, 30, and 50 gpm

30 Gallons per Minute				PUMP PERFORMANCE (Capacity in 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	650	700	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															
3	0	45.0	44.5	44.0	43.2	42.7	41.6	40.1	39.6	38.2	35.5	32.0	27.3								420	182
	20	43.8	43.0	42.4	41.5	41.0	39.8	38.5	37.1	35.7	32.1	28.0	18.5									
	30	42.9	42.2	41.3	40.6	39.9	38.7	37.2	35.8	34.2	30.3	24.9	6.0									
	40	42.1	41.2	40.4	39.7	38.8	37.3	35.9	34.5	32.6	28.3	19.9										
	50	41.1	40.3	39.5	38.5	37.4	36.0	34.6	32.7	31.0	25.2	9.5										
	60	40.2	39.3	38.3	37.2	36.1	34.7	32.8	31.0	28.5	20.5											
5	0	—	—	—	44.3	44.0	43.5	43.0	42.6	42.0	40.7	39.2	38.0	36.0	34.2	31.9	29.2	26.0	20.0		705	305
	20	—	44.1	44.0	43.4	43.1	42.7	42.0	41.3	40.8	39.3	38.2	36.2	34.4	32.4	30.0	26.1	21.5				
	30	44.1	43.9	43.4	43.0	42.8	42.1	41.4	40.8	40.1	38.7	37.0	35.1	33.1	31.1	26.0	24.1	16.0				
	40	43.8	43.4	43.0	42.7	42.1	41.5	40.9	40.2	39.3	37.9	36.1	34.3	32.0	29.4	26.2	20.4					
	50	43.3	43.0	42.6	42.0	41.5	41.2	40.2	39.5	38.8	37.1	35.4	33.2	31.2	28.8	24.5	16.0					
	60	42.9	42.5	42.0	41.4	41.1	40.3	39.8	38.9	38.1	36.2	34.2	32.1	30.0	26.7	22.0						
HP	PSI	Pumping Depth in Feet												Shutoff Head								
		200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	Feet	PSI						
7-1/2	0	—	43.2	40.4	37.6	34.8	32.0	28.1	20.0						975	422						
	20	44.6	42.0	39.3	36.5	33.8	30.5	25.5	13.8													
	30	44.2	41.3	38.6	35.8	33.1	29.8	23.3	6.5													
	40	43.6	40.7	38.1	35.6	32.6	29.3	21.7														
	50	42.7	40.1	37.3	34.6	31.7	27.4	19.3														
	60	42.0	39.4	36.5	33.7	30.7	25.1	13.9														
10	0	—	44.7	43.1	41.3	39.5	37.3	35.1	33.1	30.4	27.1	22.5	11.9		1345	582						
	20	—	44.2	42.3	40.5	38.6	36.4	34.5	31.8	29.2	25.3	18.7										
	30	—	43.7	42.0	40.1	38.0	35.7	33.7	31.3	28.4	24.2	16.3										
	40	44.9	43.3	41.6	39.7	37.7	35.5	33.5	30.9	27.7	23.4	14.4										
	50	44.6	42.7	41.0	39.3	37.1	34.9	32.8	30.2	26.7	21.7	7.7										
	60	44.3	42.3	40.6	38.7	36.5	34.5	32.3	29.5	25.7	20.1	5.0										

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.



4" submersible pumps – 10, 15, 20, 30, and 50 gpm

50 Gallons per Minute				PUMP PERFORMANCE (Capacity in Gallons Per Minute)																
HP	PSI	Pumping Depth in Feet																Shutoff Head		
		20	40	60	80	100	125	150	175	200	250	300	350	450	550	650	700	Feet	PSI	
1-1/2	0	—	71.0	65.1	58.2	49.3	33.5											145	63	
	20	63.5	55.9	46.5	32.5															
	30	54.8	45.0	30.0																
	40	43.3	26.9																	
	50	21.9																		
	60																			
2	0	—	72.6	68.0	63.3	57.0	47.8	33.9										180	78	
	20	66.5	62.2	55.1	46.8	37.1	13.0													
	30	61.1	53.6	46.0	34.3	14.1														
	40	52.8	45.0	32.5	11.0															
	50	42.7	27.9																	
	60	25.2																		
3	0	—	75.5	71.5	68.0	64.5	59.4	52.5	45.0	33.8								235	102	
	20	70.5	66.9	63.7	59.0	53.5	46.5	36.2	18.2											
	30	66.1	62.9	58.1	53.0	47.0	37.0	20.5												
	40	62.5	57.6	52.0	46.2	38.8	22.1													
	50	56.5	51.0	44.7	36.2	22.8														
	60	50.0	43.7	34.0	20.5															
5	0	—	—	75.8	73.9	71.1	68.9	65.9	63.2	59.9	51.9	41.9	22.5					385	166	
	20	75.0	72.9	70.3	68.2	66.1	63.5	60.8	56.1	52.4	42.5	24.9								
	30	72.4	70.1	68.0	66.0	63.8	60.9	56.9	53.0	47.9	35.5	12.9								
	40	69.9	67.9	65.5	63.2	61.0	57.0	53.2	48.0	43.5	27.0									
	50	67.2	65.1	63.0	60.8	57.1	53.3	48.1	43.6	36.4	14.2									
	60	64.9	62.4	60.0	56.9	53.7	48.7	44.1	37.5	28.0										
7-1/2	0	—	—	—	—	75.2	73.5	71.3	69.8	68.0	66.0	61.0	55.3	43.1	20.0			595	257	
	20	—	—	74.8	73.4	71.8	70.0	68.3	66.5	64.8	61.1	56.0	50.0	34.9						
	30	—	74.4	73.2	71.5	70.1	68.8	66.7	64.9	63.3	58.7	53.2	47.2	28.8						
	40	74.1	72.9	71.2	69.9	68.9	66.8	65.0	63.6	61.7	56.2	50.9	44.1	22.0						
	50	72.6	71.1	69.8	68.3	66.9	65.1	63.7	61.8	58.9	53.9	47.5	41.0	13.2						
	60	71.0	69.3	68.1	66.7	65.2	63.8	61.9	59.0	56.5	51.1	44.9	36.0							
10	0	—	—	—	—	—	75.3	73.8	72.2	70.8	67.9	65.0	62.1	54.2	44.7	29.0	15.2	745	322	
	20	—	—	—	75.2	74.0	72.4	71.0	69.6	68.1	65.5	62.5	59.1	50.1	39.2	17.1				
	30	—	—	75.0	73.9	72.6	71.1	69.7	68.2	66.9	64.1	61.2	56.9	47.5	35.0	10.5				
	40	—	74.9	73.7	72.3	71.2	69.8	68.3	67.0	65.8	63.0	59.3	54.9	45.2	30.5					
	50	74.7	73.5	72.1	71.0	69.9	68.4	67.1	65.9	64.2	61.5	57.2	53.0	42.9	25.0					
	60	73.2	72.0	70.9	69.7	68.5	67.2	66.0	64.3	63.2	59.9	55.0	51.0	40.6	19.7					

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.