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IMPORTANT NOTES

Specifications and/or materials are subject to change without notice.

Dimensions are for estimating purposes only.

Products are tested and rated in accordance with Water Systems Council Standards.

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Product Selection Guide







Product Type	PENTEK® Motors and Controls				6" Submersible Motors
	4" Submersible Motors	Submersible Motor Controls	Single-Phase Motor Protectors	Constant Pressure Controller	
Application	Water systems for residential, industrial, commercial, multiple housing and farm clean water use	Water systems for residential, industrial, commercial, multiple housing and farm clean water use	Water systems for residential, industrial, commercial, multiple housing and farm clean water use	Residential, commercial and irrigation constant pressure systems	Water systems for residential, industrial, commercial, multiple housing and farm clean water use
Description	Single- and three-phase 4" submersible high thrust motor	Single-phase motor controls for submersible applications	Single-phase motor protectors for submersible applications	Constant pressure controller for below and above ground applications	Single- and three-phase 6" submersible motor
Materials	Stainless steel construction	NEMA 3R Enclosure	NEMA 3R Enclosure	NEMA 3R Enclosure	Corrosion resistant components
Performance					
Capacity	N/A	N/A	N/A	N/A	N/A
Head	N/A	N/A	N/A	N/A	N/A
Suction/ Discharge	N/A	N/A	N/A	N/A	N/A
Horsepower	1/2 to 10 HP	1/2 to 15 HP	1/3 to 15 HP	1/2 to 3 HP	5 to 60 HP
Series	XE	SMC	SPP	PID	6-inch

PENTEK® is a registered trademark of Pentair Water.

Product Selection Guide



Product Type	*Self-Priming Shallow Well and Convertible Jet*	*Vertical Single & Multi-Stage and Self-Priming Horizontal Multi-Stage Deep Well Jet*	*Small, Straight Centrifugal*	*Self-Priming Centrifugal*	*High Pressure Booster Pumps*
Application	Residential and general water supply systems, booster, and light irrigation	General water supply, booster and light irrigation for 2", 3" and 4" or larger water wells	General purpose, process, booster and liquid transfer	Lawn sprinkling, light irrigation, general dewatering and sump drainage, liquid transfer	General purpose booster, warm and cold water wash down, cleaning
Description	Threaded connections Motor-drive Mechanical seal Back pull-out design Convertible to deep well use	Threaded connections Motor-drive Mechanical seals	Threaded connections Motor-drive, ODP and TEFC Mechanical seals – standard and high temperature Back pull-out design 4-position discharge	Fast priming Threaded connections Motor- and engine-drive Portable or permanent installation Mechanical seals Back pull-out design	Threaded connections Motor-drive Mechanical seals ODP and TEFC motors
Materials	Cast iron or fiberglass reinforced thermoplastic with thermoplastic impellers	Cast iron with thermo-plastic impellers	Cast iron with bronze (high temperature) or thermoplastic impellers	Cast iron or fiberglass reinforced thermo-plastic with bronze, cast iron or thermo-plastic impellers	Stainless steel or cast iron construc-tion with thermo-plastic impellers/ diffusers
Performance ***Capacity*** ***Head***	 To 45 GPM To 160 TDH/ft.	 To 55 GPM To 325 TDH/ft.	 To 260 GPM To 140 TDH/ft.	 To 240 GPM To 160 TDH/ft.	 To 40 GPM To 690 TDH/ft.
Suction/ Discharge	1" to 1-1/4" 3/4" to 1"	1-1/4" suction, 1" drive 1"	1-1/4" to 2-1/2" 1" to 2"	1" to 3" 1" to 2-1/2"	3/4" to 1-1/4" 1" to 1-1/2"
Horsepower	1/3 to 1-1/2 HP	1/2 to 2 HP	1/3 to 5 HP	1/2 to 5 HP	1/2 to 3 HP
Series	SN, HN, FN, PN, SL, HL, FL, PL	MS, LT2	CP/CB, SSCX, Type C	EDD, EDP, BPD, SSHM, LTH, LTHH	MGP/MGPS

BERKELEY®

Residential Water Systems

Product Selection Guide








Horizontal End Suction/Close Coupled and Frame Mounted Centrifugal	*6" to 10" Submersible Turbine*	*4" Submersible*	*Water Systems Tanks*		
			PRO-Source PLUS™ Pressurized Fibrewound	*PRO-Source PLUS™ PRO-Source™ Pressurized Steel*	*PRO-Source™ EpoxyLined "Air Over Water" Steel*
General purpose, process, booster, hot and cold water transfer and re-circulation	General water supply, irrigation, booster, sump, circulation, dewatering	General water supply, booster, sump circulation, and irrigation	General water storage and transfer	General water storage and transfer	General water storage and transfer
Mechanical or packing seal design Back pull-out design	Threaded connections Completely submerged sealed motor coupled to pump For ordering information on 7" and larger please consult factory	Threaded connections Completely submerged sealed motor 2 and 3 wire	Pre-pressurized composite well tank UL Classified to ANSI/NSF 61 Field serviceable	Pre-pressurized steel well tank UL Classified to ANSI/NSF 61	Air over water standard tank
Cast iron with bronze or cast iron impellers	6A – Cast iron suction/discharge and steel shell, with thermoplastic impellers 6TP/T Series – All cast iron with bronze, polycarbonate or stainless steel impellers 6TS – All stainless steel construction	MGS – Stainless steel and composite construction with thermoplastic impellers/diffusers 70 GPM Series – Cast iron bowls with thermoplastic impellers	Pressure vessel: polyethylene Exterior: continuous, overlapping fiberglass strands, sealed with high grade epoxy resin, then oven cured	Pressure vessel: steel Exterior: baked-on powder polyester paint Water separator: PVC	Pressure vessel: steel Exterior: baked-on powder polyester paint Interior: baked-on epoxy paint
To 5000 GPM To 660 TDH/ft.	To 2200 GPM To 1700 TDH/ft.	To 105 GPM To 1900 TDH/ft.	Physical Capacity: 20 - 119 gallons Drawdown: 5.2 - 41.1 gallons Maximum operating pressure: 100 PSI	Physical Capacity: 2.7 - 85 gallons Drawdown: 0.6 - 30 gallons Maximum operating pressure: 100 PSI	Physical Capacity: 12 - 120 gallons Drawdown: 1.9 - 18.6 gallons Maximum operating pressure: 75 PSI
1-1/2" to 4" NPT, 3" to 12" flanged 1" to 3" NPT, 2" to 10" flanged	3" to 8"	1-1/4" to 2"	1" to 1-1/4" NPT	3/4" to 1-1/4" NPT	1-1/4" NPT
1 to 200 HP	1-1/2 to 200 HP	1/2 to 10 HP	N/A	N/A	N/A
Type B Type C	6A, 6TP, 6TS 6T, 7T, 8T, 10T	MGS Series 70 GPM Series	PRO-Source PLUS™	PRO-Source™ PRO-Source PLUS™	PRO-Source™

PRO-Source™ and PRO-Source PLUS™ are trademarks of Pentair Water.

4" Submersible Pumps

MS+ series





MS+ Series SubPAK

Ships complete with MS+ Series pump, XE Series motor and SMC-CR Control Box. Factory assembled and tested.

Precision-engineered, high-quality, rugged Stainless Steel Series Pumps deliver efficient, dependable performance even in rough, aggressive water.

The MS+ series puts the plus in HS+ with the advanced PENTEK® XE Series™ motor. Superior PENTEK motor technology super-charges an HS+ pump with extra stages, raising the performance bar without exceeding recommended service factor amps.

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 – Stainless steel
Cable Guard – Stainless steel
Check Valve – Acetal†
Agency Listings – CSA

†Except where noted.

FEATURES

Proven 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 wrench flats 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 – Heavy-walled corrosion-resistant 300 grade 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.

PENTEK XE Series 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™, TrimLine™, and XE Series™ are trademarks of Pentair Water.

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

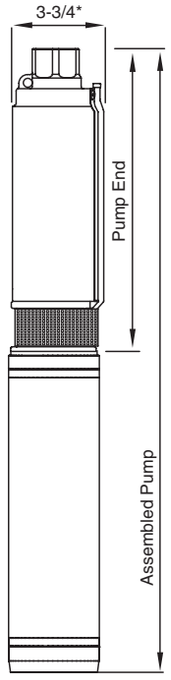
4" Submersible Pumps

MS+ series

ORDERING INFORMATION

HP	Stgs	PH	Volts	Assembled Pump Catalog Number	Assembled Pump Length Inches	Assembled Pump Wt. Lbs.
5 GPM / 3 WIRE						
1/2	15	1	230	**B5P4MS+05231**	29	26
3/4	21	1	230	**B5P4MS+07231**	35-1/4	32
1	24	1	230	**B5P4MS+10231**	38-3/4	32
7 GPM / 3 WIRE						
1/2	12	1	230	**B7P4MS+05231**	27	26
3/4	15	1	230	**B7P4MS+07231**	30-3/4	30
1	19	1	230	**B7P4MS+10231**	35-1/2	30
10 GPM / 3 WIRE						
1/2	9	1	230	**B10P4MS05231PLUS**	24-3/4	26-1/2
3/4	12	1	230	**B10P4MS07231PLUS**	27-3/4	29-1/2
1	15	1	230	**B10P4MS10231PLUS**	30-3/4	29-1/2
15 GPM / 3 WIRE						
1/2	7	1	230	**B15P4MS+05231**	24-1/2	27
3/4	9	1	230	**B15P4MS+07231**	28	30
1	11	1	230	**B15P4MS+10231**	31-1/2	30
20 GPM / 3 WIRE						
3/4	7	1	230	**S20P4MS+07231**	26	29
1	9	1	230	**S20P4MS+10231**	29-1/2	29

OUTLINE DIMENSIONS



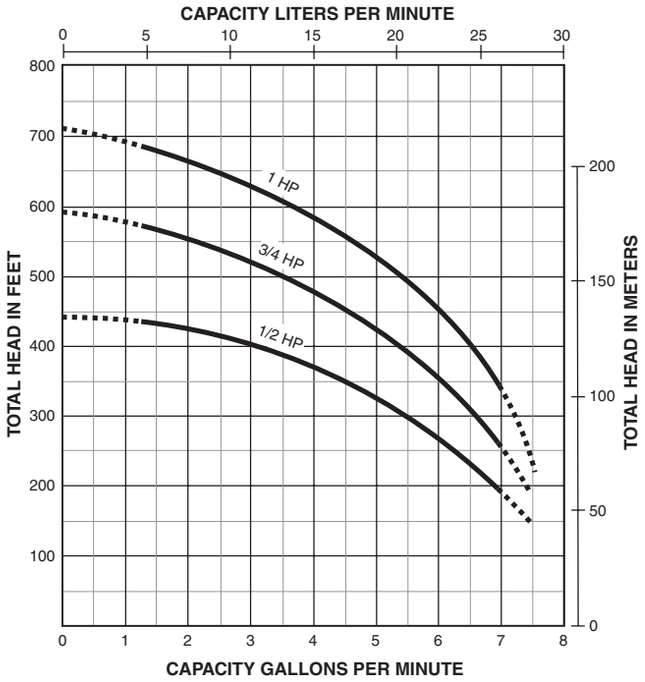
Discharge	
5 GPM	1-1/4" NPT
7 GPM	1-1/4" NPT
10 GPM	1-1/4" NPT
15 GPM	1-1/4" NPT
20GPM	1-1/4" NPT

For dimensions, refer to Ordering Information table.

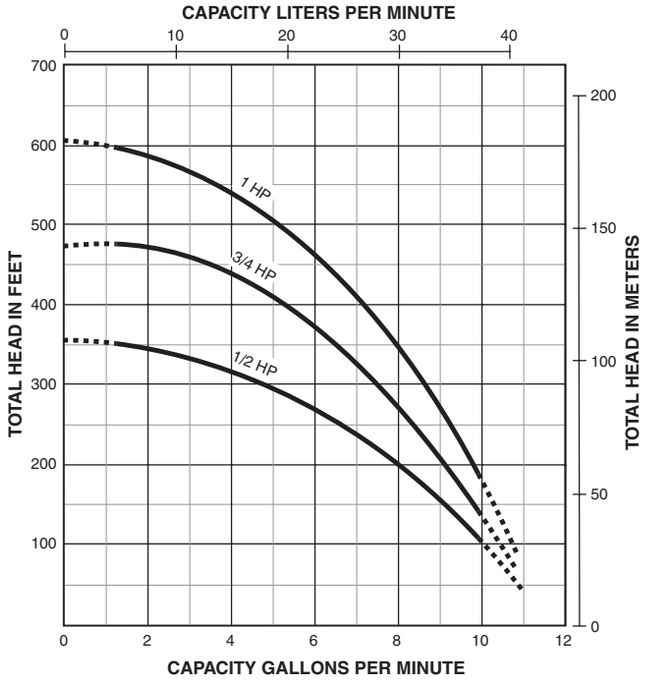
*5 and 7 GPH pumps are 3-3/4

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE – 5 GPM



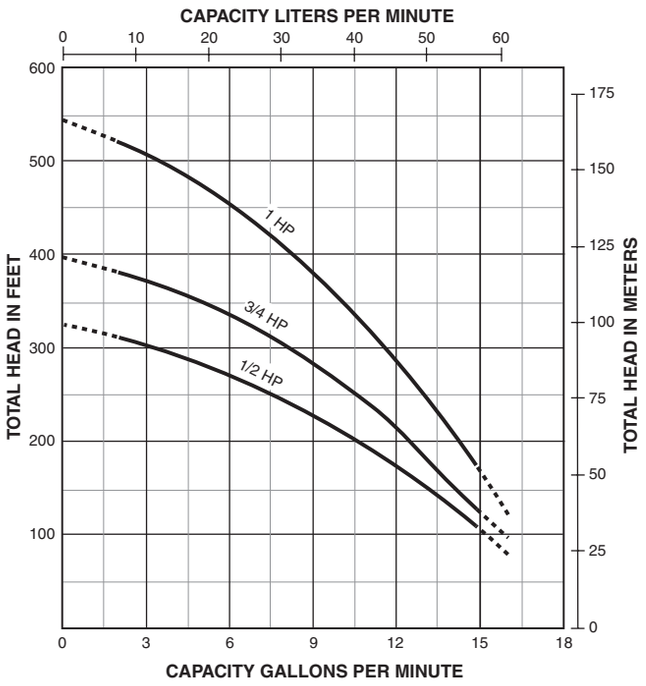
PUMP PERFORMANCE – 7 GPM



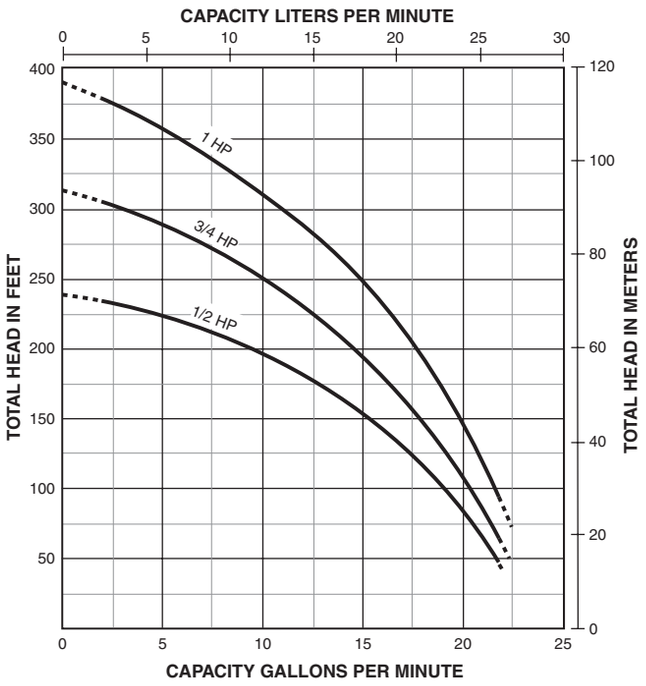
4" Submersible Pumps

MS+ series

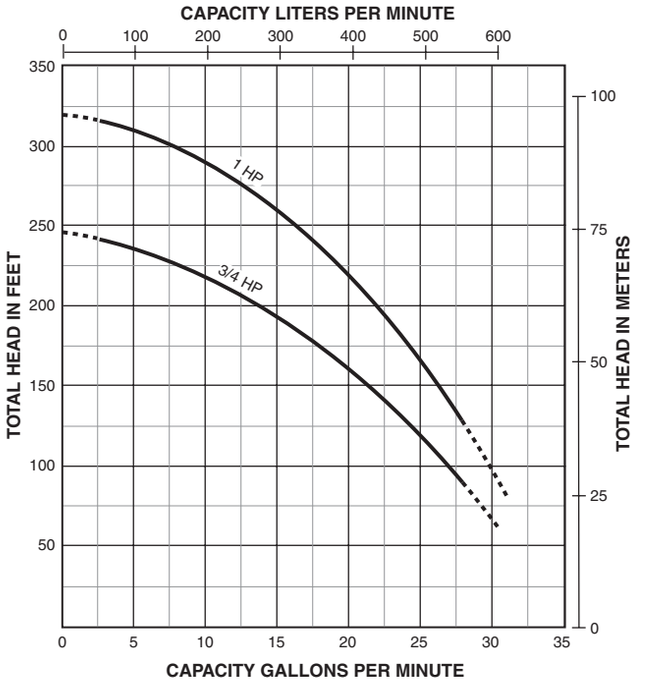
PUMP PERFORMANCE – 10 GPM



PUMP PERFORMANCE – 15 GPM



PUMP PERFORMANCE – 20 GPM



BERKELEY®

MS stainless steel series

4" Submersible Pumps

5 and 7 gpm TrimLine™



POWERED BY PENTEK Pentair Water

C SA US

SA NSF/ANSI 61 Drinking Water

Precision-engineered, high-quality, rugged Stainless Steel Series Pumps deliver efficient, dependable performance even in rough, aggressive water.

The TrimLine™ 5 and 7 GPM Series Pumps are 3-3/4" maximum O.D. Heads to 1,150 feet and capacities to 10.5 GPM. Built to deliver long-term, trouble-free service. Floating impeller design resists sand and reduces sand locking. These pumps feature the proven SignaSeal™ staging system.

APPLICATIONS

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

SPECIFICATIONS

Shell – Stainless steel

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 – Stainless steel

Cable Guard – Stainless steel

Agency Listings – CSA

Check Valve – Acetal

FEATURES

Proven 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 wrench flats 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 – Heavy-walled corrosion-resistant 300 grade 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 stainless steel.

PENTEK® XE Series™ 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™, TrimLine™, and XE Series™ are trademarks of Pentair Water.

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

4" Submersible Pumps

5 and 7 gpm TrimLine™

ORDERING INFORMATION

GPM	Motor Type	HP	Stgs.	PH	Volt	Assembled Pump Catalog Number	Assembled Pump Length Inches*	Assembled Pump Weight Pounds*	Pump End Catalog Number	Pump End Length Inches*	Pump End Weight Pounds*	Motor Catalog Number	Motor Weight Pounds*	Control Box Catalog Number	Control Box Weight Pounds*
5	2 Wire	1/2	13	1	115	**B5P4MS05121**	27-1/2	28	**L5P4CMGS**	18	12	**P42B0005A1**	19		
		1/2	13	1	230	**B5P4MS05221**	27-1/2	28	**L5P4CMGS**	18	12	**P42B0005A2**	19		
		3/4	18	1	230	**B5P4MS07221**	32-3/4	34	**L5P4DMGS**	22	15	**P42B0007A2**	23		
		1	22	1	230	**B5P4MS10221**	37	39	**L5P4EMGS**	25-1/4	17	**P42B0010A2**	25		
		1-1/2	30	1	230	**B5P4MS15221**	47	51	**L5P4FMGS**	32	21	**P42B0015A2**	29		
	3 Wire	1/2	13	1	115	**B5P4MS05131**	27-1/2	28	**L5P4CMGS**	18	12	**P43B0005A1**	19	**SMC-IR0511**	4
		1/2	13	1	230	**B5P4MS05231**	27-1/2	28	**L5P4CMGS**	18	12	**P43B0005A2**	18	**SMC-CR0521**	4
		3/4	18	1	230	**B5P4MS07231**	32-3/4	34	**L5P4DMGS**	22	15	**P43B0007A2**	21	**SMC-CR0721**	4
		1	22	1	230	**B5P4MS10231**	37	39	**L5P4EMGS**	25-1/4	17	**P43B0010A2**	23	**SMC-CR1021**	4
		1-1/2	30	1	230	**B5P4MS15231**	45-1/2	48	**L5P4FMGS**	32	21	**P43B0015A2**	27	**SMC-CR1521**	7
		1-1/2	30	3	230				**L5P4FMGS**	32	21	**P43B0015A3**	23		
		1-1/2	30	3	460				**L5P4FMGS**	32	21	**P43B0015A4**	23		
		2	38	1	230				**L5P4GMGS**	37-3/4	25	**P43B0020A2**	31	**SMC-CR2021**	7
		2	38	3	230				**L5P4GMGS**	37-3/4	25	**P43B0015A3**	23		
		2	38	3	460				**L5P4GMGS**	37-3/4	25	**P43B0015A4**	23		
7	2 Wire	1/2	10	1	115	**B7P4MS05121**	25-1/2	27	**L7P4CMGS**	16	11	**P42B0005A1**	19		
		1/2	10	1	230	**B7P4MS05221**	25-1/2	27	**L7P4CMGS**	16	11	**P42B0005A2**	19		
		3/4	13	1	230	**B7P4MS07221**	29	32	**L7P4DMGS**	18-1/2	13	**P42B0007A2**	23		
		1	17	1	230	**B7P4MS10221**	33-3/4	37	**L7P4EMGS**	22	15	**P42B0010A2**	25		
		1-1/2	22	1	230	**B7P4MS15221**	42-1/2	47	**L7P4FMGS**	27-1/4	17	**P42B0015A2**	29		
	3 Wire	1/2	10	1	115	**B7P4MS05131**	25-1/2	27	**L7P4CMGS**	16	11	**P43B0005A1**	19	**SMC-IR0511**	4
		1/2	10	1	230	**B7P4MS05231**	25-1/2	27	**L7P4CMGS**	16	11	**P43B0005A2**	18	**SMC-CR0521**	4
		3/4	13	1	230	**B7P4MS07231**	29	32	**L7P4DMGS**	18-1/2	13	**P43B0007A2**	21	**SMC-CR0721**	4
		1	17	1	230	**B7P4MS10231**	33-3/4	37	**L7P4EMGS**	22	15	**P43B0010A2**	23	**SMC-CR1021**	4
		1-1/2	22	1	230	**B7P4MS15231**	41	44	**L7P4FMGS**	27-1/4	17	**P43B0015A2**	27	**SMC-CR1521**	7
		1-1/2	22	3	230				**L7P4FMGS**	27-1/4	17	**P43B0015A3**	23		
		1-1/2	22	3	460				**L7P4FMGS**	27-1/4	17	**P43B0015A4**	23		
		2	28	1	230				**L7P4GMGS**	32-1/2	20	**P43B0020A2**	31	**SMC-CR2021**	7
		2	28	3	230				**L7P4GMGS**	32-1/2	20	**P43B0020A3**	27		
		2	28	3	460				**L7P4GMGS**	32-1/2	20	**P43B0020A4**	27		
		3	36	1	230				**L7P4HMGS**	39-1/2	24	**P43B0030A2**	37	**SMC-CR3021**	8
		3	36	3	230				**L7P4HMGS**	39-1/2	24	**P43B0030A3**	37		
		3	36	3	460				**L7P4HMGS**	39-1/2	24	**P43B0030A4**	37		

*Length and Weight are approximate.

TrimLine™ version maximum outside diameter 3-3/4". Standard version maximum outside diameter 3-7/8".

NOTE: Motor, Control Box or Magnetic Starter must be ordered separately, if ordering pump end only.
Discharge NPT is 1-1/4".

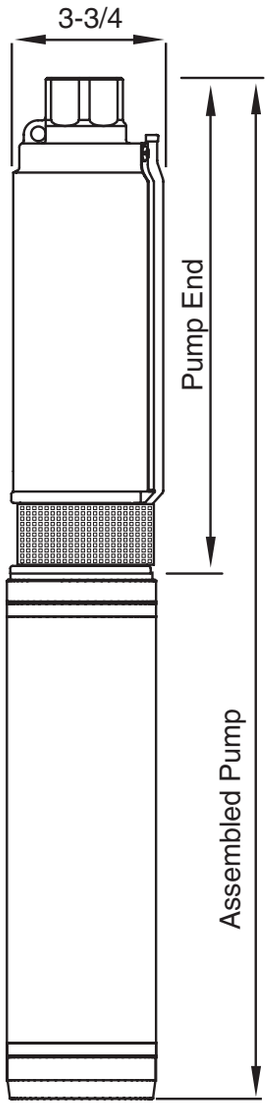
BERKELEY®

MS stainless steel series

4" Submersible Pumps

5 and 7 gpm TrimLine™

OUTLINE DIMENSIONS

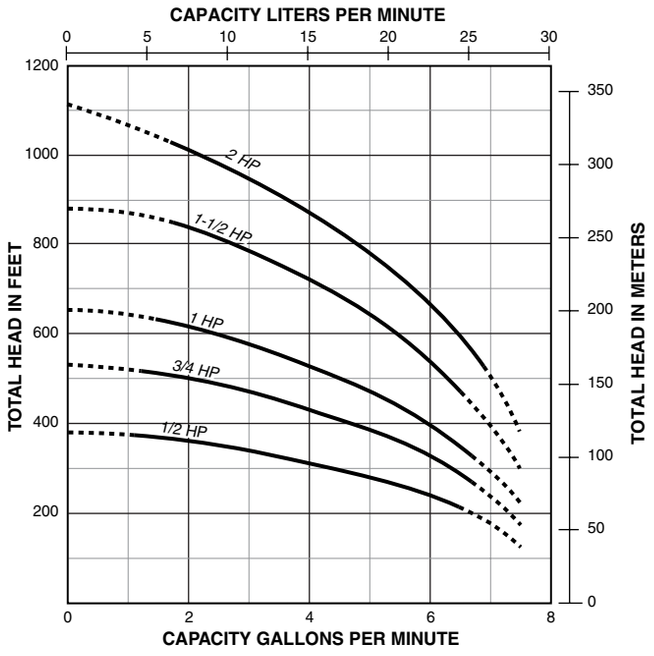


Discharge	
5 GPM	1-1/4" NPT
7 GPM	1-1/4" NPT

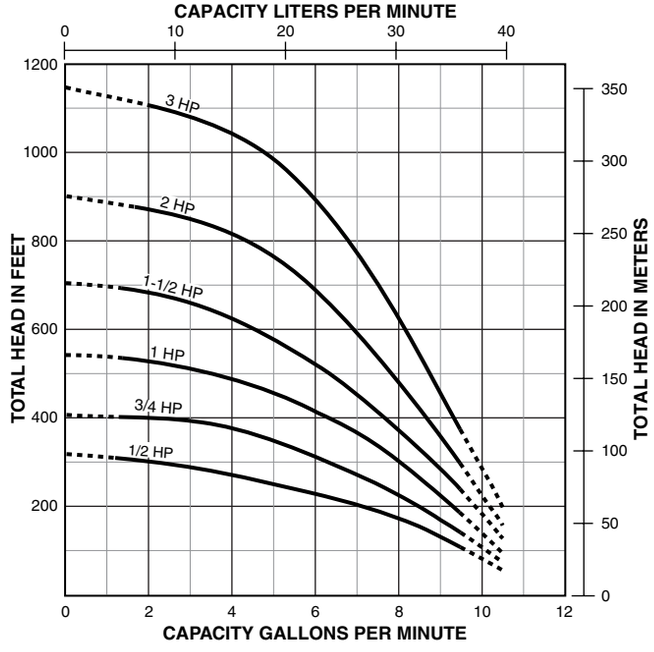
For dimensions, refer to Ordering Information table.

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE – 5 GPM



PUMP PERFORMANCE – 7 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

5 and 7 gpm TrimLine™

5 Gallons per Minute

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	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	Feet	PSI
1/2	0	–	–	–	–	–	–	–	–	–	5.7	4.3	2.7															380	164
	20	–	–	–	–	–	–	–	6.3	5.7	4.5	2.8																	
	30	–	–	–	–	–	–	6.3	5.8	5.2	3.6	1.5																	
	40	–	–	–	–	–	6.4	5.8	5.3	4.6	2.9																		
	50	–	–	–	–	6.4	5.9	5.3	4.7	3.7	1.7																		
	60	–	–	–	6.3	5.9	5.3	4.7	3.8	3.0																			
3/4	0	–	–	–	–	–	–	–	–	–	–	6.4	5.6	4.7	3.4	2.0												531	230
	20	–	–	–	–	–	–	–	–	–	6.5	5.7	4.8	3.5	2.2														
	30	–	–	–	–	–	–	–	–	–	6.1	5.3	4.2	3.0	1.1														
	40	–	–	–	–	–	–	–	–	6.5	5.7	4.9	3.6	2.4															
	50	–	–	–	–	–	–	–	6.5	6.2	5.4	4.3	3.1	1.3															
	60	–	–	–	–	–	–	6.5	6.2	5.8	4.9	3.6	2.4																
1	0	–	–	–	–	–	–	–	–	–	–	–	6.5	6.0	5.3	4.5	3.4	2.4										652	282
	20	–	–	–	–	–	–	–	–	–	–	6.6	6.0	5.3	4.5	3.5	2.5												
	30	–	–	–	–	–	–	–	–	–	–	6.3	5.8	5.1	4.1	3.1	1.7												
	40	–	–	–	–	–	–	–	–	–	6.7	6.1	5.4	4.6	3.6	2.6													
	50	–	–	–	–	–	–	–	–	–	6.4	5.8	5.1	4.1	3.1	1.9													
	60	–	–	–	–	–	–	–	–	6.7	6.1	5.5	4.7	3.6	2.7														
1-1/2	0	–	–	–	–	–	–	–	–	–	–	–	–	–	6.7	6.4	5.9	5.5	4.9	4.1	3.4	2.7	1.6					882	382
	20	–	–	–	–	–	–	–	–	–	–	–	–	–	6.4	6.0	5.5	5.0	4.2	3.5	2.8	1.7							
	30	–	–	–	–	–	–	–	–	–	–	–	–	6.6	6.2	5.7	5.3	4.6	3.8	3.2	2.4								
	40	–	–	–	–	–	–	–	–	–	–	–	–	6.4	6.0	5.6	5.0	4.3	3.6	2.8	1.8								
	50	–	–	–	–	–	–	–	–	–	–	–	6.6	6.2	5.8	5.3	4.7	3.9	3.2	2.5									
	60	–	–	–	–	–	–	–	–	–	–	–	6.5	6.0	5.6	5.0	4.3	3.6	2.9	1.8									
2	0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6.8	6.5	6.2	5.9	5.5	5.0	4.5	4.0	3.3	2.4		1120	485
	20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6.8	6.5	6.2	5.9	5.5	5.0	4.5	4.0	3.3	2.4				
	30	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6.6	6.3	6.0	5.7	5.2	4.8	4.3	3.7	2.9	2.1				
	40	–	–	–	–	–	–	–	–	–	–	–	–	–	6.8	6.5	6.2	5.9	5.5	5.0	4.5	4.0	3.3	2.4					
	50	–	–	–	–	–	–	–	–	–	–	–	–	–	6.6	6.4	6.1	5.8	5.4	4.9	4.4	3.9	3.1	2.2					
	60	–	–	–	–	–	–	–	–	–	–	–	–	6.8	6.5	6.2	6.0	5.6	5.1	4.6	4.1	3.2	2.5						

CAUTION: DO NOT use pump at flow rates indicated by the symbol '—'. To do so can cause premature failure of unit. Pump warranty is 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.

BERKELEY®

MS stainless steel series

4" Submersible Pumps

5 and 7 gpm TrimLine™

7 Gallons per Minute | 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	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	Feet	PSI
1/2	0	–	–	–	–	9.5	9.0	8.6	8.1	7.5	5.7	3.2																	322	139
	20	–	9.2	9.3	8.9	8.6	8.1	7.6	6.7	5.4	3.6																			
	30	–	9.3	8.9	8.6	8.1	7.6	6.8	5.9	5.0																				
	40	9.2	8.9	8.5	8.1	7.6	7.0	6.0	5.0	3.6																				
	50	8.8	8.5	8.0	7.6	7.0	6.0	5.1	3.9																					
	60	8.4	8.0	7.5	6.8	6.2	5.1	4.0																						
3/4	0	–	–	–	–	–	9.5	9.2	8.9	8.5	7.6	6.5	5.0	2.3															409	177
	20	–	–	–	9.5	9.3	8.9	8.6	8.2	7.7	6.5	5.2	3.0																	
	30	–	–	9.4	9.2	8.9	8.6	8.2	7.8	7.2	6.0	4.2																		
	40	–	9.4	9.1	8.9	8.7	8.3	7.9	7.3	6.7	5.2	3.1																		
	50	9.4	9.1	8.9	8.6	8.3	7.9	7.3	6.7	6.1	4.3																			
	60	9.0	8.8	8.5	8.2	7.9	7.4	6.7	6.1	5.4	3.1																			
1	0	–	–	–	–	–	–	–	9.4	9.1	8.6	8.0	7.3	6.4	5.2	3.7													545	236
	20	–	–	–	–	–	9.4	9.2	8.9	8.6	8.1	7.3	6.5	5.3	3.8															
	30	–	–	–	–	9.4	9.2	8.9	8.6	8.4	7.7	6.9	6.0	4.6	2.8															
	40	–	–	–	9.4	9.2	9.0	8.6	8.4	8.1	7.4	6.5	5.3	3.9																
	50	–	9.6	9.3	9.2	9.0	8.6	8.4	8.2	7.8	7.0	6.1	5.3	3.0																
	60	9.5	9.3	9.2	8.9	8.7	8.4	8.2	7.8	7.5	6.6	5.5	4.0																	
1-1/2	0	–	–	–	–	–	–	–	–	–	9.2	8.8	8.4	7.9	7.3	6.6	5.8	4.8	3.5										705	305
	20	–	–	–	–	–	–	–	9.4	9.2	8.8	8.5	8.0	7.3	6.7	5.8	4.9	3.7												
	30	–	–	–	–	–	9.3	9.5	9.2	9.0	8.7	8.2	7.7	7.1	6.3	5.9	4.4	2.7												
	40	–	–	–	–	–	9.5	9.2	9.1	8.8	8.5	8.0	7.4	6.7	5.9	4.9	3.7													
	50	–	–	–	9.7	9.5	9.2	9.1	8.8	8.7	8.3	7.7	7.1	6.5	5.4	4.6	2.8													
	60	–	–	9.7	9.5	9.3	9.1	8.9	8.7	8.5	8.0	7.5	6.8	6.0	5.0	4.1														
2	0	–	–	–	–	–	–	–	–	–	9.7	9.4	9.0	8.7	8.4	8.0	7.4	7.1	6.4	5.8	5.0	4.2	2.8						900	389
	20	–	–	–	–	–	–	–	–	9.7	9.4	9.1	8.7	8.4	8.0	7.6	7.1	6.6	5.8	5.1	4.3	3.8								
	30	–	–	–	–	–	–	–	9.7	9.5	9.2	8.9	8.6	8.3	7.9	7.4	6.9	6.2	5.5	4.7	3.8									
	40	–	–	–	–	–	–	–	9.6	9.4	9.1	8.7	8.5	8.1	7.7	7.2	6.6	5.9	5.2	4.2	3.2									
	50	–	–	–	–	–	–	9.6	9.4	9.3	8.9	8.7	8.3	7.9	7.4	6.9	6.3	5.5	4.8	4.0	2.3									
	60	–	–	–	–	–	9.6	9.4	9.3	9.1	8.8	8.5	8.1	7.7	7.2	6.7	6.0	5.8	4.5	3.3										
3	0	–	–	–	–	–	–	–	–	–	–	–	9.5	9.3	9.0	8.8	8.6	8.3	8.0	7.6	7.3	6.8	6.4	5.7	5.2	4.7	3.9	2.5	1150	498
	20	–	–	–	–	–	–	–	–	–	–	9.5	9.3	9.0	8.8	8.6	8.3	8.1	7.7	7.4	6.9	6.5	5.8	5.2	4.8	4.0	3.1			
	30	–	–	–	–	–	–	–	–	–	9.6	9.4	9.2	8.9	8.7	8.4	8.1	7.9	7.4	7.0	6.6	6.0	5.4	5.8	4.3	3.5				
	40	–	–	–	–	–	–	–	–	–	9.6	9.4	9.1	8.8	8.6	8.3	8.1	7.8	7.4	7.0	6.5	5.9	5.3	4.9	4.2	3.2				
	50	–	–	–	–	–	–	–	–	9.7	9.4	9.2	8.9	8.7	8.5	8.1	7.9	7.5	7.1	6.6	6.1	5.5	5.1	4.4	3.6					
	60	–	–	–	–	–	–	–	9.7	9.6	9.4	9.1	8.9	8.7	8.4	8.1	7.8	7.4	7.0	6.6	5.9	5.3	4.9	4.2	3.3					

CAUTION: DO NOT use pump at flow rates indicated by the symbol '—'. To do so can cause premature failure of unit. Pump warranty is 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



POWERED BY PENTEK Pentair Water

C US

NSF/ANSI 61 Drinking Water

Precision-engineered, high-quality, rugged 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 proven 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

Cable Guard – Stainless steel

Check Valve – Acetal†

Agency Listings – CSA

FEATURE

Proven 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 wrench flats for ease of installation.

Discharge Bearing – 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.

PENTEK® XE Series™ 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™, TrimLine™, and XE Series™ are trademarks of Pentair Water.

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

†Except where noted.

4" Submersible Pumps

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	7	1	115	**B10P4MS05121**	22-3/4	27-1/2	**L10P4CMGS**	12-3/4	9	**P42B0005A1**	19		
		1/2	7	1	230	**B10P4MS05221**	22-3/4	27-1/2	**L10P4CMGS**	12-3/4	9	**P42B0005A2**	19		
		3/4	10	1	230	**B10P4MS07221**	25-3/4	30-1/2	**L10P4DMGS**	14-1/2	10	**P42B0007A2**	23		
		1	13	1	230	**B10P4MS10221**	28-3/4	34-1/2	**L10P4EMGS**	16-1/2	10-3/4	**P42B0010A2**	25		
		1-1/2	17	1	230	**B10P4MS15221**	34-3/4	41-1/2	**L10P4FMGS**	19-3/4	12-1/2	**P42B0015A2**	29		
	3 Wire	1/2	7	1	115	**B10P4MS05131**	22-3/4	27-1/2	**L10P4CMGS**	12-3/4	9	**P43B0005A1**	19	**SMC-IR0511**	4
		1/2	7	1	230	**B10P4MS05231**	22-3/4	27-1/2	**L10P4CMGS**	12-3/4	9	**P43B0005A2**	18	**SMC-CR0521**	4
		3/4	10	1	230	**B10P4MS07231**	25-3/4	30-1/2	**L10P4DMGS**	14-1/2	10	**P43B0007A2**	21	**SMC-CR0721**	4
		1	13	1	230	**B10P4MS10231**	28-3/4	34-1/2	**L10P4EMGS**	16-1/2	10-3/4	**P43B0010A2**	23	**SMC-CR1021**	4
		1-1/2	17	1	230	**B10P4MS15231**	33-1/2	41-1/2	**L10P4FMGS**	19-3/4	12-1/2	**P43B0015A2**	27	**SMC-CR1521**	7
		1-1/2	17	3	230				**L10P4FMGS**	19-3/4	12-1/2	**P43B0015A3**	23		
		1-1/2	17	3	460				**L10P4FMGS**	19-3/4	12-1/2	**P43B0015A4**	23		
		2	21	1	230				**L10P4GMGS**	22	13-3/4	**P43B0020A2**	31	**SMC-CR2021**	7
		2	21	3	230				**L10P4GMGS**	22	13-3/4	**P43B0020A3**	23		
		2	21	3	460				**L10P4GMGS**	22	13-3/4	**P43B0020A4**	23		
		3	29	1	230				**L10P4GMGS**	22	16-3/4	**P43B0030A2**	40	**SMC-CR3021**	8
		3	29	3	230				**L10P4HMGS**	28	16-3/4	**P43B0030A3**	32		
		3	29	3	460				**L10P4HMGS**	28	16-3/4	**P43B0030A4**	32		
		5	47	1	230				**L10P4JMGS**	43-1/2	25-1/2	**P43B0050A2**	70	**SMC-CR5021**	12
		5	47	3	230				**L10P4JMGS**	43-1/2	25-1/2	**P43B0050A3**	55		
		5	47	3	460				**L10P4JMGS**	43-1/2	25-1/2	**P43B0050A4**	55		
15**	2 Wire	1/2	5	1	115	**B15P4MS05121**	22-1/4	27	**L15P4CMGS**	12-1/4	9	**P42B0005A1**	19		
		1/2	5	1	230	**B15P4MS05221**	22-1/4	27	**L15P4CMGS**	12-1/4	9	**P42B0005A2**	19		
		3/4	7	1	230	**B15P4MS07221**	25-3/4	31	**L15P4DMGS**	14-1/2	10	**P42B0007A2**	23		
		1	9	1	230	**B15P4MS10221**	29-1/4	35	**L15P4EMGS**	16-3/4	11	**P42B0010A2**	25		
		1-1/2	12	1	230	**B15P4MS15221**	35-1/4	43	**L15P4FMGS**	20-1/4	13	**P42B0015A2**	29		
	3 Wire	1/2	5	1	115	**B15P4MS05131**	22-1/4	27	**L15P4CMGS**	12-1/4	9	**P43B0005A1**	19	**SMC-IR0511**	4
		1/2	5	1	230	**B15P4MS05231**	22-1/4	27	**L15P4CMGS**	12-1/4	9	**P43B0005A2**	18	**SMC-CR0521**	4
		3/4	7	1	230	**B15P4MS07231**	25-3/4	31	**L15P4DMGS**	14-1/2	10	**P43B0007A2**	21	**SMC-CR0721**	4
		1	9	1	230	**B15P4MS10231**	29-1/4	35	**L15P4EMGS**	16-3/4	11	**P43B0010A2**	23	**SMC-CR1021**	4
		1-1/2	12	1	230	**B15P4MS15231**	33-3/4	41	**L15P4FMGS**	20-1/4	13	**P43B0015A2**	27	**SMC-CR1521**	7
		1-1/2	12	3	230				**L15P4FMGS**	20-1/4	13	**P43B0015A3**	23		
		1-1/2	12	3	460				**L15P4FMGS**	20-1/4	13	**P43B0015A4**	23		
		2	15	1	230				**L15P4GMGS**	23-1/2	15	**P43B0020A2**	31	**SMC-CR2021**	7
		2	15	3	230				**L15P4GMGS**	23-1/2	15	**P43B0020A3**	23		
		2	15	3	460				**L15P4GMGS**	23-1/2	15	**P43B0020A4**	23		
		3	22	1	230				**L15P4HMGS**	31-1/4	18	**P43B0030A2**	40	**SMC-CR3021**	7
		3	22	3	230				**L15P4HMGS**	31-1/4	18	**P43B0030A3**	32		
		3	22	3	460				**L15P4HMGS**	31-1/4	18	**P43B0030A4**	32		

* 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

ORDERING INFORMATION

GPM	Motor Type	HP	Stgs.	PH	Volt	Assembled Pump Catalog Number	Assembled Pump Length Inches*	Assembled Pump Weight Pounds*	Pump End Catalog Number	Pump End Length Inches*	Pump End Weight Pounds*	Motor Catalog Number	Motor Weight Pounds*	Control Box Catalog Number	Control Box Weight Pounds*
20**	2 Wire	3/4	5	1	230	B20P4MS07221	23-3/4	30	L20P4DMGS	12-1/2	8-1/2	P42B0007A2	23		
		1	7	1	230	B20P4MS10221	27-1/4	34	L20P4EMGS	14-3/4	9-3/4	P42B0010A2	25		
		1-1/2	9	1	230	B20P4MS15221	32	39	L20P4FMGS	16-3/4	10-3/4	P42B0015A2	29		
	3 Wire	3/4	5	1	230	B20P4MS07231	23-3/4	30	L20P4DMGS	12-1/2	8-1/2	P43B0007A2	23	SMC-CR0721	5
		1	7	1	230	B20P4MS10231	27-1/4	34	L20P4EMGS	14-3/4	9-3/4	P43B0010A2	25	SMC-CR1021	5
		1-1/2	9	1	230	B20P4MS15231	30-1/2	39	L20P4FMGS	16-3/4	10-3/4	P43B0015A2	29	SMC-CR1521	7
		1-1/2	9	3	230				L20P4FMGS	16-3/4	10-3/4	P43B0015A3	23		
		1-1/2	9	3	460				L20P4FMGS	16-3/4	10-3/4	P43B0015A4	23		
		2	12	1	230				L20P4GMGS	20-1/4	12-1/2	P43B0020A2	31	SMC-CR2021	7
		2	12	3	230				L20P4GMGS	20-1/4	12-1/2	P43B0020A3	32		
		2	12	3	460				L20P4GMGS	20-1/4	12-1/2	P43B0020A4	32		
		3	17	1	230				L20P4HMGS	25-3/4	15	P43B0030A2	40	SMC-CR3021	7
		3	17	3	230				L20P4HMGS	25-3/4	15	P43B0030A3	32		
		3	17	3	460				L20P4HMGS	25-3/4	15	P43B0030A4	32		
		5	28	1	230				L20P4JMGS	38	21	P43B0050A2	70	SMC-CR5021	8
		5	28	3	230				L20P4JMGS	38	21	P43B0050A3	55		
		5	28	3	460				L20P4JMGS	38	21	P43B0050A4	55		
		7-1/2	40	3	230				L20P4KMGS	53-3/4	30	P43B0075A3	70		
		7-1/2	40	3	460				L20P4KMGS	53-3/4	30	P43B0075A4	70		
		10	54	3	460				L20P4LMGS	71	41	P43B0100A4	78		
30***	2 Wire	1	5	1	230	B30P4MS10221	26-1/2	35	L30P4EMGS	14	9-3/4	P42B0010A2	25		
		1-1/2	6	1	230	B30P4MS15221	30-1/2	39	L30P4FMGS	15-1/4	10-3/4	P42B0015A2	29		
	3 Wire	1	5	1	230	B30P4MS10231	26-1/2	35	L30P4EMGS	14	10	P43B0010A2	25	SMC-CR1021	5
		1-1/2	6	1	230	B30P4MS15231	29	39	L30P4FMGS	15-1/4	11	P43B0015A2	29	SMC-CR-1521	7
		1-1/2	6	3	230				L30P4FMGS	15-1/4	11	P43B0015A3	23		
		1-1/2	6	3	460				L30P4FMGS	15-1/4	11	P43B0015A4	23		
		2	8	1	230				L30P4GMGS	18-1/4	12	P43B0020A2	31	SMC-CR2021	7
		2	8	3	230				L30P4GMGS	18-1/4	12	P43B0020A3	23		
		2	8	3	460				L30P4GMGS	18-1/4	12	P43B0020A4	23		
		3	12	1	230				L30P4HMGS	24	15	P43B0030A2	40	SMC-CR3021	7
		3	12	3	230				L30P4HMGS	24	15	P43B0030A3	32		
		3	12	3	460				L30P4HMGS	24	15	P43B0030A4	32		
		5	20	1	230				L30P4JMGS	35-3/4	20	P43B0050A2	70	SMC-CR5021	8
		5	20	3	230				L30P4JMGS	35-3/4	20	P43B0050A3	55		
		5	20	3	460				L30P4JMGS	35-3/4	20	P43B0050A4	55		
		7-1/2	28	3	230				L30P4KMGS	50	27	P43B0075A3	70		
		7-1/2	28	3	460				L30P4KMGS	50	27	P43B0075A4	70		
		10	38	3	460				L30P4LMGS	65-1/2	35	P43B0100A4	70		

* 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

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*
	2 Wire	1-1/2	4	1	230	**L50P4FMGS**	15-1/4	10	**P42B0015A2**	29		
		1-1/2	4	1	230	**L50P4FMGS**	15-1/4	10	**P43B0015A2**	27	**SMC-CR1521**	7
		1-1/2	4	3	230	**L50P4FMGS**	15-1/4	10	**P43B0015A3**	23		
		1-1/2	4	3	460	**L50P4FMGS**	15-1/4	10	**P43B0015A4**	23		
		2	6	1	230	**L50P4GMGS**	19-1/4	12	**P43B0020A2**	31	**SMC-CR2021**	7
		2	6	3	230	**L50P4GMGS**	19-1/4	12	**P43B0020A3**	27		
		2	6	3	460	**L50P4GMGS**	19-1/4	12	**P43B0020A4**	27		
50***		3	8	1	230	**L50P4HMGS**	23-1/4	15	**P43B0030A2**	40	**SMC-CR3021**	7
	3 Wire	3	8	3	230	**L50P4HMGS**	23-1/4	15	**P43B0030A3**	32		
		3	8	3	460	**L50P4HMGS**	23-1/4	15	**P43B0030A4**	32		
		5	13	1	230	**L50P4JMGS**	33-1/2	20	**P43B0050A2**	70	**SMC-CR5021**	8
		5	13	3	230	**L50P4JMGS**	33-1/2	20	**P43B0050A3**	55		
		5	13	3	460	**L50P4JMGS**	33-1/2	20	**P43B0050A4**	55		
		7-1/2	20	3	230	**L50P4KMGS**	47-1/2	25	**P43B0075A3**	70		
		7-1/2	20	3	460	**L50P4KMGS**	47-1/2	25	**P43B0075A4**	70		
		10	25	3	460	**L50P4LMGS**	57-3/4	35	**P43B0100A4**	70		

* Length and Weight are approximate.

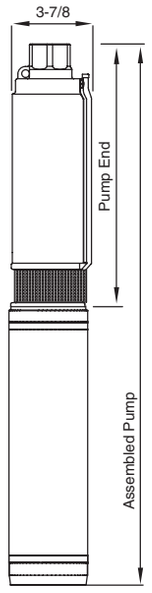
** For 10 GPM, 15 GPM, and 20 GPM, discharge is 1-1/4" NPT.

*** 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

OUTLINE DIMENSIONS – 10, 15, AND 20 GPM

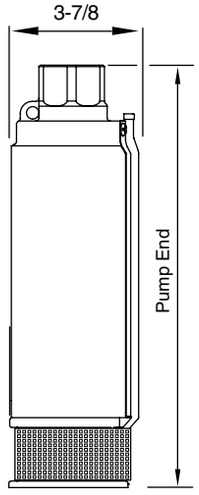


Discharge	
10 GPM	1-1/4" NPT
15 GPM	1-1/4" NPT
20 GPM	1-1/4" NPT

For lengths, refer to Ordering Information tables.

Dimensions (in inches) are for estimating purposes only.

OUTLINE DIMENSIONS – 30 AND 50 GPM

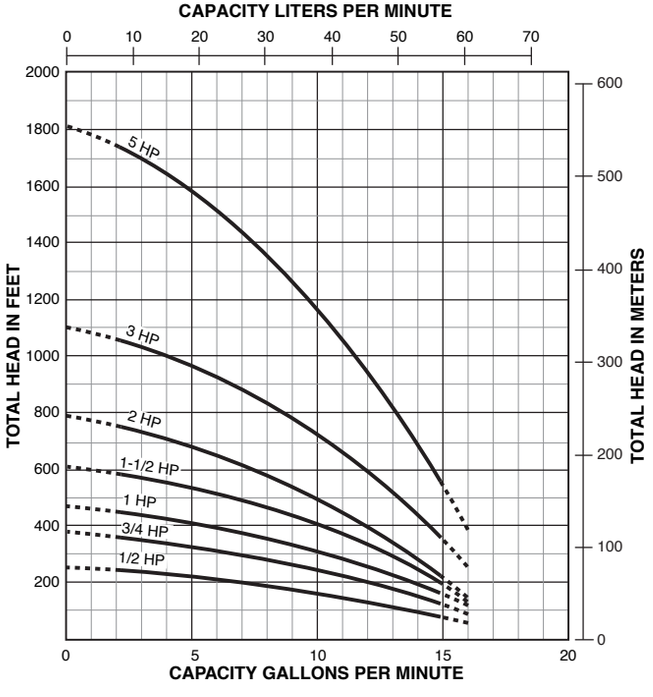


Discharge	
30 GPM	2" NPT
50 GPM	2" NPT

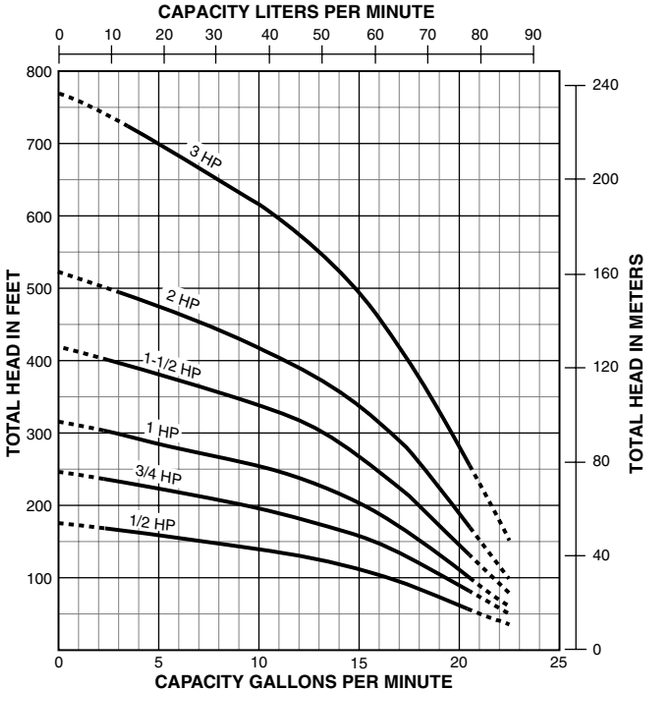
Pump diameter is 3-7/8". For lengths, refer to Ordering Information tables.

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE – 10 GPM



PUMP PERFORMANCE – 15 GPM

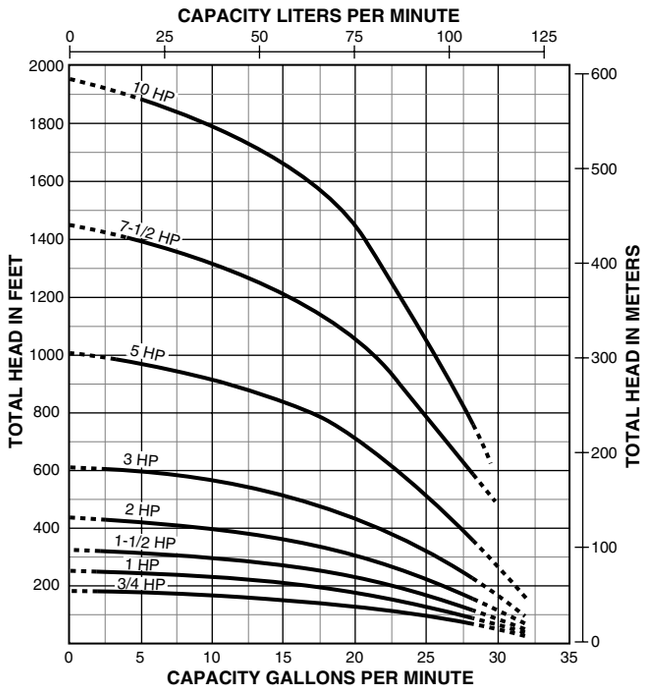


Tested and rated in accordance with Water Systems Council standards.

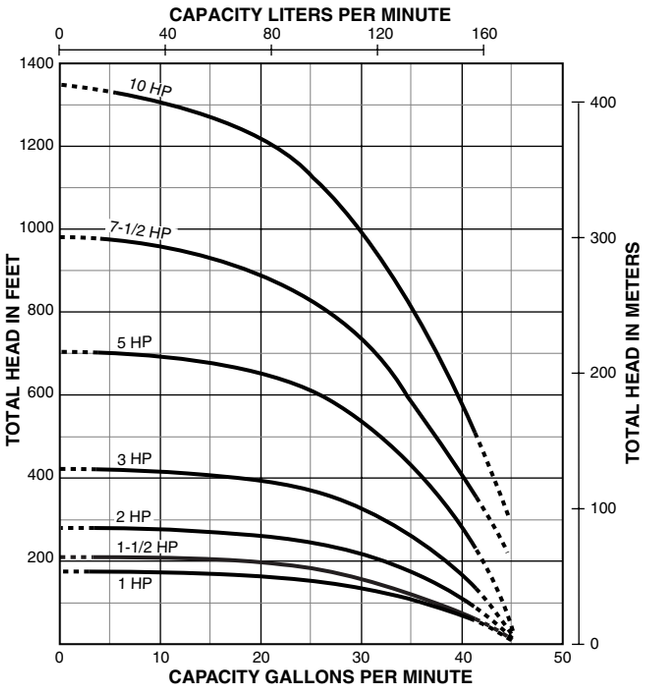
NOTE: Pumps installed with a PRO-Source™ tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

4" Submersible Pumps

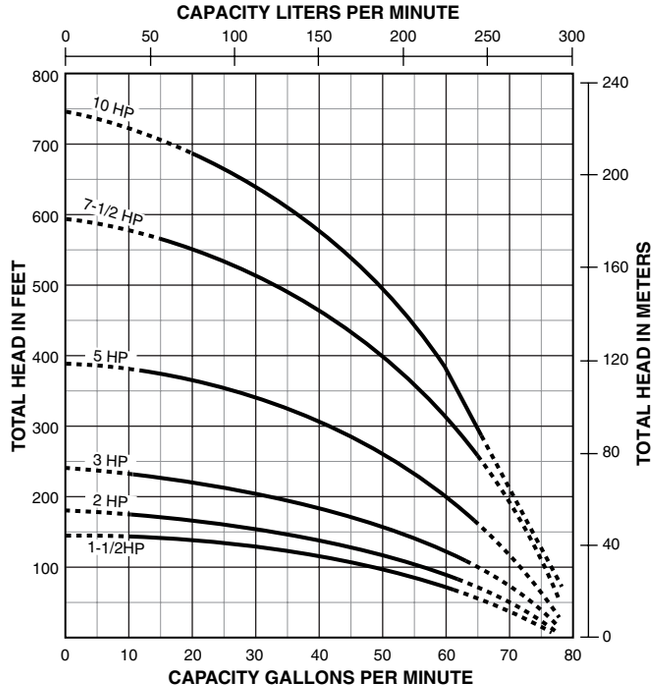
PUMP PERFORMANCE – 20 GPM



PUMP PERFORMANCE – 30 GPM



PUMP PERFORMANCE – 50 GPM



4" Submersible Pumps

10 Gallons per Minute | 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	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	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																			
	30	13.2	12.6	11.8	10.9	9.8	8.0	5.5																				
	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	0	—	—	—	—	14.9	14.4	13.8	13.3	12.8	11.5	10.1	8.2	5.8	2.1												467	202
	20	—	—	14.7	14.4	14.0	13.4	12.9	12.3	11.7	10.2	8.3	6.0	2.6														
	30	—	14.7	14.4	13.8	13.4	12.9	12.3	11.7	11.0	9.4	7.4	4.6															
	40	14.6	14.2	13.8	13.3	13.0	12.5	11.8	11.1	10.3	8.5	6.2	3.0															
	50	14.1	13.7	13.3	12.9	12.4	11.8	11.1	10.2	9.5	7.4	4.8																
	60	13.7	13.2	12.8	12.4	11.9	11.2	10.3	9.5	8.7	6.3	3.2																
1-1/2	0	—	—	—	—	—	—	14.7	14.4	14.0	13.2	12.2	11.2	10.1	8.6	7.1	5.2	2.5									636	275
	20	—	—	—	—	14.8	14.4	14.0	13.6	13.2	12.4	11.3	10.2	8.7	7.3	5.3	2.8											
	30	—	—	—	14.7	14.4	14.0	13.6	13.2	12.8	11.9	10.7	9.6	8.1	6.4	4.4												
	40	—	15.0	14.7	14.4	14.1	13.7	13.3	12.8	12.4	11.4	10.2	8.9	7.3	5.5	3.0												
	50	14.9	14.6	14.3	14.0	13.6	13.2	12.8	12.4	12.0	10.8	9.7	8.2	6.5	4.5													
	60	14.5	14.3	14.0	13.6	13.3	12.8	12.4	12.0	11.5	10.2	9.0	7.5	5.6	3.3													
2	0	—	—	—	—	—	—	—	14.9	14.6	14.0	13.3	12.7	12.0	11.1	10.2	9.2	8.0	6.6	5.1	3.1						806	349
	20	—	—	—	—	—	14.9	14.6	14.4	14.0	13.4	12.7	12.0	11.1	10.2	9.2	8.0	6.6	5.1	3.1								
	30	—	—	—	—	15.0	14.7	14.4	14.0	13.8	13.1	12.4	11.7	10.7	9.8	8.8	7.5	6.1	4.5	2.0								
	40	—	—	—	14.9	14.6	14.4	14.2	13.8	13.3	12.8	12.1	11.3	10.2	9.2	8.0	6.6	5.1	3.1									
	50	—	—	14.9	14.6	14.4	14.1	13.8	13.4	13.1	12.4	11.6	10.8	9.8	8.8	7.6	6.1	4.7	2.2									
	60	15.1	14.9	14.6	14.4	14.1	13.8	13.4	13.1	12.8	12.1	11.3	10.3	9.5	8.3	6.9	5.3	3.7										
3	0	—	—	—	—	—	—	—	—	—	—	14.7	14.3	13.8	13.3	12.8	12.3	11.8	11.0	10.2	9.5	8.7	7.6	6.4	5.3	4.1	1100	476
	20	—	—	—	—	—	—	—	—	—	14.7	14.3	13.8	13.3	12.8	12.3	11.8	11.0	10.2	9.5	8.7	7.6	6.4	5.3	4.1			
	30	—	—	—	—	—	—	—	14.7	15.0	14.5	14.1	13.6	13.1	12.6	12.1	11.4	10.7	10.0	9.2	8.2	7.1	6.0	4.9	3.3			
	40	—	—	—	—	—	—	—	15.0	14.7	14.3	13.8	13.3	12.8	12.3	11.8	11.0	10.2	9.5	8.7	7.6	6.4	5.3	4.1				
	50	—	—	—	—	—	—	15.0	14.8	14.6	14.1	13.7	13.2	12.7	12.2	11.7	10.9	10.1	9.4	8.6	7.5	6.2	5.0	3.9				
	60	—	—	—	—	—	15.0	14.8	14.6	14.4	13.9	13.4	12.9	12.4	11.9	11.2	10.4	9.7	8.8	7.9	6.6	5.5	4.3					

HP	PSI	Pumping Depth in Feet																Shut-Off Head	
		200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	Feet	PSI
5	0	—	—	—	14.6	14.2	13.5	12.9	12.3	11.6	10.8	9.9	8.9	7.7	6.3	4.9		1824	745
	20	—	—	15.0	14.5	13.9	13.3	12.7	12.1	11.2	10.3	9.4	8.5	7.1	5.6	4.1			
	30	—	—	14.9	14.3	13.8	13.1	12.5	11.9	11.1	10.2	9.2	8.2	6.7	5.2	3.7			
	40	—	—	14.7	14.2	13.5	12.9	12.3	11.6	10.8	9.9	8.9	7.7	6.3	4.9				
	50	—	—	14.6	14.1	13.4	12.8	12.2	11.5	10.7	9.8	8.8	7.5	6.1	4.7				
	60	—	15.0	14.5	13.9	13.3	12.7	12.1	11.2	10.3	9.4	8.5	7.1	5.6	4.1				

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

15 Gallons per Minute | PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

		Pumping Depth in Feet																					Shut-Off Head	
HP	PSI	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	—	—	20.0	18.7	16.9	13.1	7.4															175	76
	20	19.7	18.3	16.3	13.0	8.8																		
	30	18.0	15.6	12.4	7.9	2.0																		
	40	15.2	11.9	7.0																				
	50	11.2	5.8																					
	60	4.8																						
3/4	0	—	—	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																
	40	18.6	17.5	15.9	13.5	10.9	6.0																	
	50	17.2	15.4	13.1	10.0	6.4																		
	60	15.0	12.7	9.7	5.5																			
1	0	—	—	—	—	20.4	19.4	18.4	17.2	15.5	10.3	2.7											318	138
	20	—	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														
	60	18.0	17.0	15.6	13.7	11.7	8.4	4.4																
1-1/2	0	—	—	—	—	—	20.5	19.9	19.3	18.4	16.4	13.1	8.3	2.8									420	182
	20	—	—	21.2	20.5	20.0	19.3	18.6	17.6	16.5	13.5	9.1	3.2											
	30	—	21.1	20.3	19.9	19.3	18.7	17.7	16.6	15.4	11.7	6.3												
	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													
	60	19.6	19.0	18.5	17.7	16.9	15.7	13.9	12.0	9.7	3.8													
2	0	—	—	—	—	—	—	20.7	20.2	19.6	18.3	16.9	14.4	11.6	7.4	2.7							525	227
	20	—	—	—	21.2	20.9	20.2	19.7	19.1	18.4	17.0	14.7	11.8	7.8	3.2									
	30	—	—	21.2	20.8	20.3	19.7	19.1	18.5	17.9	16.1	13.5	10.2	5.5										
	40	—	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											
	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	—	—	—	—	—	—	—	—	21.0	20.2	19.5	18.7	17.8	16.6	15.0	13.0	10.8	8.0	4.9	1.6		770	333
	20	—	—	—	—	—	—	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				
	30	—	—	—	—	—	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				
	40	—	—	—	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	—	—	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						
	60	—	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							

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

20 Gallons per Minute | 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	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	Feet	PSI
3/4	0	—	—	—	—	23.5	19.0	13.7																			180	78
	20	—	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																									
	60	10.2																										
1	0	—	—	—	—	—	25.3	22.4	18.8	15.5																	251	109
	20	—	—	—	25.1	22.8	19.5	16.1	10.1																			
	30	—	—	24.9	22.5	19.8	16.5	10.6																				
	40	—	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	—	—	—	—	—	—	26.4	24.0	21.6	16.4	5.4															323	140
	20	—	—	—	—	26.8	24.4	22.0	19.5	16.8	6.8																	
	30	—	—	—	26.5	24.7	22.2	19.6	17.1	13.9																		
	40	—	—	26.2	24.3	22.3	19.8	17.3	14.2	8.0																		
	50	—	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	—	—	—	—	—	—	—	—	—	23.2	20.2	16.2	8.5													420	275
	20	—	—	—	—	—	—	26.1	24.9	23.4	20.6	16.7	9.5															
	30	—	—	—	—	—	26.2	25.0	23.5	22.1	19.1	13.8	4.8															
	40	—	—	—	—	26.4	25.1	23.7	22.2	20.8	17.2	10.1																
	50	—	—	—	26.1	25.1	23.8	22.3	20.9	19.3	14.0	5.7																
	60	—	—	26.0	25.0	23.9	22.4	21.0	19.4	17.3	10.8																	
3	0	—	—	—	—	—	—	—	—	—	—	25.3	23.5	21.3	19.1	16.0	11.3	3.6									605	349
	20	—	—	—	—	—	—	—	—	—	25.4	23.6	21.6	19.3	16.1	12.0	5.0											
	30	—	—	—	—	—	—	—	—	26.6	24.8	22.7	20.6	18.1	14.5	9.0												
	40	—	—	—	—	—	—	—	26.7	25.5	23.8	21.7	19.6	16.8	12.5	5.3												
	50	—	—	—	—	—	—	26.7	25.6	24.9	22.8	20.8	18.5	15.0	9.5													
	60	—	—	—	—	—	26.8	25.7	24.9	23.9	21.8	19.8	16.9	12.7	5.6													
5	0	—	—	—	—	—	—	—	—	—	—	—	—	—	26.5	25.2	24.0	22.8	21.5	20.2	18.9	17.0	14.3	11.0	6.8		1005	476
	20	—	—	—	—	—	—	—	—	—	—	—	—	26.6	25.3	24.1	22.9	21.6	20.3	19.0	17.3	14.0	11.2	7.3				
	30	—	—	—	—	—	—	—	—	—	—	—	—	26.0	24.9	23.5	22.2	21.0	19.9	18.2	16.2	13.3	9.5	5.2				
	40	—	—	—	—	—	—	—	—	—	—	—	26.7	25.4	24.2	22.9	21.7	20.4	19.1	17.5	14.4	11.5	7.7	3.1				
	50	—	—	—	—	—	—	—	—	—	—	—	26.0	25.0	23.6	22.3	21.1	20.0	18.4	16.3	13.5	9.9	5.7					
	60	—	—	—	—	—	—	—	—	—	—	26.8	25.5	24.3	23.0	21.8	20.5	19.2	17.7	14.9	12.0	8.0	3.7					

HP	PSI	Pumping Depth in Feet															Shut-Off Head	
		200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	Feet	PSI
7-1/2	0	—	—	—	—	—	25.7	24.3	23.1	21.5	19.9	16.4	11.3	4.1			1450	628
	20	—	—	—	—	26.7	25.3	23.7	22.3	20.8	18.9	14.7	8.5					
	30	—	—	—	—	26.5	25.1	23.5	22.1	20.6	18.3	13.4	7.0					
	40	—	—	—	—	26.3	24.7	23.3	21.7	20.2	17.3	12.1	5.3					
	50	—	—	—	—	25.7	24.5	22.7	21.3	19.7	16.0	10.6	3.6					
	60	—	—	—	26.9	25.5	24.3	22.5	21.0	19.3	15.1	9.5						
10	0	—	—	—	—	—	—	26.8	25.7	24.7	23.7	22.6	21.6	20.7	19.5	17.1	1950	844
	20	—	—	—	—	—	—	26.4	25.3	24.4	23.3	22.1	21.3	20.1	18.5	16.0		
	30	—	—	—	—	—	—	26.2	25.0	24.1	23.0	21.9	21.0	19.9	18.0	15.0		
	40	—	—	—	—	—	—	25.7	24.9	24.0	22.8	21.7	20.8	19.7	17.6	14.7		
	50	—	—	—	—	—	26.7	25.5	24.7	23.6	22.5	21.5	20.6	19.4	17.0	14.0		
	60	—	—	—	—	—	26.4	25.3	24.4	23.3	22.2	21.3	20.2	18.5	16.1	12.5		

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

30 Gallons per Minute | 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	250	300	350	400	450	500	550	600	650	700	Feet	PSI
1	0	—	—	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	—	—	—	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	—	—	—	—	40.5	38.8	36.8	34.7	31.6	23.7										280	121
	20	—	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	—	—	—	—	—	41.6	40.1	39.6	38.2	35.5	32.0	27.3								420	182
	20	—	—	—	41.5	41.0	39.8	38.5	37.1	35.7	32.1	28.0	18.5									
	30	—	—	41.3	40.6	39.9	38.7	37.2	35.8	34.2	30.3	24.9	6.0									
	40	—	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	—	—	—	—	—	—	—	—	42.0	40.7	39.2	38.0	36.0	34.2	31.9	29.2	26.0	20.0		705	305
	20	—	—	—	—	—	—	42.0	41.3	40.8	39.3	38.2	36.2	34.4	32.4	30.0	26.1	21.5				
	30	—	—	—	—	—	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	—	—	—	—	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	—	—	—	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	—	—	42.0	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													Shut-Off Head	
		200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	Feet	PSI
7-1/2	0	—	—	40.4	37.6	34.8	32.0	28.1	20.0						975	422
	20	—	42.0	39.3	36.5	33.8	30.5	25.5	13.8							
	30	—	41.3	38.6	35.8	33.1	29.8	23.3	6.5							
	40	—	40.7	38.1	35.6	32.6	29.3	21.7								
	50	—	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	—	—	—	41.3	39.5	37.3	35.1	33.1	30.4	27.1	22.5	11.9		1345	582
	20	—	—	—	40.5	38.6	36.4	34.5	31.8	29.2	25.3	18.7				
	30	—	—	42.0	40.1	43.0	35.7	33.7	31.3	28.4	24.2	16.3				
	40	—	—	41.6	39.7	37.7	35.5	33.5	30.9	27.7	23.4	14.4				
	50	—	—	41.0	39.3	37.1	34.9	32.8	30.2	26.7	21.7	7.7				
	60	—	—	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

50 Gallons per Minute | 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	250	300	350	450	550	650	700	Feet	PSI
1-1/2	0	—	—	—	58.2	49.3	33.5											145	63
	20	—	55.9	46.5	32.5														
	30	54.8	45.0	30.0															
	40	43.3	26.9																
	50	21.9																	
	60																		
2	0	—	—	—	63.3	57.0	47.8	33.9										180	78
	20	—	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	—	—	—	—	64.5	59.4	52.5	45.0	33.8								235	102
	20	—	—	63.7	59.0	53.5	46.5	36.2	18.2										
	30	—	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	—	—	—	—	—	—	65.9	63.2	59.9	51.9	41.9	22.5					385	166
	20	—	—	—	—	—	63.5	60.8	56.1	52.4	42.5	24.9							
	30	—	—	—	—	63.8	60.9	56.9	53.0	47.9	35.5	12.9							
	40	—	—	65.5	63.2	61.0	57.0	53.2	48.0	43.5	27.0								
	50	—	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	—	—	—	—	—	—	—	—	—	66.0	61.0	55.3	43.1	20.0			595	257
	20	—	—	—	—	—	—	—	—	64.8	61.1	56.0	50.0	34.9					
	30	—	—	—	—	—	—	—	64.9	63.3	58.7	53.2	47.2	28.8					
	40	—	—	—	—	—	—	65.0	63.6	61.7	56.2	50.9	44.1	22.0					
	50	—	—	—	—	—	65.1	63.7	61.8	58.9	53.9	47.5	41.0	13.2					
	60	—	—	—	—	65.2	63.8	61.9	59.0	56.5	51.1	44.9	36.0						
10	0	—	—	—	—	—	—	—	—	—	—	65.0	62.1	54.2	44.7	29.0	15.2	745	322
	20	—	—	—	—	—	—	—	—	—	65.5	62.5	59.1	50.1	39.2	17.1			
	30	—	—	—	—	—	—	—	—	66.9	64.1	61.2	56.9	47.5	35.0	10.5			
	40	—	—	—	—	—	—	—	67.0	65.8	63.0	59.3	54.9	45.2	30.5				
	50	—	—	—	—	—	—	67.1	65.9	64.2	61.5	57.2	53.0	42.9	25.0				
	60	—	—	—	—	—	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.

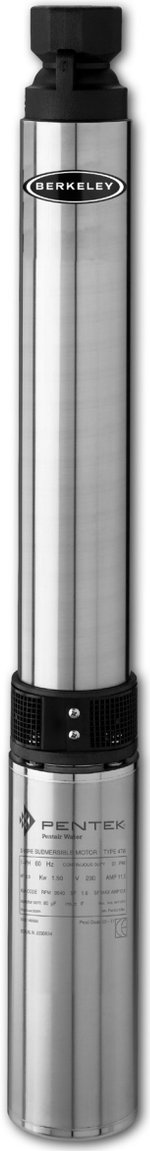
Tested and rated in accordance with Water Systems Council Standards.

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.

JP composite series

4" Submersible Pumps

5 and 7 gpm TrimLine™



POWERED BY PENTEK Pentair Water

C US

NSF/ANSI 61 Drinking Water

Precision-engineered, corrosion-resistant Composite Pumps in 5 and 7 GPM deliver efficient, dependable performance even in rough, aggressive water. Heads to over 850 feet and capacities to 10 GPM. Built to deliver long-term, trouble-free service.

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

The 5 and 7 GPM models are the smaller 3-3/4" diameter TrimLine.

APPLICATIONS

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

SPECIFICATIONS

Shell – Stainless steel

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

Agency Listings – CSA

Check Valve – Acetal

FEATURES

Proven 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 wrench flats 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 Series™ 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™, TrimLine™ and XE Series™ are trademarks of Pentair Water.

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

4" Submersible Pumps

5 and 7 gpm TrimLine™

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*
5	2 Wire	1/2	13	1	115	**B5P4JP05121**	27-1/2	29	**SL5P4CJ**	18	12	**P42B0005A1**	19		
		1/2	13	1	230	**B5P4JP05221**	27-1/2	29	**SL5P4CJ**	18	12	**P42B0005A2**	19		
		3/4	18	1	230	**B5P4JP07221**	32-3/4	34	**SL5P4DJ**	22	15	**P42B0007A2**	23		
		1	22	1	230	**B5P4JP10221**	37	38	**SL5P4EJ**	25-1/4	17	**P42B0010A2**	25		
		1-1/2	30	1	230	**B5P4JP15221**	47	45	**SL5P4FJ**	32	21	**P42B0015A2**	29		
	3 Wire	1/2	13	1	115	**B5P4JP05131**	27-1/2	29	**SL5P4CJ**	18	12	**P43B0005A1**	19	**SMC-IR0511**	4
		1/2	13	1	230	**B5P4JP05231**	27-1/2	29	**SL5P4CJ**	18	12	**P43B0005A2**	18	**SMC-CR0521**	4
		3/4	18	1	230	**B5P4JP07231**	32-3/4	24	**SL5P4DJ**	22	15	**P43B0007A2**	21	**SMC-CR0721**	4
		1	22	1	230	**B5P4JP10231**	37	38	**SL5P4EJ**	25-1/4	17	**P43B0010A2**	23	**SMC-CR1021**	4
		1	22	3	230				**SL5P4EJ**	25-1/4	17	**P43B0010A3**	23		
		1	22	3	460				**SL5P4EJ**	25-1/4	17	**P43B0010A4**	23		
		1-1/2	30	1	230	**B5P4JP15231**	45-1/2	45	**SL5P4FJ**	32	21	**P43B0015A2**	27	**SMC-CR1521**	7
		1-1/2	30	3	230				**SL5P4FJ**	32	21	**P43B0015A3**	23		
		1-1/2	30	3	460				**SL5P4FJ**	32	21	**P43B0015A4**	23		
7	2 Wire	1/2	10	1	115	**B7P4JP05121**	25-1/2	27	**SL7P4CJ**	16	12	**P42B0005A1**	19		
		1/2	10	1	230	**B7P4JP05221**	25-1/2	27	**SL7P4CJ**	16	12	**P42B0005A2**	19		
		3/4	13	1	230	**B7P4JP07221**	29	32	**SL7P4DJ**	18-1/2	15	**P42B0007A2**	23		
		1	17	1	230	**B7P4JP10221**	33-3/4	37	**SL7P4EJ**	22	17	**P42B0010A2**	25		
		1-1/2	22	1	230	**B7P4JP15221**	42-1/2	47	**SL7P4FJ**	27-1/4	21	**P42B0015A2**	29		
	3 Wire	1/2	10	1	115	**B7P4JP05131**	25-1/2	27	**SL7P4CJ**	16	12	**P43B0005A1**	19	**SMC-IR0511**	4
		1/2	10	1	230	**B7P4JP05231**	25-1/2	27	**SL7P4CJ**	16	12	**P43B0005A2**	18	**SMC-CR0521**	4
		3/4	13	1	230	**B7P4JP07231**	29	32	**SL7P4DJ**	18-1/2	15	**P43B0007A2**	21	**SMC-CR0721**	4
		1	17	1	230	**B7P4JP10231**	33-3/4	37	**SL7P4EJ**	22	17	**P43B0010A2**	23	**SMC-CR1021**	4
		1	17	3	230				**SL7P4EJ**	22	17	**P43B0010A3**	23		
		1	17	3	460				**SL7P4EJ**	22	17	**P43B0010A4**	23		
		1-1/2	22	1	230	**B7P4JP15231**	41	44	**SL7P4FJ**	27-1/4	21	**P43B0015A2**	27	**SMC-CR1521**	7
		1-1/2	22	3	230				**SL7P4FJ**	27-1/4	21	**P43B0015A3**	23		
		1-1/2	22	3	460				**SL7P4FJ**	27-1/4	21	**P43B0015A4**	23		

*Length and Weight are approximate.

TrimLine™ version maximum outside diameter 3-3/4". Standard version maximum outside diameter 3-7/8".

NOTE: Motor, Control Box or Magnetic Starter must be ordered separately.
Discharge NPT is 1-1/4".

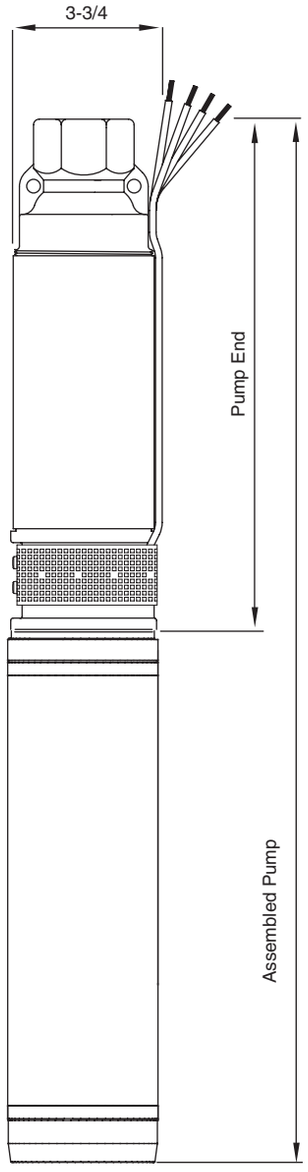
BERKELEY®

JP composite series

4" Submersible Pumps

5 and 7 gpm TrimLine™

OUTLINE DIMENSIONS

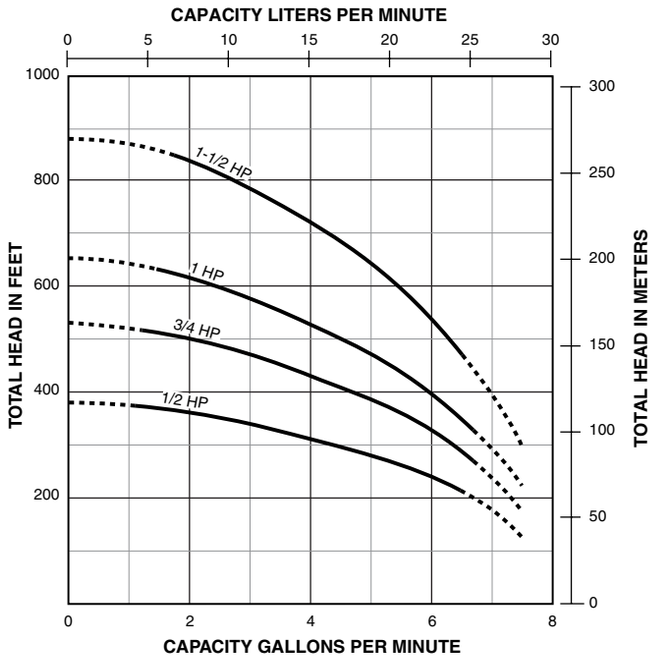


Discharge	
5 GPM	1-1/4" NPT
7 GPM	1-1/4" NPT

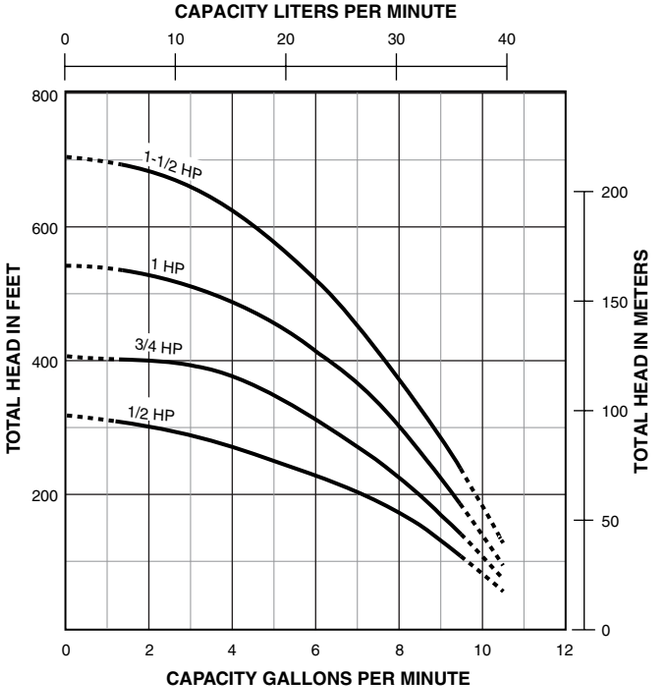
For dimensions, refer to Ordering Information table.

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE – 5 GPM



PUMP PERFORMANCE – 7 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

5 and 7 gpm TrimLine™

5 Gallons per Minute | 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	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	Feet	PSI
1/2	0	–	–	–	–	–	–	–	–	–	5.7	4.3	2.7															380	164
	20	–	–	–	–	–	–	–	6.3	5.7	4.5	2.8																	
	30	–	–	–	–	–	–	6.3	5.8	5.2	3.6	1.5																	
	40	–	–	–	–	–	6.4	5.8	5.3	4.6	2.9																		
	50	–	–	–	–	6.4	5.9	5.3	4.7	3.7	1.7																		
	60	–	–	–	6.3	5.9	5.3	4.7	3.8	3.0																			
3/4	0	–	–	–	–	–	–	–	–	–	–	6.4	5.6	4.7	3.4	2.0												531	230
	20	–	–	–	–	–	–	–	–	–	6.5	5.7	4.8	3.5	2.2														
	30	–	–	–	–	–	–	–	–	–	6.1	5.3	4.2	3.0															
	40	–	–	–	–	–	–	–	–	6.5	5.7	4.9	3.6	2.4															
	50	–	–	–	–	–	–	–	6.5	6.2	5.4	4.3	3.1	1.3															
	60	–	–	–	–	–	–	6.5	6.2	5.8	4.9	3.6	2.4																
1	0	–	–	–	–	–	–	–	–	–	–	–	6.5	6.0	5.3	4.5	3.4	2.4										652	282
	20	–	–	–	–	–	–	–	–	–	–	–	6.0	5.3	4.5	3.5	2.5												
	30	–	–	–	–	–	–	–	–	–	–	6.3	5.8	5.1	4.1	3.1	1.7												
	40	–	–	–	–	–	–	–	–	–	–	6.1	5.4	4.6	3.6	2.6													
	50	–	–	–	–	–	–	–	–	–	6.4	5.8	5.1	4.1	3.1	1.9													
	60	–	–	–	–	–	–	–	–	–	6.1	5.5	4.7	3.6	2.7														
1-1/2	0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6.4	5.9	5.5	4.9	4.1	3.4	2.7						882	382
	20	–	–	–	–	–	–	–	–	–	–	–	–	–	6.4	6.0	5.5	5.0	4.2	3.5	2.8	1.7							
	30	–	–	–	–	–	–	–	–	–	–	–	–	6.6	6.2	5.7	5.3	4.6	3.8	3.2	2.4								
	40	–	–	–	–	–	–	–	–	–	–	–	–	6.4	6.0	5.6	5.0	4.3	3.6	2.8	1.8								
	50	–	–	–	–	–	–	–	–	–	–	–	6.6	6.2	5.8	5.3	4.7	3.9	3.2	2.5									
	60	–	–	–	–	–	–	–	–	–	–	–	6.5	6.0	5.6	5.0	4.3	3.6	2.9	1.8									

CAUTION: DO NOT use pump at flow rates indicated by the symbol '—'. To do so can cause premature failure of unit. Pump warranty is 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

5 and 7 gpm TrimLine™

7 Gallons per Minute | 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	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	Feet	PSI
1/2	0	–	–	–	–	9.5	9.0	8.6	8.1	7.5	5.7	3.2																	322	139
	20	–	9.2	9.3	8.9	8.6	8.1	7.6	6.7	5.4	3.6																		
	30	–	9.3	8.9	8.6	8.1	7.6	6.8	5.9	5.0																			
	40	9.2	8.9	8.5	8.1	7.6	7.0	6.0	5.0	3.6																			
	50	8.8	8.5	8.0	7.6	7.0	6.0	5.1	3.9																				
	60	8.4	8.0	7.5	6.8	6.2	5.1	4.0																					
3/4	0	–	–	–	–	–	9.5	9.2	8.9	8.5	7.6	6.5	5.0	2.3															409	177
	20	–	–	–	9.5	9.3	8.9	8.6	8.2	7.7	6.5	5.2	3.0																
	30	–	–	9.4	9.2	8.9	8.6	8.2	7.8	7.2	6.0	4.2																	
	40	–	9.4	9.1	8.9	8.7	8.3	7.9	7.3	6.7	5.2	3.1																	
	50	9.4	9.1	8.9	8.6	8.3	7.9	7.3	6.7	6.1	4.3																		
	60	9.0	8.8	8.5	8.2	7.9	7.4	6.7	6.1	5.4	3.1																		
1	0	–	–	–	–	–	–	–	9.4	9.1	8.6	8.0	7.3	6.4	5.2	3.7													545	236
	20	–	–	–	–	–	9.4	9.2	8.9	8.6	8.1	7.3	6.5	5.3	3.8														
	30	–	–	–	–	9.4	9.2	8.9	8.6	8.4	7.7	6.9	6.0	4.6	2.8														
	40	–	–	–	9.4	9.2	9.0	8.6	8.4	8.1	7.4	6.5	5.3	3.9															
	50	–	–	9.3	9.2	9.0	8.6	8.4	8.2	7.8	7.0	6.1	5.3	3.0															
	60	9.5	9.3	9.2	8.9	8.7	8.4	8.2	7.8	7.5	6.6	5.5	4.0																
1-1/2	0	–	–	–	–	–	–	–	–	–	9.2	8.8	8.4	7.9	7.3	6.6	5.8	4.8	3.5										705	305
	20	–	–	–	–	–	–	–	9.4	9.2	8.8	8.5	8.0	7.3	6.7	5.8	4.9	3.7											
	30	–	–	–	–	–	9.3	9.5	9.2	9.0	8.7	8.2	7.7	7.1	6.3	5.9	4.4	2.7											
	40	–	–	–	–	9.5	9.3	9.2	9.1	8.8	8.5	8.0	7.4	6.7	5.9	4.9	3.7												
	50	–	–	–	–	9.5	9.2	9.1	8.8	8.7	8.3	7.7	7.1	6.5	5.4	4.6	2.8												
	60	–	–	–	9.5	9.3	9.1	8.9	8.7	8.5	8.0	7.5	6.8	6.0	5.0	4.1													

CAUTION: DO NOT use pump at flow rates indicated by the symbol '—'. To do so can cause premature failure of unit. Pump warranty is 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



POWERED BY PENTEK Pentair Water

C US

NSF/ANSI 61 Drinking Water

Precision-engineered, corrosion-resistant 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 proven 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

FEATURES

Proven 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 wrench flats 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 Series™ 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™, TrimLine™ and XE Series™ are trademarks of Pentair Water.

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

4" Submersible Pumps

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	7	1	115	**B10P4JP05121**	22-3/4	27-1/2	**SL10P4CJ**	12-3/4	9	**P42B0005A1**	19		
		1/2	7	1	230	**B10P4JP05221**	22-3/4	27-1/2	**SL10P4CJ**	12-3/4	9	**P42B0005A2**	19		
		3/4	10	1	230	**B10P4JP07221**	25-3/4	30-1/2	**SL10P4DJ**	14-1/2	10	**P42B0007A2**	23		
		1	13	1	230	**B10P4JP10221**	28-3/4	34-1/2	**SL10P4EJ**	16	10-3/4	**P42B0010A2**	25		
		1-1/2	17	1	230	**B10P4JP15221**	34-3/4	41-1/2	**SL10P4FJ**	19-3/4	12-1/2	**P42B0015A2**	29		
	3 Wire	1/2	7	1	115	**B10P4JP05131**	22-3/4	27-1/2	**SL10P4CJ**	12-3/4	9	**P43B0005A1**	19	**SMC-IR0511**	4
		1/2	7	1	230	**B10P4JP05231**	22-3/4	27-1/2	**SL10P4CJ**	12-3/4	9	**P43B0005A2**	18	**SMC-CR0521**	4
		3/4	10	1	230	**B10P4JP07231**	25-3/4	30-1/2	**SL10P4DJ**	14-1/2	10	**P43B0007A2**	21	**SMC-CR0721**	4
		1	13	1	230	**B10P4JP10231**	28-3/4	34-1/2	**SL10P4EJ**	16-1/4	10-3/4	**P43B0010A2**	23	**SMC-CR1021**	4
		1	13	3	230				**SL10P4EJ**	15-1/2	10-1/4	**P43B0010A3**	23		
		1	13	3	460				**SL10P4EJ**	15-1/2	10-1/4	**P43B0010A4**	23		
		1-1/2	17	1	230	**B10P4JP15231**	33-1/2	41-1/2	**SL10P4FJ**	19-3/4	12-1/2	**P43B0015A2**	27	**SMC-CR1521**	7
		1-1/2	17	3	230				**SL10P4FJ**	19-3/4	12-1/2	**P43B0015A3**	23		
		1-1/2	17	3	460				**SL10P4FJ**	19-3/4	12-1/2	**P43B0015A4**	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		
	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	10	3	230				**SL10P4EJ**	15-1/2	10-1/4	**P43B0010A3**	23		
		1	10	3	460				**SL10P4EJ**	15-1/2	10-1/4	**P43B0010A4**	23		
		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	230				**SL15P4FJ**	20-1/4	13	**P43B0015A3**	23		
		1-1/2	12	3	460				**SL15P4FJ**	20-1/4	13	**P43B0015A4**	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		
	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	10	3	230				**SL10P4EJ**	15-1/2	10-1/4	**P43B0010A3**	23		
		1	10	3	460				**SL10P4EJ**	15-1/2	10-1/4	**P43B0010A4**	23		
		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	**P43B0015A4**	23		
		2	12	1	230				**SL20P4GJ**	20-1/4	12-1/2	**P43B0020A2**	31	**SMC-CR2021**	7
		2	12	3	230				**SL20P4GJ**	20-1/4	12-1/2	**P43B0020A3**	23		
		2	12	3	460				**SL20P4GJ**	20-1/4	12-1/2	**P43B0020A4**	23		
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	10	3	230				**SL10P4EJ**	15-1/2	10-1/4	**P43B0010A3**	23		
		1	10	3	460				**SL10P4EJ**	15-1/2	10-1/4	**P43B0010A4**	23		
		1-1/2	6	1	230	**B30P4JP15231**	29	39	**SL30P4FJ**	15-1/4	11	**P43B0015A2**	27	**SMC-CR1521**	7
		1-1/2	6	3	230				**SL30P4FJ**	15-1/4	11	**P43B0015A3**	23		
		1-1/2	6	3	460				**SL30P4FJ**	15-1/4	11	**P43B0015A4**	23		
		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	**P43B0020A4**	23		

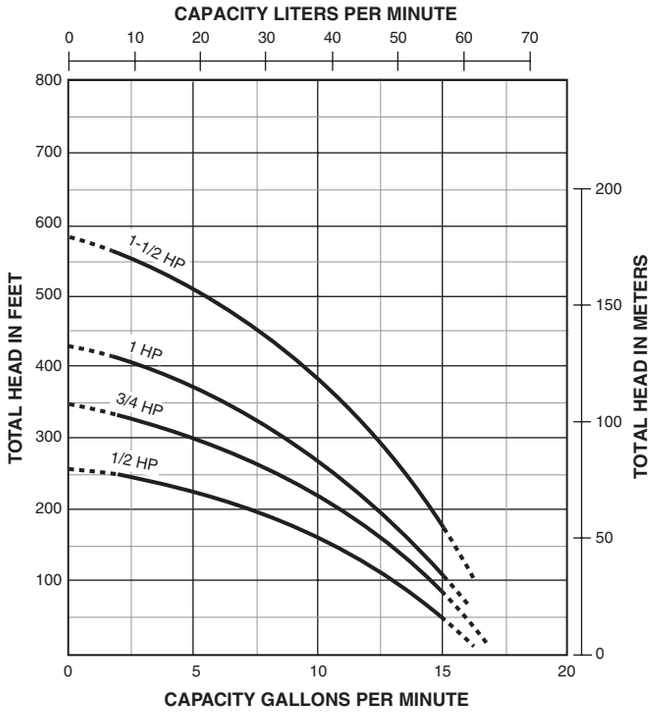
*Length and Weight are approximate.

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

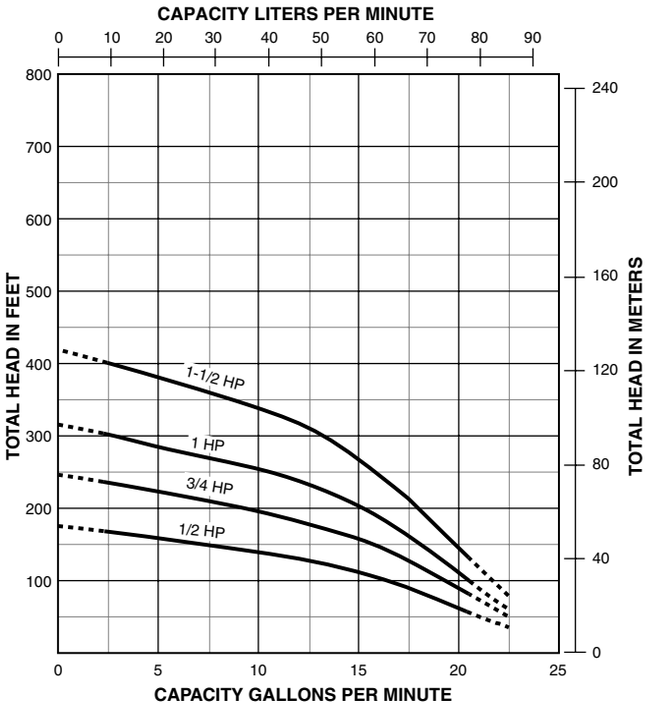
NOTE: On 2 HP and larger pumps – Motor, Control Box or Magnetic Starter must be ordered separately.

4" Submersible Pumps

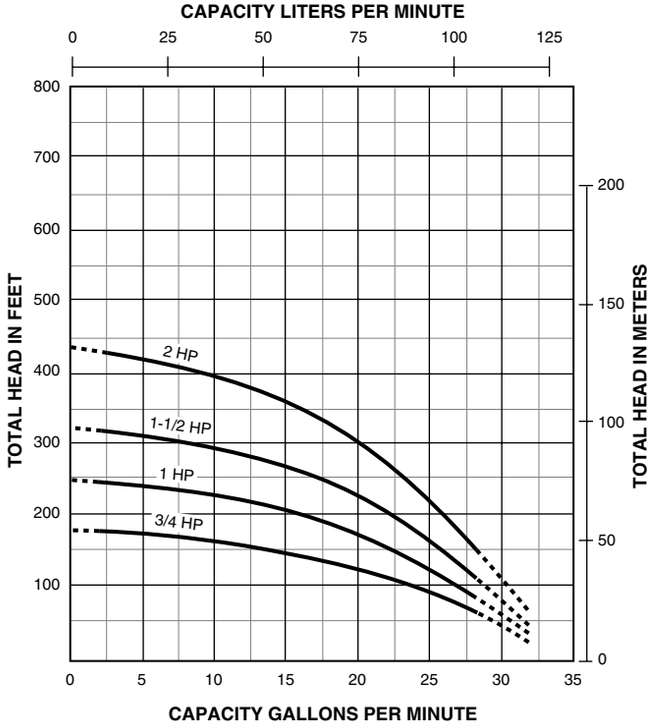
PUMP PERFORMANCE – 10 GPM



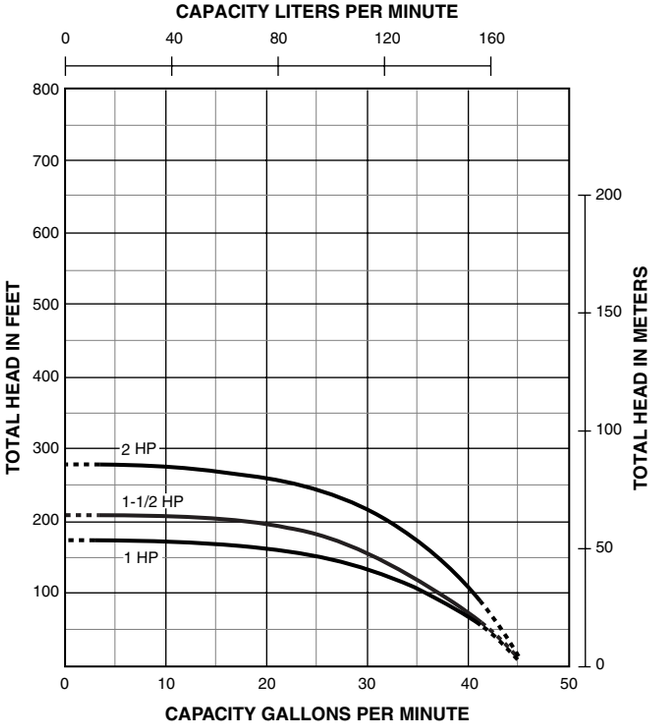
PUMP PERFORMANCE – 15 GPM



PUMP PERFORMANCE – 20 GPM

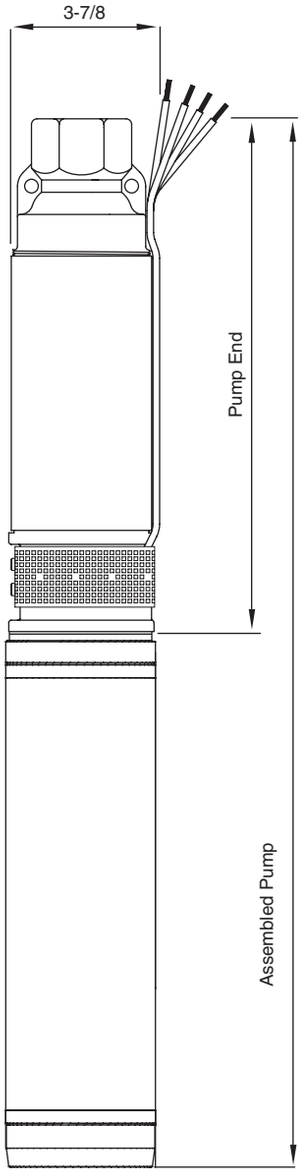


PUMP PERFORMANCE – 30 GPM



4" Submersible Pumps

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 Gallons per Minute | 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	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	—	—	—	—	14.9	14.4	13.8	13.3	12.8	11.5	10.1	8.2	5.8	2.1				467	202
	20	—	—	14.7	14.4	14.0	13.4	12.9	12.3	11.7	10.2	8.3	6.0	2.6						
	30	—	14.7	14.4	13.8	13.4	12.9	12.3	11.7	11.0	9.4	7.4	4.6							
	40	14.6	14.2	13.8	13.3	13.0	12.5	11.8	11.1	10.3	8.5	6.2	3.0							
	50	14.1	13.7	13.3	12.9	12.4	11.8	11.1	10.2	9.5	7.4	4.8								
	60	13.7	13.2	12.8	12.4	11.9	11.2	10.3	9.5	8.7	6.3	3.2								
1-1/2	0	—	—	—	—	—	—	14.7	14.4	14.0	13.2	12.2	11.2	10.1	8.6	7.1	5.2	2.5	636	275
	20	—	—	—	—	14.8	14.4	14.0	13.6	13.2	12.4	11.3	10.2	8.7	7.3	5.3	2.8			
	30	—	—	—	14.7	14.4	14.0	13.6	13.2	12.8	11.9	10.7	9.6	8.1	6.4	4.4				
	40	—	15.0	14.7	14.4	14.1	13.7	13.3	12.8	12.4	11.4	10.2	8.9	7.3	5.5	3.0				
	50	14.9	14.6	14.3	14.0	13.6	13.2	12.8	12.4	12.0	10.8	9.7	8.2	6.5	4.5					
	60	14.5	14.3	14.0	13.6	13.3	12.8	12.4	12.0	11.5	10.2	9.0	7.5	5.6	3.3					

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

15 Gallons per Minute — 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	250	300	350	400	450	500	Feet	PSI
1/2	0	—	—	20.0	18.7	16.9	13.1	7.4									175	76
	20	19.7	18.3	16.3	13.0	8.8												
	30	18.0	15.6	12.4	7.9	2.0												
	40	15.2	11.9	7.0														
	50	11.2	5.8															
	60	4.8																
3/4	0	—	—	—	20.2	19.3	17.8	16.0	13.2	9.6							245	106
	20	—	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										
	40	18.6	17.5	15.9	13.5	10.9	6.0											
	50	17.2	15.4	13.1	10.0	6.4												
	60	15.0	12.7	9.7	5.5	1.8												
1	0	—	—	—	—	20.4	19.4	18.4	17.2	15.5	10.3	2.7					318	138
	20	—	—	20.2	19.3	18.7	17.5	15.8	13.4	10.9	3.2							
	30	—	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									
	60	18.0	17.0	15.6	13.7	11.7	8.4	4.4										
1-1/2	0	—	—	—	—	—	20.5	19.9	19.3	18.4	16.4	13.1	8.3	2.8			420	182
	20	—	—	—	20.5	20.0	19.3	18.6	17.6	16.5	13.5	9.1	3.2					
	30	—	—	20.3	19.9	19.3	18.7	17.7	16.6	15.4	11.7	6.3						
	40	—	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							
	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

20 Gallons per Minute | 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	250	300	350	400	450	Feet	PSI
3/4	0	—	—	—	26.9	23.5	19.0	13.7								180	78
	20	—	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														
	60	10.2															
1	0	—	—	—	—	—	25.3	22.4	18.8	15.5						251	109
	20	—	—	—	25.1	22.8	19.5	16.1	10.1								
	30	—	—	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	—	—	—	—	—	—	26.4	24.0	21.6	16.4	5.4				323	140
	20	—	—	—	—	26.8	24.4	22.0	19.5	16.8	6.8						
	30	—	—	—	26.5	24.7	22.2	19.6	17.1	13.9							
	40	—	—	26.2	24.3	22.3	19.8	17.3	14.2	8.0							
	50	—	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	0	—	—	—	—	—	—	—	27.3	26.0	23.2	20.2	16.2	8.5		435	188
	20	—	—	—	—	—	—	26.1	24.9	23.4	20.6	16.7	9.5				
	30	—	—	—	—	—	26.2	25.0	23.5	22.1	19.1	13.8	4.8				
	40	—	—	—	—	26.4	25.1	23.7	22.2	20.8	17.2	10.1					
	50	—	—	27.2	26.1	25.1	23.8	22.3	20.9	19.3	14.0	5.7					
	60	—	27.1	26.0	25.0	23.9	22.4	21.0	19.4	17.3	10.8						

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

30 Gallons per Minute | 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	250	300	350	400	450	Feet	PSI
1	0	—	—	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	—	—	—	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	—	—	—	41.8	40.5	38.8	36.8	34.7	31.6	23.7					280	121
	20	—	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.

Mining Deepset series

4" Submersible Pumps – 5, 10, 20, 30 and 50 Gpm



Precision-engineered, high-quality, rugged MGS 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. Higher temperature engineered thermoplastic staging with floating impeller design resists sand and reduces sand locking. Pumps feature the proven SignaSeal™ staging system.

APPLICATIONS

- **Solution Mining**
- **Coal Bed Methane**
- **Uranium Mining**

SPECIFICATIONS

Shell – Stainless steel
Diameter – 3-7/8"
Discharge – Stainless steel
Discharge Bearing – Nylatron®
Intermediate Bearing – Higher temperature engineered thermoplastic, nitrile rubber and stainless steel
Impellers – Acetal
Diffusers – Higher temperature engineered thermoplastic
Suction Caps – Higher temperature engineered thermoplastic with stainless steel insert
Thrust Pads – Proprietary spec.
Shaft and Coupling – Stainless steel
Intake – Stainless steel
Intake Screen – Stainless steel
CableGuard – Stainless steel

FEATURES

Proven Staging System – Our vhigher temperature engineered thermoplastic 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 wrench flats 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 "treated" 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.
Hardware – All screws, washers and nuts are corrosion-resistant 300 grade stainless steel.
Cable Guard – Corrosion-resistant stainless steel guard protects motor leads. Tapered ends prevent pump from catching on well.
Intake Screen – Stainless steel.
PENTEK® XE Motor – 2 and 3 wire NEMA standard all stainless construction water-filled motors.

Nylatron® is a registered trademark of Polymer Corp. 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 – 5, 10, 20, 30 and 50 Gpm

ORDERING INFORMATION

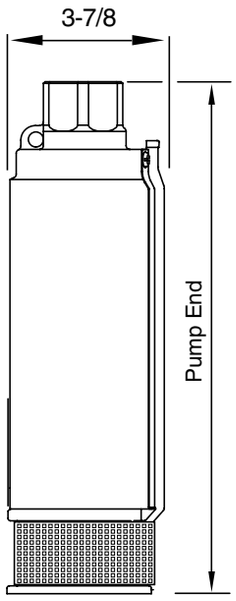
					Pump End			Motor	
GPM	HP	Stgs.	PH	Volt	Catalog Number	Length Inches*	Weight Pounds*	Catalog Number	Weight Pounds*
5	3	57	1	230	**L5MGS30-M**	53-1/2	27	**P43B0030A2**	53
	3	57	3	230	**L5MGS30-M**	53-1/2	27	**P43B0030A3**	53
	3	57	3	460	**L5MGS30-M**	53-1/2	27	**P43B0030A4**	53
10	3	26	1	230	**L10MGS30-M**	27-1/2	17	**P43B0030A2**	53
	3	26	3	230	**L10MGS30-M**	27-1/2	17	**P43B0030A3**	53
	3	26	3	460	**L10MGS30-M**	27-1/2	17	**P43B0030A4**	53
	5	43	1	230	**L10MGS50-M**	42-3/4	25	**P43B0050A2**	67
	5	43	3	230	**L10MGS50-M**	42-3/4	25	**P43B0050A3**	67
	5	43	3	460	**L10MGS50-M**	42-3/4	25	**P43B0050A4**	67
20	5	28	1	230	**L20MGS50-M**	38	21	**P43B0050A2**	67
	5	28	3	230	**L20MGS50-M**	38	21	**P43B0050A3**	67
	5	28	3	460	**L20MGS50-M**	38	21	**P43B0050A4**	67
	7-1/2	40	3	230	**L20MGS75-M**	53-3/4	30	**P43B0075A3**	69
	7-1/2	40	3	460	**L20MGS75-M**	53-3/4	30	**P43B0075A4**	69
	10	54	3	460	**L20MGS100-M**	71	41	**P43B0100A4**	69
30	5	20	1	230	**L30MGS50-M**	35-3/4	20	**P43B0050A2**	53
	5	20	3	230	**L30MGS50-M**	35-3/4	20	**P43B0050A3**	53
	5	20	3	460	**L30MGS50-M**	35-3/4	20	**P43B0050A4**	53
	7-1/2	28	3	230	**L30MGS75-M**	50	27	**P43B0075A3**	69
	7-1/2	28	3	460	**L30MGS75-M**	50	27	**P43B0075A4**	69
	10	38	3	460	**L30MGS100-M**	65-1/2	35	**P43B0100A4**	69
50	7-1/2	20	3	230	**L50MGS75-M**	47-1/2	33	**P43B0075A3**	69
	7-1/2	20	3	460	**L50MGS75-M**	47-1/2	33	**P43B0075A4**	69
	10	25	3	460	**L50MGS100-M**	57-3/4	35	**P43B0100A4**	70

* Length and Weight are approximate.

NOTE: Pump, Motor, Control Box or Magnetic Starter must be ordered separately.

4" Submersible Pumps – 5, 10, 20, 30 And 50 Gpm

OUTLINE DIMENSIONS

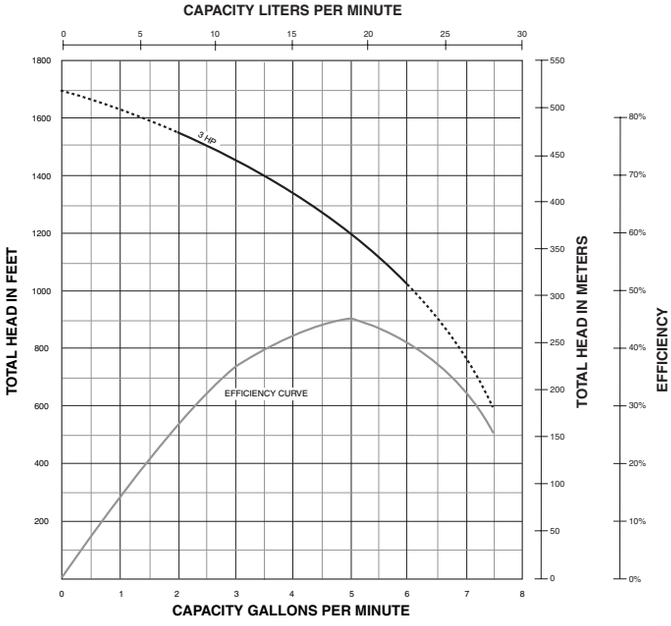


Discharge	
5 GPM	1-1/4" NPT
10 GPM	1-1/4" NPT
20 GPM	1-1/4" NPT
30 GPM	2" NPT
50 GPM	2" NPT

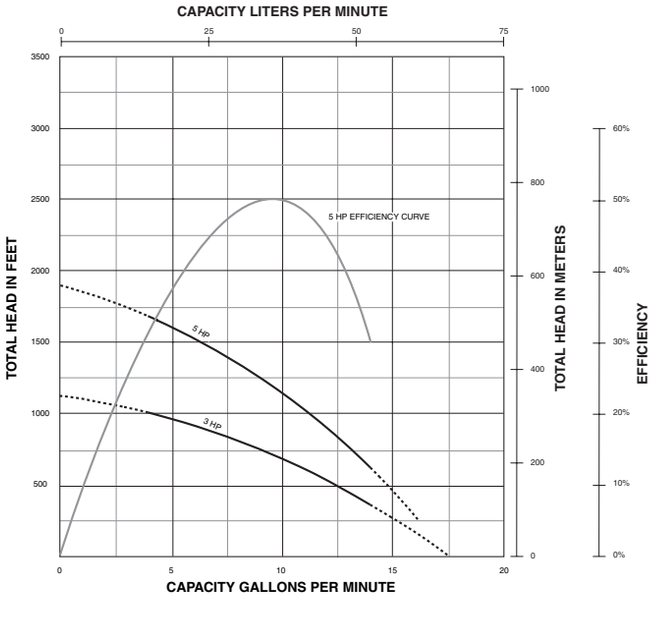
Pump diameter is 3-7/8". For lengths, refer to Ordering Information tables.

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE – 5 GPM



PUMP PERFORMANCE – 10 GPM

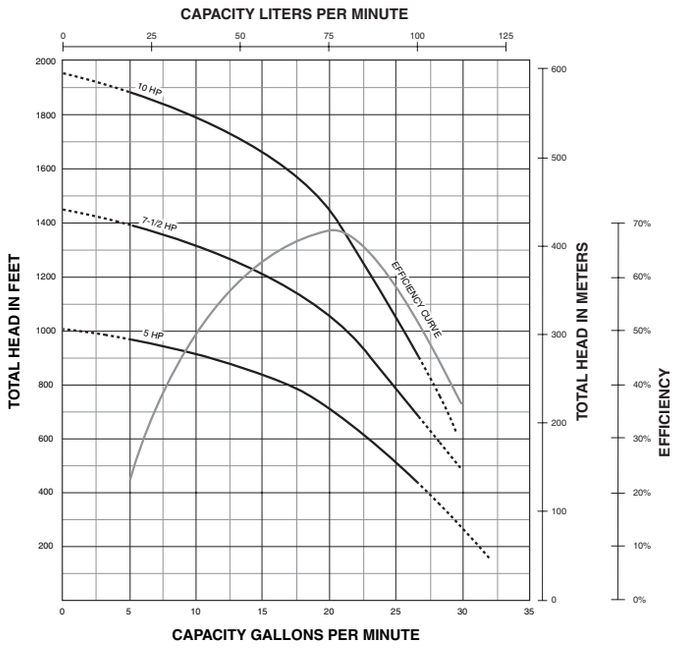


Tested and rated in accordance with Water Systems Council standards.

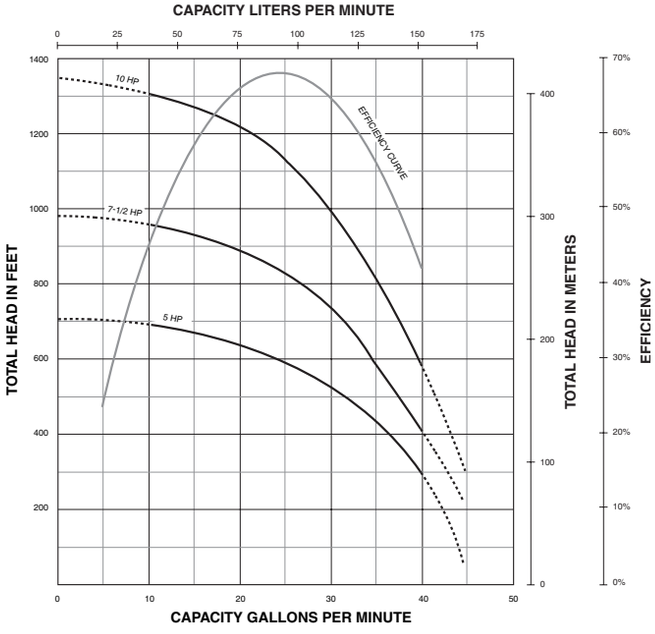
NOTE: Pumps installed with a PRO-SOURCE™ tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

4" Submersible Pumps – 5, 10, 20, 30 And 50 Gpm

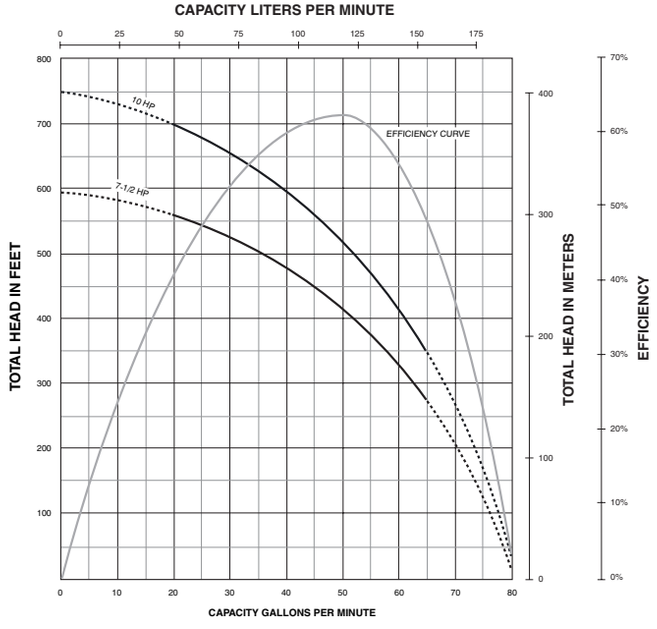
PUMP PERFORMANCE – 20 GPM



PUMP PERFORMANCE – 30 GPM



PUMP PERFORMANCE – 50 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

70 gpm series



Precision engineered, quality built, and rugged 70 GPM Series submersibles may be used in wells 4" or larger. Maximum outside diameter 3-7/8".

APPLICATIONS

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

SPECIFICATIONS

Discharge – Cast iron, ASTM A48 Class 30

Pump Bowls – Cast iron, ASTM A48 Class 30

Impellers – Polycarbonate with brass insert

Collets – Stainless steel, AISI 416

Upthrust Bearing – Bronze, ASTM B255 Type II

Pump Shaft – Stainless steel, AISI 416

Bowl and Intake Bearings – Nitrile (proprietary spec.)

Lead Guard – Stainless steel, AISI 430

Intake Bracket – Cast iron, ASTM A48 Class 30

Screen – Stainless steel, AISI 430

Pump/Motor Coupling – Stainless steel, AISI 416

FEATURES

Discharge – Heavy-duty cast iron construction provides smooth water passage to column pipe. NPT threads standard.

Bowl and Intake Bearings – Fluted, cutless rubber type assures superior abrasive-handling characteristics, located at each stage.

Polycarbonate Impellers – Glass-reinforced polycarbonate resists abrasives and provides smooth water passages for minimum friction loss. Ensures optimum pump efficiency.

Pump Bowls – Highly efficient hydraulic design... threaded bowl design in gray cast iron.

Upthrust Bearing – Bronze upthrust bearing provides positive momentary upthrust protection during start-up.

Intake Bracket – Efficient hydraulic design minimizes entrance losses, ensuring maximum pump performance.

Stainless Steel Pump Shaft – Precision straightened shaft is corrosion-resistant stainless steel.

Pump/Motor Coupling – Stainless steel for maximum corrosion resistance... precision machined to ensure accurate alignment and power transfer.

Intake Screen – Stainless steel material offers maximum corrosion resistance... protects against damaging solids entering the pump assembly.

PRO-Source™ is a trademark of Pentair Water.
In order to provide the best products possible, specifications are subject to change.

4" Submersible Pumps 70 gpm series

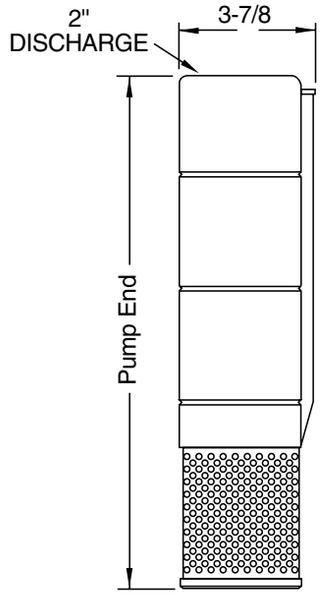
ORDERING INFORMATION

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*
2 Wire	1-1/2	4	1	230	**SL70F4**	20-25/32	26	**P42B0015A2**	29		
3 Wire	1-1/2	4	1	230	**SL70F4**	20-25/32	26	**P43B0015A2**	27	**SMC-CR1521**	7
	1-1/2	4	3	230	**SL70F4**	20-25/32	26	**P43B0015A3**	23		
	1-1/2	4	3	460	**SL70F4**	20-25/32	26	**P43B0015A4**	23		
	2	5	1	230	**SL70G4**	24-1/16	31	**P43B0020A2**	31	**SMC-CR2021**	7
	2	5	3	230	**SL70G4**	24-1/16	31	**P43B0020A3**	27		
	2	5	3	460	**SL70G4**	24-1/16	31	**P43B0020A4**	27		
	3	7	1	230	**Sl70H4**	30-5/8	39	**P43B0030A2**	40	**SMC-CR3021**	7
	3	7	3	230	**SL70H4**	30-5/8	39	**P43B0030A3**	32		
	3	7	3	460	**SL70H4**	30-5/8	39	**P43B0030A4**	32		
	5	12	1	230	**SL70J4**	47-1/32	60	**P43B0050A2**	70	**SMC-CR5021**	8
	5	12	3	230	**SL70J4**	47-1/32	60	**P43B0050A3**	55		
	5	12	3	460	**SL70J4**	47-1/32	60	**P43B0050A4**	55		
	7-1/2	17	3	230	**SL70K4**	63-7/16	81	**P43B0075A3**	70		
	7-1/2	17	3	460	**SL70K4**	63-7/16	81	**P43B0075A4**	70		
	10	23	3	460	**SL70L4**	83-1/8	106	**P43B0100A4**	70		

*Length and Weight are approximate.

NOTE: Pump end and motor purchased separately.

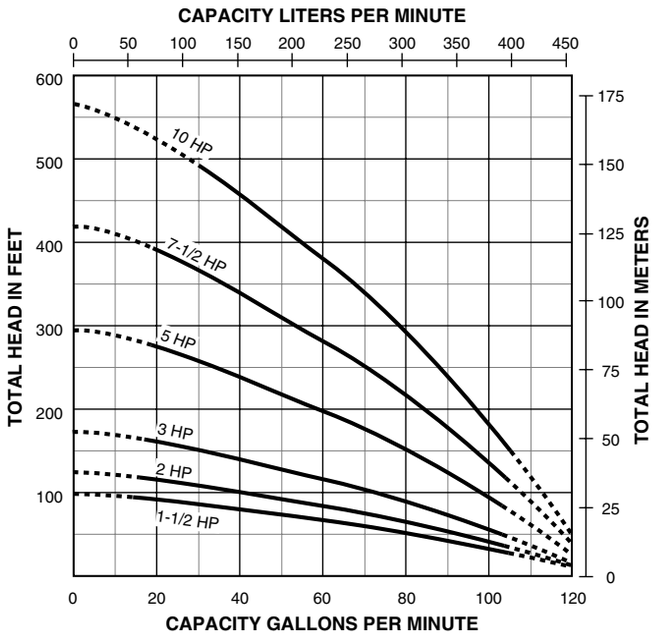
OUTLINE DIMENSIONS



For lengths, refer to Ordering Information tables.

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE – 70 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

70 gpm series

70 Gallons per Minute | PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

HP	PSI	Pumping Depth in Feet																						
		20'	40'	60'	80'	100'	125'	150'	175'	200'	225'	250'	275'	300'	325'	350'	375'	400'	425'	450'	475'	500'	525'	550'
1-1/2	0	—	92.5	70.0	40.0																			
	20	61.5	31.0																					
	30	25.0																						
	40																							
	50																							
	60																							
2	0	—	100.0	85.0	64.0	40.0																		
	20	79.0	57.0	32.5																				
	30	52.5	28.0																					
	40	25.0																						
	50																							
	60																							
3	0	—	104.0	98.0	86.0	73.5	52.5	31.0																
	20	95.0	82.5	68.0	52.0	35.0																		
	30	81.0	66.0	49.0	32.0																			
	40	64.0	47.0	29.0																				
	50	43.0	25.5																					
	60	22.0																						
5	0	—	—	—	106.0	99.0	91.0	82.0	72.0	60.0	47.5	35.0	21.0											
	20	—	104.0	97.0	90.5	83.5	74.0	62.0	49.5	37.0	23.0													
	30	102.5	96.0	88.5	82.5	74.5	63.0	50.0	38.0	25.0														
	40	95.0	87.5	81.5	73.5	64.0	51.5	39.0	26.0															
	50	86.0	80.0	72.0	62.0	52.0	39.5	27.0																
	60	78.0	70.0	61.0	50.0	40.0	27.5																	
7-1/2	0	—	—	—	—	—	103.0	97.0	91.0	85.0	78.0	75.0	62.5	54.0	45.5	35.5								
	20	—	—	—	102.5	97.5	92.0	86.0	80.0	76.0	64.9	56.0	47.0	37.5	27.5									
	30	—	107.5	102.0	97.0	92.5	87.0	80.5	76.5	65.0	56.5	47.5	38.0	28.0										
	40	107.0	101.5	96.5	92.0	87.5	81.5	77.0	65.5	57.0	48.0	38.5	29.0											
	50	101.0	96.0	91.0	86.0	82.0	77.0	66.0	57.5	48.0	39.0	30.0	20.0											
	60	95.0	90.0	85.0	80.5	77.5	66.5	57.5	49.0	40.0	31.0	21.0												
10	0	—	—	—	—	—	—	106.0	102.0	97.5	93.0	88.0	84.0	79.0	74.9	68.0	62.0	55.0	48.0	42.5	36.0			
	20	—	—	—	—	107.0	102.5	98.5	93.5	89.0	85.0	80.0	75.5	69.5	62.5	56.0	49.5	43.0	37.0	31.0				
	30	—	—	—	106.5	103.0	99.0	94.0	89.5	85.0	80.5	76.0	70.0	63.0	57.0	55.0	43.5	37.5	31.5					
	40	—	—	106.0	102.5	99.5	95.0	90.0	85.5	81.0	76.5	70.5	64.0	57.5	51.0	44.0	38.0	32.0						
	50	—	105.5	102.0	98.5	95.0	90.0	86.0	81.5	76.5	71.0	64.5	57.5	51.5	44.5	38.0	32.5							
	60	104.5	101.5	98.0	94.0	91.0	86.5	82.0	77.0	72.0	65.0	58.0	52.0	46.0	38.5	32.5								

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

90 gpm series



Noryl® is a registered trademark of General Electric Co.

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

The 90 GPM Stainless Steel High-Flo 4" Submersible Pumps deliver efficient and dependable performance even in rough, aggressive water. Heads to 410 feet and capabilities to 120 GPM. Built to deliver long-term, trouble-free service. FDA compliant engineered composite and stainless steel components.

APPLICATIONS

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

SPECIFICATIONS

Discharge – 300 grade stainless steel with 2" NPT threads

Top Bearing – Acetal

Top Bearing Journal – 300 grade stainless steel

Diffuser Assembly – Noryl® (20% glass filled) urethane 300 grade stainless steel

Up-Thrust Washers – Phenolic

Impellers – Polycarbonate (20% glass filled)

Impeller Eye Seals – Urethane

Bowls – Noryl (20% glass filled)

Intermediate Bearing – Acetal

Intermediate Bearing Journal – 300 grade stainless steel

Shaft – 300 grade stainless steel

Coupling – 300 grade stainless steel, 7/16" hex stock

Shell – 300 grade stainless steel

Motor Adapter – 300 grade stainless steel

Suction Screen – 300 grade stainless steel

Cable Guard – 300 grade stainless steel

Fasteners – 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 – Field-proven, sealed and lubricated top bearing assembly keeps abrasives out, ensuring long bearing life.

Impellers – 20% glass-reinforced polycarbonate to resist abrasives and provide smooth water passage for minimal friction loss.

Upthrust Bearing – Phenolic washers and stainless steel up thrust rings at each stage provide excellent wear resistant surfaces.

Diffuser Bearing – Urethane 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.

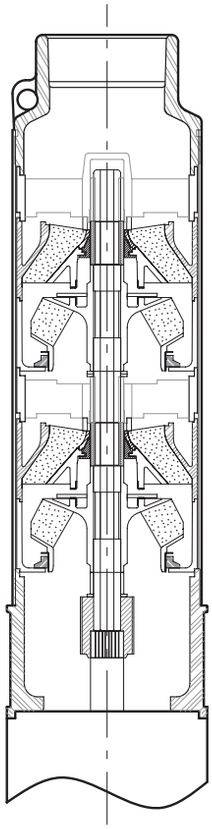
Intake Screen – 300 series stainless steel material offers maximum corrosion resistance and protects against damaging solids entering the pump.

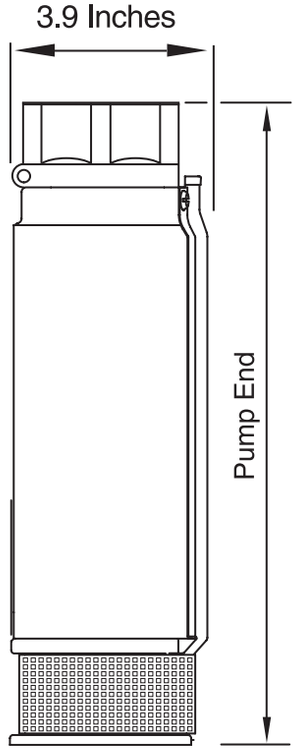
4" Submersible Pumps 90 gpm

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	**L90BF20**	21	15	**P43B0020A2**	31	**SMC-CR2021**	7
			3	230	**L90BF20**	21	15	**P43B0020A3**	31		
			3	460	**L90BF20**	21	15	**P43B0020A4**	31		
	3	7	1	230	**L90BF30**	26-5/8	17	**P43B0030A2**	40	**SMC-CR3021**	7
			3	230	**L90BF30**	26-5/8	17	**P43B0030A3**	32		
			3	460	**L90BF30**	26-5/8	17	**P43B0030A4**	32		
	5	12	1	230	**L90BF50**	41-1/2	19	**P43B0050A2**	70	**SMC-CR5021**	8
			3	230	**L90BF50**	41-1/2	19	**P43B0050A3**	55		
			3	460	**L90BF50**	41-1/2	19	**P43B0050A4**	55		
	7-1/2	17	3	230	**L90BF75**	56	26	**P43B0075A3**	70		
			3	460	**L90BF75**	56	26	**P43B0075A4**	70		
	10	23	3	460	**L90BF100**	72-3/8	35	**P43B0100A4**	78		

CROSS-SECTIONAL VIEW / OUTLINE DIMENSIONS





Model Number	Discharge
L90HF20	2" NPT
L90HF30	
L90HF50	
L90HF75	
L90HF100	

For lengths, refer to Ordering Information tables.

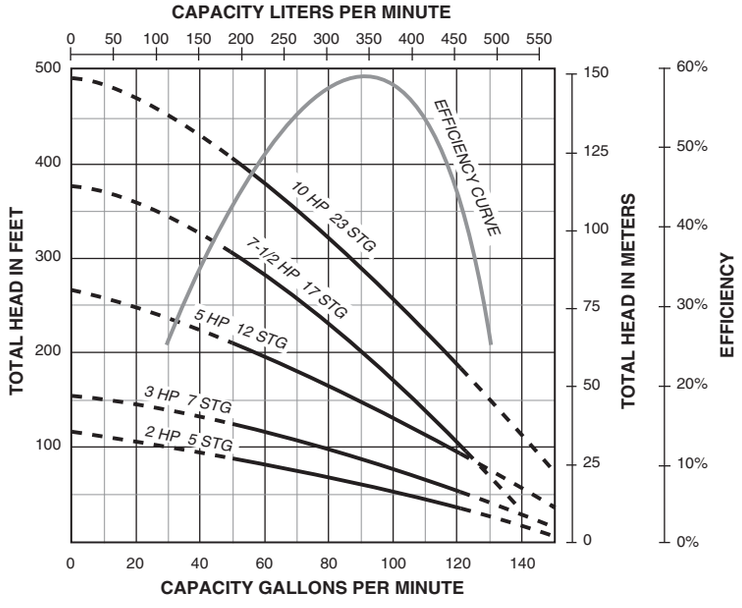
Dimensions are for estimating purposes only.

4" Submersible Pumps 90 gpm

90 Gallons per Minute | 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'	250'	300'	350'	400'	Feet	PSI
2	0	–	115	90	60										109	48
	20	80	53													
	30	50														
	40															
	50															
	60															
3	0	–	–	113	96	75	50								153	67
	20	108	90	69	50											
	30	87	66													
	40															
	50															
	60															
5	0	–	–	–	–	115	103	86	72	56					258	112
	20	–	122	112	102	88	74	59								
	30	119	111	101	87	73	58									
	40	108	98	84	72	57										
	50	96	83	71	56											
	60	82	70	55												
7-1/2	0	–	–	–	–	124	116	108	103	92	73	50			402	175
	20	–	–	122	116	110	101	93	87	74	52					
	30	–	121	115	109	102	94	84	79	65						
	40	120	114	108	101	94	85	76	70	54						
	50	113	107	100	93	86	76	66	60							
	60	106	99	92	85	77	67	56								
10	0	–	–	–	–	–	–	–	118	112	99	81	66	52	491	213
	20	–	–	–	–	–	119	113	106	100	83	67	53			
	30	–	–	–	–	120	114	107	101	93	75	60				
	40	–	–	–	119	114	107	101	94	84	68	54				
	50	–	–	118	114	108	102	95	85	77	62					
	60	125	117	113	108	102	94	86	78	70	55					

PUMP PERFORMANCE – 90 GPM



6" Submersible Pumps



The 6TS Series Submersible features heavy-duty 304 stainless steel construction that will outperform ordinary fabricated stainless steel pumps in aggressive water conditions.

APPLICATIONS

- **Water systems...** for municipal, multiple housing, commercial, in water fountains, irrigation, mine de-watering, and farm use.

SPECIFICATIONS

Suction Motor Bracket – Stainless steel 304 (investment cast)

Top Bearing – Stainless steel 304 (chrome plated)

Coupling – Stainless steel 416

Shaft – Stainless steel 416

Spacer – Stainless steel 304

Impeller – Stainless steel 304

Diffuser Bowl – Stainless steel 304

Discharge Bracket – Stainless steel 304 (investment cast)

Check Valve – Stainless steel 304

FEATURES

Heavy-Duty, Investment Cast 304 Stainless Steel Discharge and Suction Bracket – Assures perfect pump-to-motor alignment with any NEMA-standard submersible motor. Discharge assures secure connection to drop pipe. Wrench flats provide positive grip during installation.

Low-Profile Stainless Steel Lead Guard – Aids installation in narrow wells

Wide Range of Performance Options – 1 HP to 60 HP; 29 to 365 U.S. GPM

Hard Chrome-plated Top Bearing Journal – Reduces wear in harsh conditions, such as sand

State-of-the-Art Design – Delivers maximum performance and reliability in the toughest conditions

100% Lead-free Components – Meets all U.S. federal guidelines for safe drinking water

Built-In Thrust Protection – Protects pump during periods of high demand and start-up. Prevents pump failure.

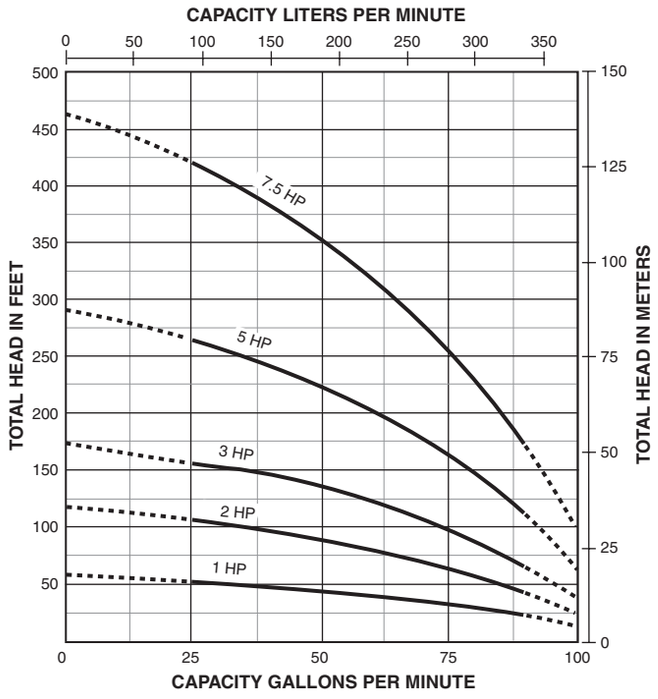
Built-In Check Valve – Prevents backflow and reverse rotation

Self-aligning Teflon Wear Rings – Improve pump efficiency and durability

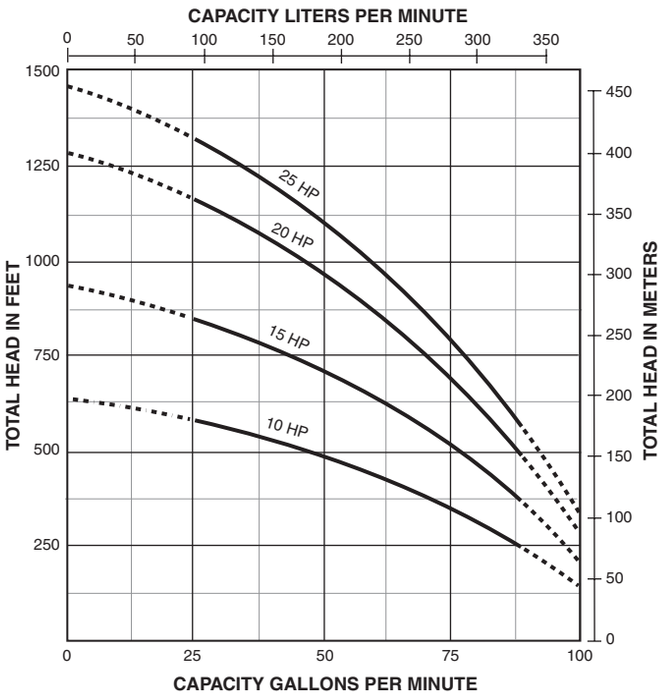
In order to provide the best products possible, specifications are subject to change.

6" Submersible Pumps

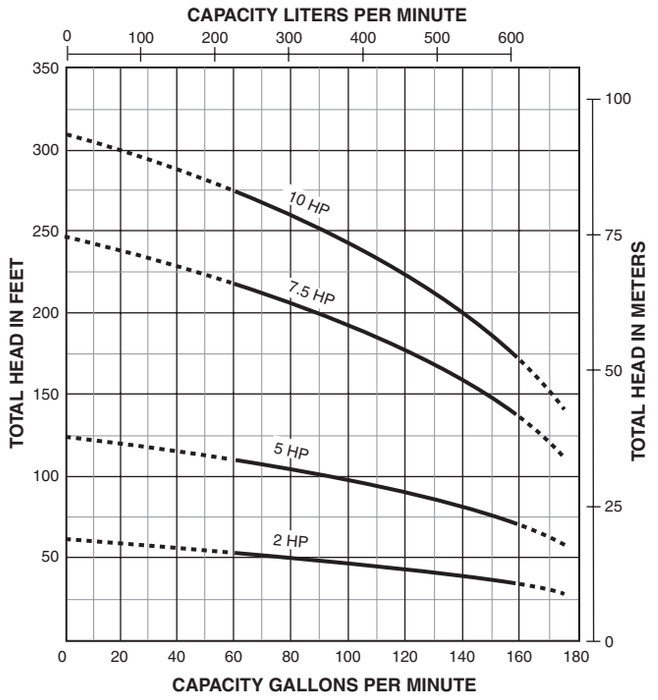
PUMP PERFORMANCE – 6TS70 (1 – 7.5 HP)



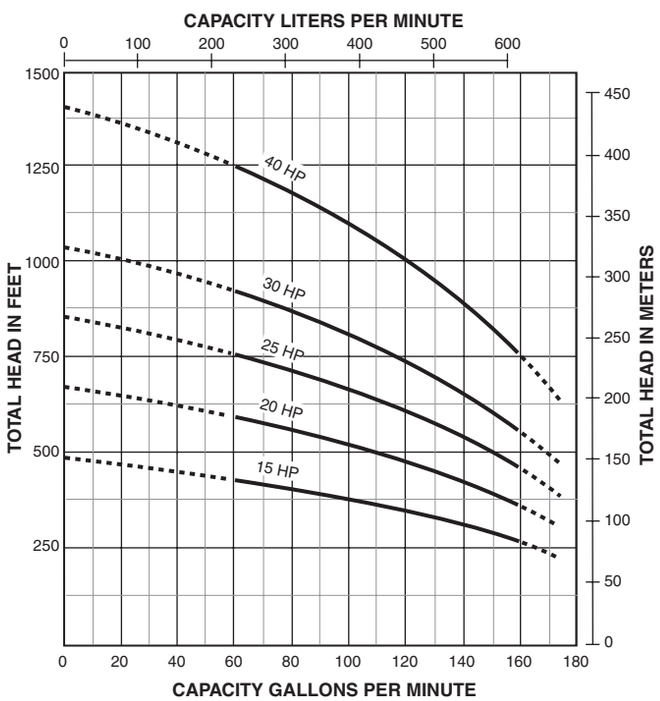
PUMP PERFORMANCE – 6TS70 (10 – 25 HP)



PUMP PERFORMANCE – 6TS115 (2 – 10 HP)

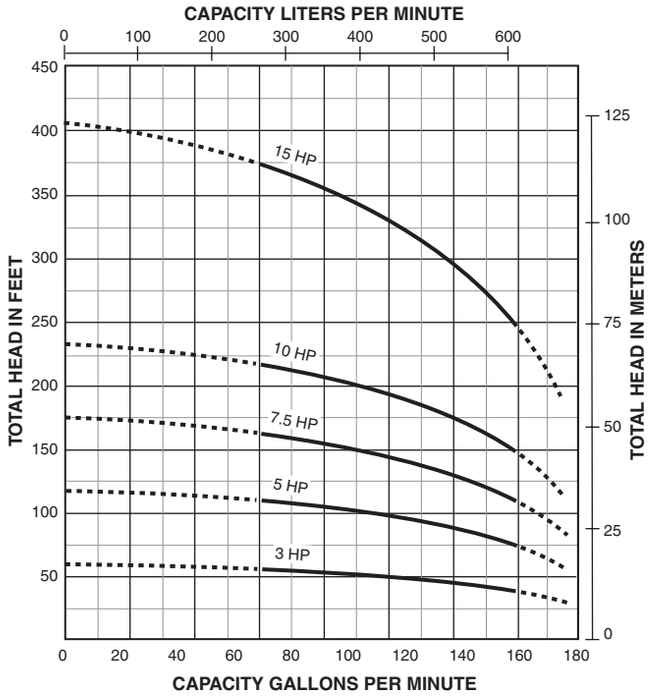


PUMP PERFORMANCE – 6TS115 (15 – 40 HP)

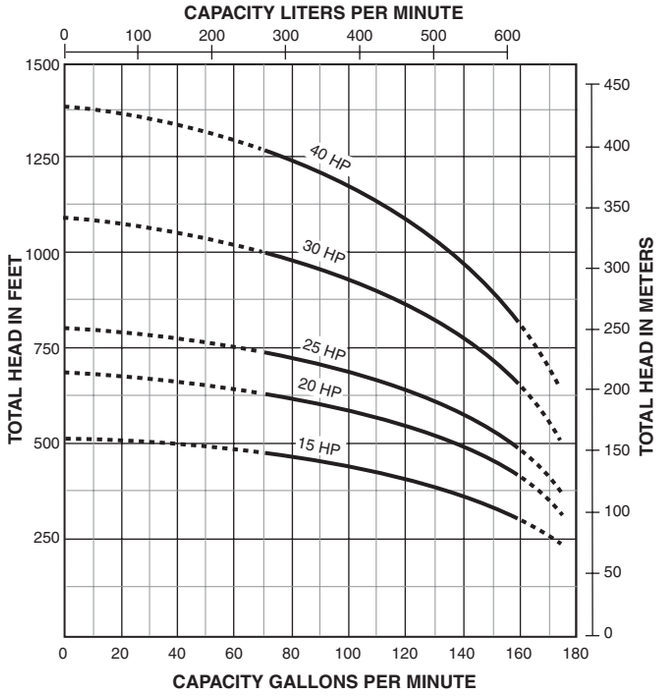


6" Submersible Pumps

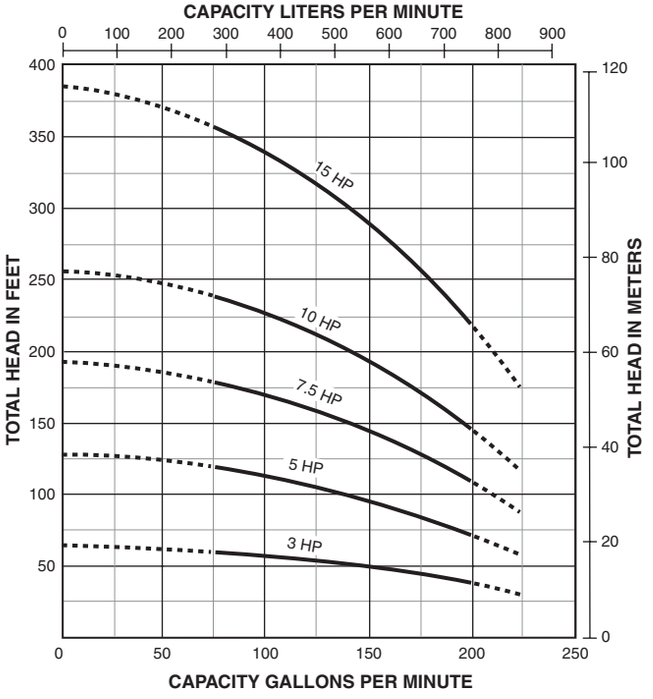
PUMP PERFORMANCE – 6TS140 (3 – 15 HP)



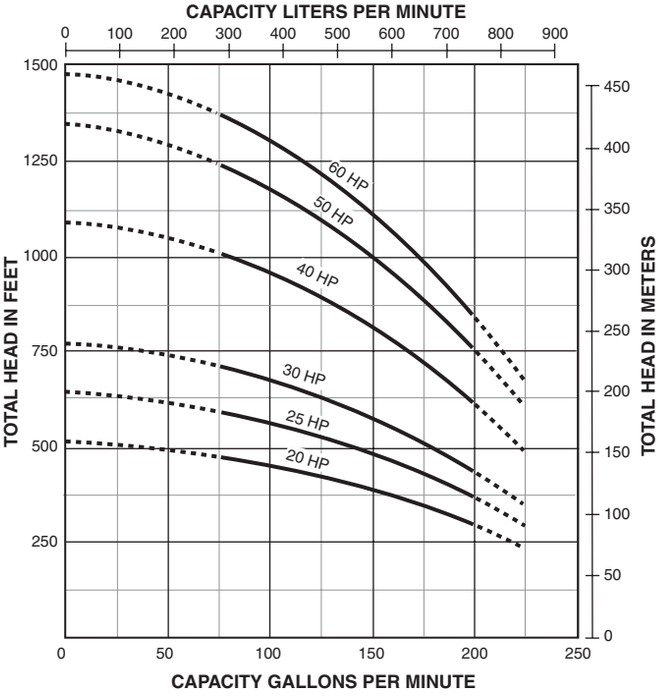
PUMP PERFORMANCE – 6TS140 (20 – 50 HP)



PUMP PERFORMANCE – 6TS155 (3 – 15 HP)

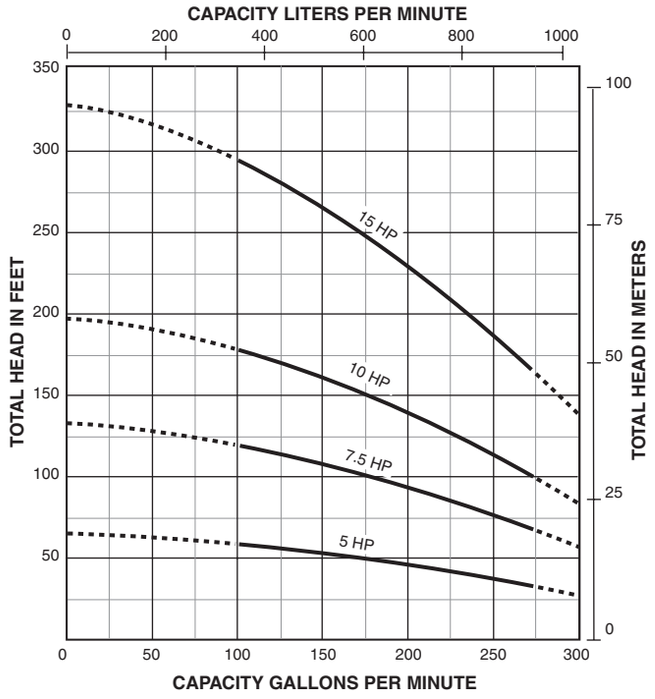


PUMP PERFORMANCE – 6TS155 (20 – 60 HP)

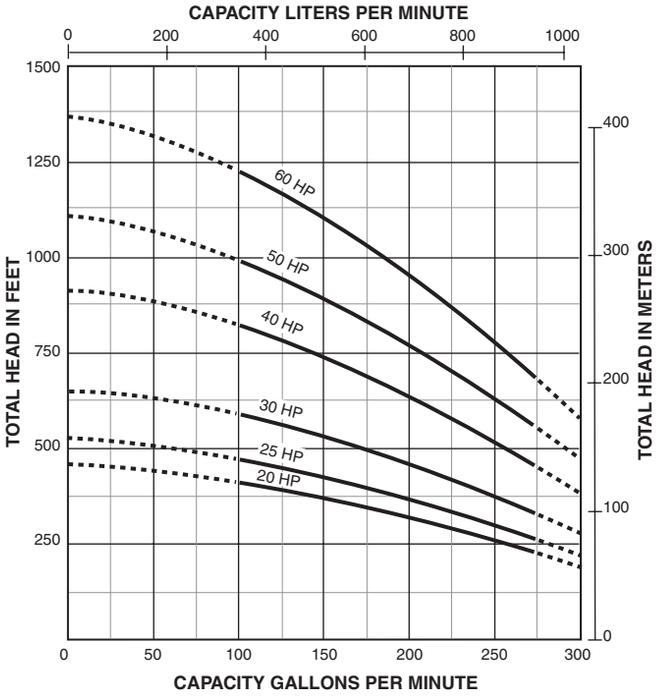


6" Submersible Pumps

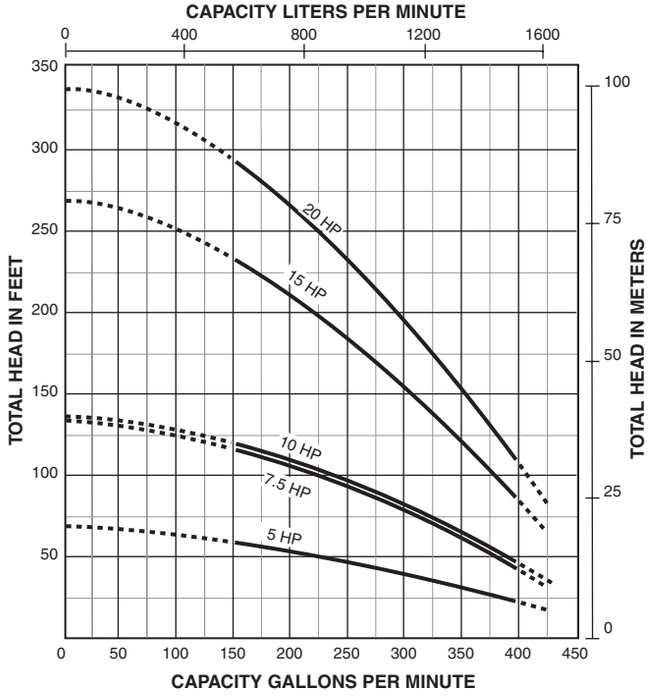
PUMP PERFORMANCE – 6TS230 (3 – 15 HP)



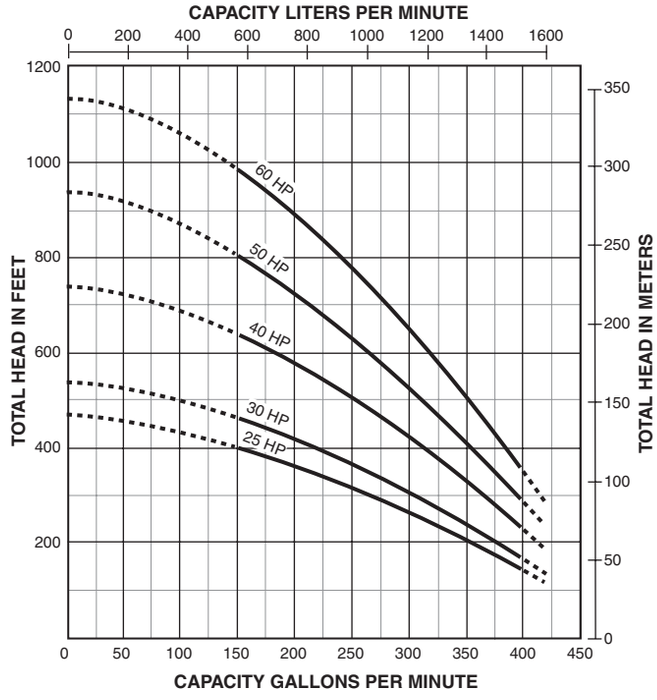
PUMP PERFORMANCE – 6TS230 (20 – 60 HP)



PUMP PERFORMANCE – 6TS300 (5 – 20 HP)



PUMP PERFORMANCE – 6TS300 (25 – 60 HP)

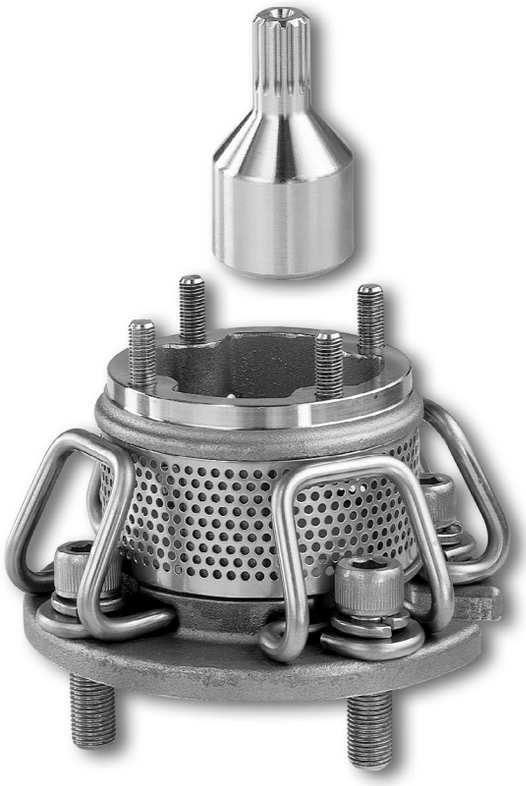


6" Submersible Pumps

ORDERING INFORMATION

Capacity GPM	Model #	Catalog Number	HP	Stages	Discharge	Motor Diameter	Weight Pounds
70	B82678	6TS70-10	1	1	3"	4"	26
	B82679	6TS70-20	2	2	3"	4"	28
	B82680	6TS70-30	3	3	3"	4"	30
	B82681	6TS70-50	5	5	3"	4"	30
	B82684	6TS70-75	7-1/2	8	3"	6"	38
	B82686	6TS70-100	10	11	3"	6"	46
	B82687	6TS70-150	15	16	3"	6"	54
	B82688	6TS70-200	20	22	3"	6"	62
	B82689	GTS70-250	25	25	3"	6"	70
115	B82756	6TS115-20	2	1	3"	4"	24
	B82757	6TS115-30	3	1	3"	4"	24
	B82758	6TS115-50	5	2	3"	4"	29
	B82759	6TS115-50	5	2	3"	6"	29
	B82760	6TS115-75	7-1/2	4	3"	4"	40
	B82761	6TS115-75	7-1/2	4	3"	6"	40
	B82762	6TS-115-100	10	5	3"	4"	47
	B82763	6TS115-100	10	5	3"	6"	47
	B82764	6TS115-150	15	8	3"	6"	62
	B82765	6TS115-200	20	10	3"	6"	79
	B82766	6TS115-250	25	13	3"	6"	95
	B82767	6TS115-300	30	16	3"	6"	112
	B82768	6TS115-400	40	21	3"	6"	145
140	B80943	6TS140-30	3	1	3"	4"	24
	B80944	6TS140-50	5	2	3"	4"	26
	B80947	6TS140-75	7.5	3	3"	6"	29
	B80949	6TS140-100	10	4	3"	6"	31
	B80950	6TS140-150	15	7	3"	6"	39
	B80951	6TS140-200	20	9	3"	6"	43
	B80952	6TS140-250	25	12	3"	6"	51
	B80953	6TS140-300	30	14	3"	6"	56
	B80954	6TS140-400	40	19	3"	6"	68
	B80955	6TS140-500	50	24	3"	6"	80
155	B82797	6TS155-30	3	1	3"	4"	24
	B82798	6TS155-50	5	2	3"	4"	29
	B82799	6TS155-50	5	2	3"	6"	29
	B82800	6TS155-75	7-1/2	3	3"	4"	35
	B82801	6TS155-75	7-1/2	3	3"	6"	35
	B82802	6TS155-100	10	4	3"	4"	40
	B82803	6TS155-100	10	4	3"	6"	40
	B82804	6TS155-150	15	6	3"	6"	51
	B82805	6TS155-200	20	8	3"	6"	62
	B82806	6TS155-250	25	10	3"	6"	73
	B82807	6TS155-300	30	12	3"	6"	84
	B82808	6TS155-400	40	16	3"	6"	106
	B82809	6TS155-500	50	20	3"	6"	128
	B82810	6TS155-600	60	22	3"	6"	139
230	B82839	6TS230-30	3	1	4"	4"	40
	B82840	6TS230-50	5	1	4"	4"	44
	B82841	6TS230-50	5	1	4"	6"	49
	B82842	6TS230-75	7-1/2	2	4"	6"	53
	B82843	6TS230-75	7-1/2	2	4"	6"	62
	B82844	6TS230-100	10	3	4"	6"	67
	B82845	6TS230-100	10	3	4"	6"	76
	B82846	6TS230-150	15	5	4"	6"	89
	B82847	6TS230-200	20	7	4"	6"	103
	B82848	6TS230-250	25	8	4"	6"	116
	B82849	6TS230-300	30	10	4"	6"	129
	B82850	6TS230-400	40	14	4"	6"	95
	B82851	6TS230-500	50	17	4"	6"	112
	B82852	6TS230-600	60	21	4"	6"	134
300	B82879	6TS300-50	5	1	4"	4"	40
	B82880	6TS300-50	5	1	4"	6"	40
	B82881	6TS300-75	7-1/2	2	4"	4"	44
	B82882	6TS300-75	7-1/2	2	4"	6"	44
	B82883	6TS300-100	10	3	4"	4"	49
	B82884	6TS300-100	10	3	4"	6"	49
	B82885	6TS300-150	15	4	4"	6"	53
	B82886	6TS300-200	20	6	4"	6"	62
	B82887	6TS300-250	25	7	4"	6"	67
	B82888	6TS300-300	30	9	4"	6"	76
	B82889	6TS300-400	40	12	4"	6"	89
	B82890	6TS300-500	50	15	4"	6"	103
	B82891	6TS300-600	60	18	4"	6"	116

4" Submersible Motor Adapter



The PKG 4x6, Pump/Motor Adapter offers the professional distributor and dealer the flexibility to stock standard 4" submersible pump ends, and 4" and 6" motors, better utilizing inventory dollars and delivery demands!

APPLICATIONS

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

SPECIFICATIONS

Adapter Casting – Stainless steel

Coupling – Stainless steel

Intake Screen – Stainless steel

Beveled Wire Forms – Stainless steel

Socket Head Cap-screws – Stainless steel

Studs – Stainless steel

Fasteners – Stainless steel

FEATURES

Extends Single-phase Power Availability – To all submersibles through 10 HP using 6" single-phase motors.

Easy Assembly – Easy job-site assembly.

Double-suction Screens – Reduces inlet suction velocity, reducing the amount of suspended solids ingested by pump.



ORDERING INFORMATION

Catalog Number	Pump End*	Motor*	Maximum HP	Weight Pounds**
PKG 4x6	4" Nema	6" Nema	10	5

*Pump end and motor ordered separately.
**Shipping weight is approximate.

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

BERKELEY®

PENTEK® XE Series™

4" Submersible Motors



Introducing the PENTEK XE Series 4" submersible high-thrust motors. Built with the latest design, manufacturing and testing technology, they feature laser-welded 304L stainless steel construction, higher thrust capacities and higher efficiencies. The PENTEK XE Series submersible motors incorporate "encapsulated, epoxy stator design," and professional-grade Class F insulation provides longer life in harsh environments. Each motor is 100% factory pressure and run tested to support our quality standards.

APPLICATIONS

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

SPECIFICATIONS

End Bell – 304 Stainless Steel

Shell – 304 Stainless Steel

Motor Shaft – 17-4 Precipitation Hardened Stainless Steel

Insulation – Class F, 311°F (155°C)

Max. Water Temp – 86°F (30˚C)

Fasteners – 304 Stainless Steel

Sand Boot – Nitrile

Cable – Field-serviceable, Controlled Compression Design, UL and CSA Approved

Cable Length – 48"

Diaphragm – EPDM

Thrust Bearings – Kingsbury-type, pivot shoe, carbon graphite mating ring

Thrust Load Capacity – 700 lbs.

FEATURES

700# Rated Kingsbury Thrust Bearing Design – Large high-performance bearings are standard on all HPs allowing for higher thrust loads, providing many years of trouble-free service under severe-duty operation.

2-Wire Permanent Split Capacitor – Design insures quiet operation and improved operating efficiency.

3-Wire Motors – Operate with PENTEK SMC and other single-phase motor controls.

All Stainless Steel Exterior

Professional-Grade Class F-Compliant Motor Insulation – Allows for longer service life.

UL, CSA Approved and NSF/ANSI 61 Certified

100% Factory Pressure and Run Tested

Equipped with Surge Arrestor

Automatic Thermal Protection on 1/2 – 1 HP Models

PENTEK® is a registered trademark of Pentair Water. XE Series™ is a trademark of Pentair Water.

4" Submersible Motors

ORDERING INFORMATION

Rating												Length		Weight	
HP	kW	Volts	Hz	Service Factor	Catalog Number	Full Load Amps	Max. Load (SF Load) Amps	Locked Rotor Amps	Winding Main Resistance	Winding Start Resistance	Thrust Rating	In.	mm	Lb.	Kg
PSC 2 Wire															
1/2	0.37	115	60	1.6	**P42B0005A1**	7.4	9.5	36.4	1.3-1.8		700	11.0	279	19.2	8.7
		230		1.6	**P42B0005A2**	3.7	4.7	19.5	4.5-5.2			11.0	279	19.2	8.7
3/4	0.55	230		1.5	**P42B0007A2**	5.0	6.4	24.8	3.0-4.8			12.4	314	22.7	10.3
1	0.75	230		1.4	**P42B0010A2**	7.9	9.1	21.7	4.2-5.2			13.3	337	24.5	11.1
1-1/2	1.1	230		1.3	**P42B0015A2**	9.2	11.0	42.0	1.9-2.3			14.9	378	28.9	13.1
CSIR 3 Wire															
1/2	0.37	115	60	1.6	**P43B0005A1**	11.0	12.6	49.6	0.9-1.6	5.7-7.0	700	10.0	253	18.9	8.6
		230		1.6	**P43B0005A2**	5.5	6.3	22.3	4.2-4.9	17.4-18.7		9.7	246	18.1	8.2
3/4	0.55	230		1.5	**P43B0007A2**	7.2	8.3	32.0	2.6-3.6	11.8-13.0		10.8	275	21.4	9.7
1	0.75	230		1.4	**P43B0010A2**	8.4	9.7	41.2	2.2-3.2	11.3-12.3		11.7	297	23.1	10.5
CSCR 3 Wire															
1/2	0.37	230	60	1.6	**P43B0005A2**	4.1	4.9	22.3	4.2-4.9	17.4-18.7	700	9.7	246	18.1	8.2
3/4	0.55			1.5	**P43B0007A2**	5.1	6.3	32.0	2.6-3.6	11.8-13.0		10.8	275	21.4	9.7
1	0.75			1.4	**P43B0010A2**	6.1	7.2	41.2	2.2-3.2	11.3-12.3		11.7	297	23.1	10.5
1-1/2	1.1			1.3	**P43B0015A2**	9.7	11.1	47.8	1.6-2.3	7.9-8.7		13.6	345	27.4	12.4
2	1.5			1.25	**P43B0020A2**	9.9	12.2	49.4	1.6-2.2	10.8-12.0	900	15.1	383	31.0	14.1
3	2.2			1.15	**P43B0030A2**	14.3	16.5	76.4	1.1-1.4	2.0-2.5		18.3	466	40.0	18.1
5	3.7			1.15	**P43B0050A2**	24	27	101.0	0.62-0.76	1.36-1.66	1500	27.7	703	70.0	31.8

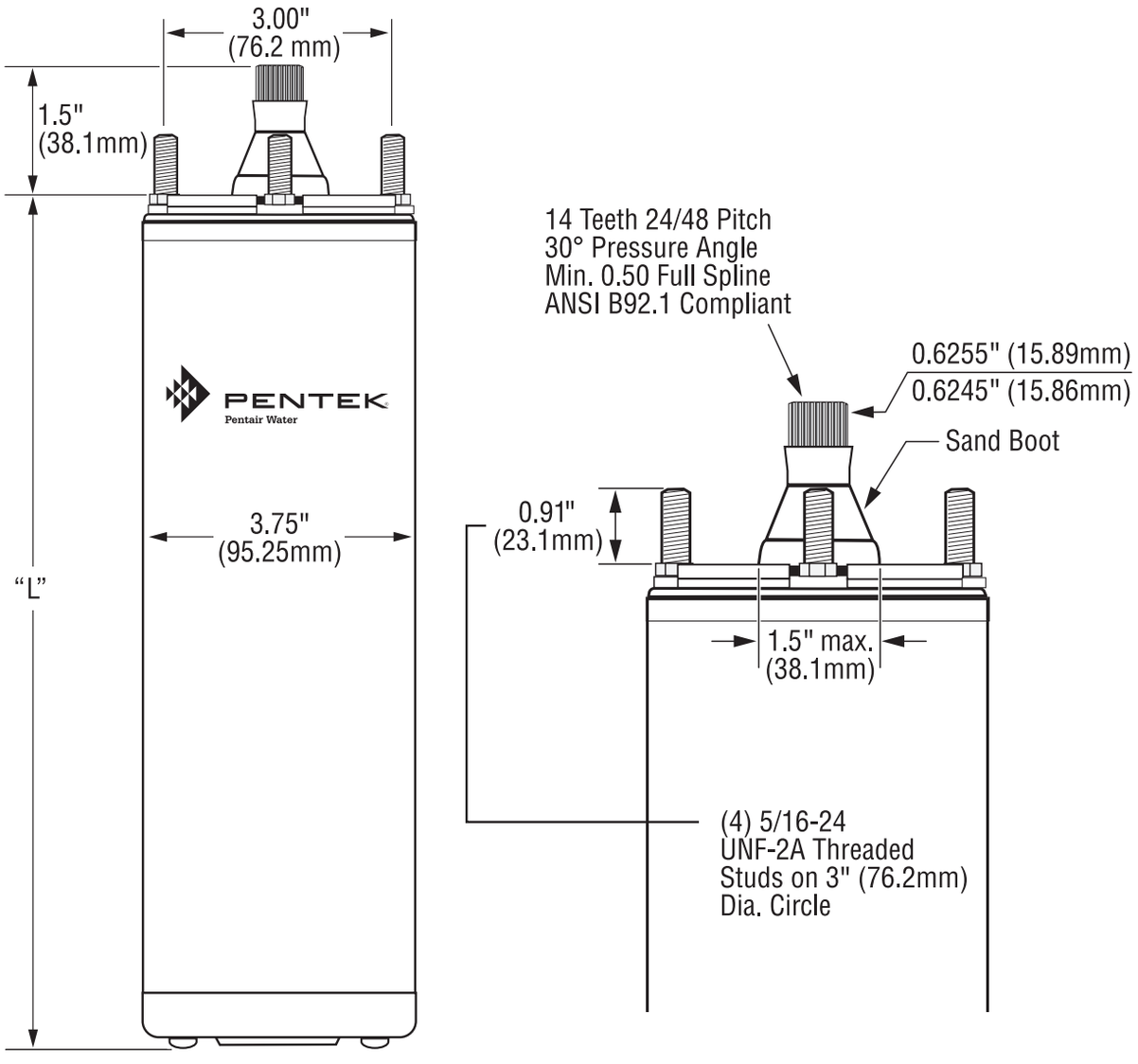
3 Phase

Rating											Length		Weight	
HP	kW	Volts	Hz	Service Factor	Catalog Number	Full Load Amps	Max. Load (SF Load) Amps	Line to Line Resistance Ohms	Locked Rotor Amps	Thrust Rating	In.	mm	Lb.	Kg
1/2	0.37	200	60	1.6	**P43B0005A8**	2.9	3.4	4.1-5.2	22	700	10.0	254	18.9	8.6
		230			**P43B0005A3**	2.4	2.9	5.72-7.2	17.3		10.0	254	18.9	8.6
		460			**P43B0005A4**	1.3	1.5	23.6-26.1	9		10.0	254	18.9	8.6
3/4	0.55	200	60	1.5	**P43B0007A8**	3.8	4.5	2.6-3.0	32.0		10.8	274	21.4	9.7
		230			**P43B0007A3**	3.3	3.9	3.3-4.3	27		10.8	274	21.4	9.7
		460			**P43B0007A4**	1.7	2.0	14.4-16.2	14		10.8	274	21.4	9.7
1	0.75	200	60	1.4	**P43B0010A8**	4.6	5.5	3.4-3.9	29.0		11.7	297	23.1	10.5
		230			**P43B0010A3**	4.0	4.7	4.1-5.1	26.1		11.7	297	23.1	10.5
		460			**P43B0010A4**	2.2	2.5	17.8-18.8	13.0		11.7	297	23.1	10.5
1-1/2	1.1	200	60	1.3	**P43B0015A8**	6.3	7.2	1.9-2.5	40.0		11.7	297	23.1	10.5
		230			**P43B0015A3**	5.2	6.1	2.8-3.4	32.4		11.7	297	23.1	10.5
		460			**P43B0015A4**	2.8	3.2	12.3-13.1	16.3		11.7	297	23.1	10.5
		575			**P43B0015A5**	2	2.4	19.8-20.6	11.5		11.7	297	23.1	10.5
2	1.5	200	60	1.25	**P43B0020A8**	7.5	8.8	1.4-2.0	51.0	900	13.8	351	27.4	12.4
		230			**P43B0020A3**	6.5	7.6	1.8-2.4	44.0		13.8	351	27.4	12.4
		460			**P43B0020A4**	3.3	3.8	8.00-8.67	23.0		13.8	351	27.4	12.4
		575			**P43B0020A5**	2.7	3.3	9.4-9.7	21.4		15.3	389	32	14.5
3	2.2	200	60	1.15	**P43B0030A8**	10.9	12.0	0.9-1.3	71.0		15.3	389	32	14.5
		230			**P43B0030A3**	9.2	10.1	1.3-1.7	58.9		15.3	389	32	14.5
		460			**P43B0030A4**	4.8	5.3	5.9-6.5	30.0		15.3	389	32	14.5
		575			**P43B0030A5**	3.7	4.1	9.4-9.7	21.4		15.3	389	32	14.5
5	3.7	200	60	1.15	**P43B0050A8**	18.3	20.2	0.4-0.8	113.0	1500	21.7	551	55	24.9
		230			**P43B0050A3**	15.7	17.5	0.85-1.25	93.0		21.7	551	55	24.9
		460			**P43B0050A4**	7.6	8.5	3.58-4.00	48.0		21.7	551	55	24.9
		575			**P43B0050A5**	7.0	7.6	3.6-4.2	55.0		27.7	703	70	31.8
7-1/2	5.6	200	60	1.15	**P43B0075A8**	27.0	30.0	0.5-0.6	165.0		27.7	703	70	31.8
		230			**P43B0075A3**	24.0	26.4	0.55-0.85	140.0		27.7	703	70	31.8
		460			**P43B0075A4**	12.2	13.5	1.9-2.3	87.0		27.7	703	70	31.8
		575			**P43B0075A5**	9.1	10.0	3.6-4.2	55.0		27.7	703	70	31.8
10	7.5	460	60	1.15	**P43B0100A4**	15.6	17.2	1.8-2.2	110.0		30.7	780	78	35.4

NOTE: Amp ratings on 3-wire motors reflect use with CSIR controls. A CSCR control is recommended for lower values. Max Load Amps are measured on the yellow wire, refer to PN793 for more detail.

4" Submersible Motors

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

LEAD LENGTH

Catalog Number	# of Wire	Type	Length	Gauge
XE SERIES REPLACEMENT MOTOR LEADS				
P18-1485K	2 Wire	XLPE	48"	14 Ga
P18-1486K	3 Wire	XLPE	48"	14 Ga
P18-1651K	2 Wire	XLPE	100"	14 Ga
P18-1652K	3 Wire	XLPE	100"	14 Ga

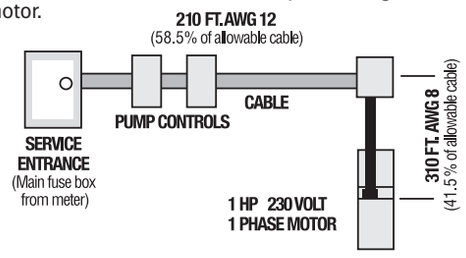
Cable Selection

4" submersible motors

Two different cable sizes can be used.
The example below is for reference and uses the CSIR chart below. Depending on the installation, any number of combinations may be used, as long as the total percentage length of the two cables used does not exceed 100%. This is to ensure that adequate voltage will be supplied to the motor.

EXAMPLE:
1 HP,
230 Volt, 3W,
1 PH Motor

using CSIR chart



In a replacement installation, the well already has 210 feet of buried #12 cable between the service entrance and the well head. The question is: *What size cable is required in the well with a 1 HP, 230 Volt, 1 PH, 3W motor setting at 310 feet?*

1. According to the table, #12 cable is large enough for the 1 HP motor so the percent of the maximum allowable cable used by the 210-foot run is 210 ÷ 359 = 58.5%, since 359 feet is the total allowable.
2. With 58.5% of the total allowable cable already used between the service entrance and the well head, only 41.5% is left for the well. Therefore, the 310 feet needed in the well can only utilize 41.5% of the total feet allowed in the table.
3. From the table, 41.5% of the 573 feet for #10 cable equals only 238 feet, so a larger size is needed. For #8, 41.5% of 908 feet = 377 feet. As a result, #8 can be used for the 310 feet in the well.

CAUTION **Use of wire size smaller than listed will void warranty.**

MOTOR LEAD LENGTHS – PENTEK® 2-WIRE MOTORS

60 Hz Motor Rating		60C and 75C Insulation – AWG Copper Wire Size												
Volts	**HP**	**14**	**12**	**10**	**8**	**6**	**4**	**3**	**2**	**1**	**1/0**	**2/0**	**3/0**	**4/0**
115	1/2	115	183	293	463	721	1150	1445	1825	2299	2902	3662	4623	5824
230	1/2	466	742	1183	1874	2915	4648	5843	7379	9295	11733			
	3/4	342	545	869	1376	2141	3413	4291	5419	6826	8617	10871		
	1	241	383	611	968	1506	2400	3018	3811	4801	6060	7646	9652	
	1-1/2	199	317	505	801	1246	1986	2496	3153	3972	5013	6325	7985	

MOTOR LEAD LENGTHS – PENTEK 3-WIRE MOTORS

CSIR Control Boxes

60 Hz Motor Rating		60C and 75C Insulation – AWG Copper Wire Size												
Volts	**HP**	**14**	**12**	**10**	**8**	**6**	**4**	**3**	**2**	**1**	**1/0**	**2/0**	**3/0**	**4/0**
115	1/2	87	138	221	349	544	867	1090	1376	1734	2188	2761	3485	4391
230	1/2	348	553	883	1398	2175	3467	4359	5505	6935	8753			
	3/4	264	420	670	1061	1651	2632	3309	4178	5264	6644	8383		
	1	226	359	573	908	1413	2252	2831	3575	4504	5685	7173		

CSCR Control Boxes

60 Hz Motor Rating		60C and 75C Insulation – AWG Copper Wire Size												
Volts	**HP**	**14**	**12**	**10**	**8**	**6**	**4**	**3**	**2**	**1**	**1/0**	**2/0**	**3/0**	**4/0**
230	1/2	447	711	1135	1797	2796	4458	5604	7078	8916	11254			
	3/4	348	553	883	1398	2175	3467	4359	5505	6935	8753	11044		
	1	304	484	772	1223	1903	3034	3814	4817	6068	7659	9663		
	1-1/2	197	314	501	793	1234	1968	2474	3124	3936	4968	6268		
	2	180	286	456	722	1123	1790	2251	2843	3581	4520	5703		
	3	133	211	337	534	830	1324	1664	2102	2648	3342	4217	5323	
	5			206	326	507	809	1017	1284	1618	2042	2577	3253	

All lengths in feet.

NOTE: Based on service factor amps, 30C ambient and 5% voltage drop.

(1) This table is based on copper wire. If aluminum wire is used it must be two sizes larger. *Example:* When the table calls for #12 copper wire you would use #10 aluminum wire.

(2) Cables #14 to #0000 are AWG sizes.

PENTEK® is a registered trademark of Pentair Water.

Cable Selection

4" submersible motors

MOTOR LEAD LENGTHS – PENTEK® 3-PHASE MOTORS

60 Hz Motor Rating		60C AND 75C Insulation – AWG Copper Wire Size												
Volts	**HP**	**14**	**12**	**10**	**8**	**6**	**4**	**3**	**2**	**1**	**1/0**	**2/0**	**3/0**	**4/0**
200	0.5	657	1045	1667	2641	4109								
	3/4	423	674	1074	1702	2648								
	1	346	551	879	1392	2166	3454	4342						
	1.5	265	421	672	1064	1655	2638	3317						
	2	217	344	549	870	1354	2158	2714	3427	4317	5449			
	3	159	253	403	638	993	1583	1990	2513	3166	3996			
	5	94	150	239	379	590	940	1182	1493	1881	2374	2995	3781	4764
	7.5	64	101	161	255	397	633	796	1005	1266	1598	2017	2546	3207
230	0.5	756	1202	1917	3037	4725	7532	9469						
	0.75	562	894	1426	2258	3513	5601	7041	8892					
	1	466	742	1183	1874	2915	4648	5843	7379					
	1.5	359	571	912	1444	2246	3581	4502	5685	7162	9040			
	2	288	459	732	1159	1803	2874	3613	4563	5748	7256	9155		
	3	217	345	551	872	1357	2163	2719	3434	4326	5460	6889	8696	10956
	5			318	503	783	1248	1569	1982	2496	3151	3976	5019	6323
	7.5				334	519	827	1040	1314	1655	2089	2635	3327	4192
460	0.5	2922	4648	7414										
	0.75	2191	3486	5560	8806									
	1	1753	2789	4448	7045									
	1.5	1370	2179	3475	5504									
	2	1153	1835	2926	4635	7212								
	3	827	1315	2098	3323	5171								
	5	516	820	1308	2072	3224	5140							
	7.5	325	516	824	1305	2030	3236	4068	5138	6472				
	10	255	405	647	1024	1593	2540	3193	4033	5080				
575	1.5	2283	3631	5792										
	2	1660	2641	4212	6671									
	3	1336	2126	3390	5370									
	5	721	1147	1829	2897	4507								
	7.5	548	871	1390	2202	3426								

All lengths in feet.

NOTE: Based on service factor amps, 30C ambient and 5% voltage drop.

(1) This table is based on copper wire. If aluminum wire is used it must be two sizes larger. *Example:* When the table calls for #12 copper wire you would use #10 aluminum wire.

(2) The portion of the total cable that is between the service entrance and a 3-phase motor starter should not exceed 25% of the total maximum length to assure reliable starter operation.

(3) Cables #14 to #0000 are AWG sizes.

Submersible Motor Controls



C US C US 778

PENTEK® offers a full range of 1/2 - 15 HP models that are interchangeable with existing motor controls for Capacitor Start/Induction Run (CSIR) and Capacitor Start/Capacitor Run (CSCR) applications. PENTEK is the professional choice in harsh and high temperature installations.

APPLICATIONS

- **Water systems...** for residential, commercial, multiple housing and farm uses, where a submersible 3-wire motor is used.

FEATURES

Enclosure

Rugged NEMA 3R enclosure – Suitable for indoor/outdoor use.

NEW HardBond™ Finish – 5-times more corrosion-resistant.

Multiple-size Electrical Knockouts

Internals

High-load Voltage Relay

Heavy-duty Contacts

External Access to Overload Reset CSCR

Heavy-duty Terminal Connectors – Suitable for up to #4 AWG wire.

Industry Standard Wiring Connections – Easy-to-read wiring diagrams.

Agency Approvals – UL 778 and CUL Recognized (60 Hz)

PENTEK® is a registered trademark of Pentair Water.

HardBond™ is a trademark of Pentair Water.

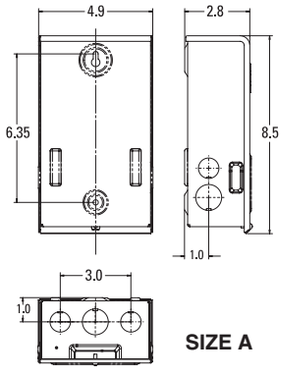
Submersible Motor Controls

ORDERING INFORMATION

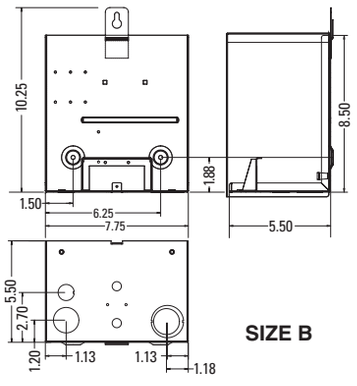
HP	kW	PH	Volts	60 Hz Catalog Number	50 Hz Catalog Number	Weight Lbs	Weight Kg	Enclosure Size
CSIR – Capacitor Start/Induction Run								
1/2	0.37	1	115	**SMC-IR0511 (-6pk)***		4	1.8	A
1/2	0.37	1	230	**SMC-IR0521 (-6pk)***		4	1.8	A
3/4	0.55	1	230	**SMC-IR0721 (-6pk)***		4	1.8	A
1	0.75	1	230	**SMC-IR1021 (-6pk)***		4	1.8	A
CSCR – Capacitor Start/Capacitor Run								
1/2	0.37	1	230	**SMC-CR0521 (-6pk)***	**SMC5-CR0521**	5	2.3	A
3/4	0.55	1	230	**SMC-CR0721 (-6pk)***	**SMC5-CR0721**	5	2.3	A
1	0.75	1	230	**SMC-CR1021 (-6pk)***	**SMC5-CR1021**	5	2.3	A
1-1/2	1.1	1	230	**SMC-CR1521**	**SMC5-CR1521**	7	3.2	B
2	1.5	1	230	**SMC-CR2021**	**SMC5-CR2021**	7	3.2	B
3	2.2	1	230	**SMC-CR3021**	**SMC5-CR3021**	7	3.2	B
5	3.7	1	230	**SMC-CR5021**	**SMC5-CR5021**	8	3.6	B
7-1/2	5.5	1	230	**SMC-CR7521**		12	5.4	C
10	7.5	1	230	**SMC-CR10021**		14	6.4	C
CSCR PLUS – Capacitor Start/Capacitor Run PLUS Magnetic Contactor								
2	1.5	1	230	**SMC-CRP2021**	**SMC5-CRP2021**	7	3.2	B
3	2.2	1	230	**SMC-CRP3021**	**SMC5-CRP3021**	8	3.6	B
5	3.7	1	230	**SMC-CRP5021**	**SMC5-CRP5021**	12	5.4	C
7-1/2	5.5	1	230	**SMC-CRP7521**		14	6.4	C
10	7.5	1	230	**SMC-CRP10021**		15	6.8	C
15	11	1	230	**SMC-CRP15021**		17	7.7	C

*Submersible Motor Controls are available in single and six packs. Include the suffix "-6pk" after the catalog number if 6 packs are required.

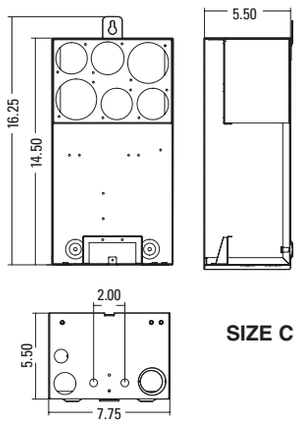
OUTLINE DIMENSIONS



SIZE A



SIZE B



SIZE C

Dimensions (in inches) are for estimating purposes only.

Single-Phase Pump Protection



PENTEK® offers a full range of 1/3 - 15 HP single-phase protectors for residential, commercial, multiple housing and farm water systems applications where a 4" submersible, 2- and 3-wire motor is used and for aboveground pressure-boost applications.

APPLICATIONS

- PENTEK offers 5 models for your application needs based on HP and Motor Type: SPP-111P, SPP-111-3RLP, SPP-231P, SPP-233P and SPP-235P.

FEATURES

Protects Pumps – From dry well, overcurrent (jammed impeller), flow restriction (dead head), overvoltage, undervoltage, rapid cycling.

ORDERING INFORMATION

	115 VOLT MODELS		230 VOLT MODELS		
Catalog Number	SPP-111P	SPP-111-3RLP	SPP-231P	SPP-233P	SPP-235P
Enclosure Type	Insider	NEMA 3R	Insider	NEMA 3R	NEMA 3R
1-Phase Line Voltage	115VAC	115VAC	230VAC	230VAC	230VAC
Load Range	1/3 - 1/2 HP	1/3 - 1 HP	1/2 - 1 HP	1/2 - 3 HP	5 - 15 HP
Frequency	50 - 60Hz	50 - 60Hz	50 - 60Hz	50 - 60Hz	50 - 60Hz
Operating Points					
Overload (% of Cal. Point)	125%	125%	125%	125%	125%
Overvoltage Reset Point	132VAC	132VAC	265VAC	265VAC	265VAC
Undervoltage Reset Point	95VAC	95VAC	190VAC	190VAC	190VAC
Trip Delay (Overload)	10 sec.	10 sec.	10 sec.	5 sec.	5 sec.
Trip Delay (Dry Well)	2 sec.	2 sec.	2 sec.	2 sec.	2 sec.
Optional Trip Delay	4 sec.	4 sec.	4 sec.	4 sec.	4 sec.
Restart Delay Time					
Over/Under Voltage Delay	5 Sec.	5 Sec.	5 Sec.	5 Sec.	5 Sec.
All Other Faults (Dry Well REC. Timer)	2 - 225 min.	2 - 225 min.	2 - 225 min.	2 - 225 min.	2 - 225 min.
Output Contact Rating (SPST)	1 HP	1 HP	1 HP (17 amps max.)	3 HP (17 amps max.)	480VA @ 240VAC
Power Consumption (max.)	5 amps	5 amps	5 amps	5 amps	5 amps
Weight w/o Enclosure	10 oz.		10 oz.	14 oz.	14 oz.
Weight w/Enclosure		1.6 lbs.		1.6 lbs.	1.6 lbs.
Enclosure Size	2.2" x 2.8"	6" x 6" x 4"	2.2" x 2.8"	6" x 6" x 4"	6" x 6" x 4"

PENTEK® is a registered trademark of Pentair Water.

Single-Phase Pump Protection SPP-111P and SPP-231P



SPP-231P installed

For 1/3 - 1 HP applications, the SPP-111P and SPP-231P Insider fits within 1/2 - 1 HP 115V and 230V CSIR control boxes. It's a "current monitor" designed to protect single-phase pumps. A simple adjustment allows the Insider to be calibrated to your specific pumping applications, reducing the possibility of false or nuisance tripping. Its unique microprocessor constantly monitors the incoming power for fluctuations in voltage and current. If loss of suction or other abnormality is detected, the Insider deactivates its output relay and directly disconnects the pump motor. Then it begins its user-selectable "Restart Delay/Dry Well Recovery" timer. When the timer counts zero or power is removed and reapplied, the SPP-231P Insider reactivates its output relay and turns the pump back on.

The PENTEK® Informer Remote Handheld Diagnostic Tool (sold separately) communicates directly with ALL PENTEK Pump Protectors and instantly displays 16 parameters including calibration points, running points and last fault.

APPLICATIONS

- **Water systems...** for residential, commercial, multiple housing, farm and turf irrigation uses, where a 4" submersible 3-wire motor is used.

FEATURES

Restart Delay – Can be set up to 225 minutes or placed in manual reset mode.

Calibration – Can be calibrated to specific pump/motor combinations and various conditions.

Infrared Communication – Coupled with the PENTEK Informer makes diagnostics simple.

Fits in Existing 3-wire Motor Control Boxes

ORDERING INFORMATION

HP	Phase	Volts	Frequency	Catalog Number	Weight		Carton Size
					Lbs.	Kg	
1/3 - 1/2	1	115	50 - 60Hz	SPP-111P	1	0.45	4.4" x 4.4" x 6.8"
1/3 - 1	1	230	50 - 60Hz	SPP-231P	1	0.45	4.4" x 4.4" x 6.8"

PENTEK® is a registered trademark of Pentair Water.

Pump Protection SPP-111-3RLP, SPP-233P and SPP-235P



SPP-233P

NRTL/C

For 1/2 - 15 HP applications the SPP-111-3RLP, SPP-233P and SPP-235P single-phase protectors include a unique microcontroller-based voltage and current-sensing circuit that constantly monitors the incoming power for fluctuations including over-current and undercurrent. When an abnormality, such as loss of suction, is detected, the control deactivates its output relay and directly disconnects the pump motor. The SPP then begins its user-selectable restart delay (dry-well recovery) timer. When the timer counts to zero or power is removed and reapplied, the SPP reactivates its output relay and turns the pump back on. An infrared LED communicates directly with a handheld diagnostic tool called the Informer (sold separately – see page 64). The Informer displays 15 parameters including calibration point, trip point, running points, and last fault. The SPPs are all mounted in a NEMA 3R enclosure.

APPLICATIONS

- **Water systems...** for residential, commercial, multiple housing and farm uses, where a 4" 2 or 3-wire submersible motor or above-ground motor is used.

FEATURES

Protects Pumps – from dry well overvoltage, flow restriction (dead head), undervoltage, overcurrent (jammed impeller).

ORDERING INFORMATION

HP	Phase	Volts	Frequency	Catalog Number	Weight		Carton Size
					Lbs.	Kg	
1/2 - 1	1	115	50 - 60Hz	SPP-111-3RLP	1.6	0.7	7.25" x 7" x 5.25"
1/2 - 1-1/2	1	230	50 - 60Hz	SPP-233P-1.5	1.6	0.7	7.25" x 7" x 5.25"
1/2 - 3	1	230	50 - 60Hz	SPP-233P	1.6	.07	7.25" x 7" x 5.25"
5 and 7-1/2	1	230	50 - 60Hz	SPP-235P-75*	2	0.9	7.25" x 7" x 5.25"
10	1	230	50 - 60Hz	SPP-235P-100*	2	0.9	7.25" x 7" x 5.25"
15	1	230	50 - 60Hz	SPP-235P-150*	2	0.9	7.25" x 7" x 5.25"

*Current transformer included.

Pump Protection



FEATURES

Infrared Receiver – The PENTEK Informer uses an infrared receiver to access data sent from the SPP, allowing remote troubleshooting of the system.

Infrared LED – Each PENTEK SPP is equipped with an infrared LED that transmits information from the device. The Informer must be aimed at the SPP as shown in the figure to the left. As soon as power is applied, the Informer begins receiving both past and present information and displays it on the LCD.

Status Light – The green COMM STATUS light indicates when the Informer is receiving data from the SPP. If communication is lost, the Informer will hold the last values it received.

APPLICATIONS

- **The PENTEK® Informer...** a remote handheld diagnostic tool designed for use with PENTEK single-phase submersible pump protectors (SPP-111P, 231P, 233P and 235P) equipped with infrared LED transmitters.

SPECIFICATIONS

Displayed Parameters – Diagnostic information received and displayed in real-time: Voltage, Current, Power, Dry Well.

Overload Trip Points

Calibration Voltage

Last Fault

Highest/Lowest Voltage Since Last Calibration

ORDERING INFORMATION

Catalog Number	WEIGHT		Carton Size
	Lbs.	Kg	
SPP-Informer	1	0.45	4.375" x 3.375" x 6.75"

PENTEK® is a registered trademark of Pentair Water.

PENTEK Intellidrive™



The PENTEK Intellidrive is a residential water pressure management system that maintains constant pressure output – regardless of fluctuating demand. This variable frequency drive system automatically adjusts motor speeds via an electronic pressure transducer.

APPLICATIONS

- Residential water systems, landscape irrigation, water transfer.

SPECIFICATIONS

Compatibility –
1-Phase: 2- or 3-wire
3-Phase: Suitable for submersible or above ground applications

Input – 230V, 1-phase

Output – 230V, 1-phase, 2-wire (1/2 HP - 3/4 HP)
230V, 1-phase, 3-wire (1/2 HP - 2 HP)
230V, 3-phase, 3-wire (1/2 HP - 3 HP)

Ambient Temperature Range – -4 – 104°F (-20 – 40°C)

Ambient Humidity Range – 95% non-condensing

FEATURES

Active Power Correction – Input voltage range 190V - 265V 1-phase; constant output voltage for 230V motor.

Built-In Pump/Motor Protection – Extends life of your investment.

Keypad with LCD Display – Real time status indication; local pump control.

Maintains Constant Pressure Output – Regardless of fluctuating demand.

Extends Life of Pump and Motor – VFD has Soft Start / Coast-to-Stop Functionality to minimize mechanical stress on pumping system.

Space-Saving Solution – A system using a VFD drive utilizes a smaller pressure tank to save space.

Energy Savings – Variable speed based on water demand.

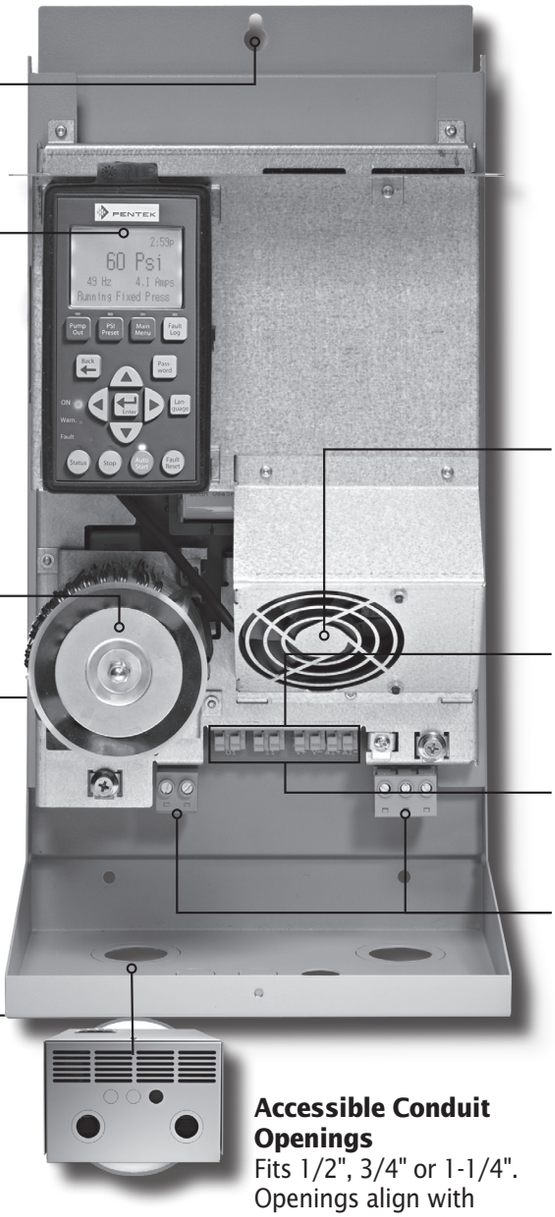
ORDERING INFORMATION

Catalog Number	Motor Type	Maximum HP	Input Voltage	Maximum Output Amps	Enclosure Type
1-Phase Input / 1-Phase Output					
PID-6-9A7-1	2-Wire*/1-Phase	3/4	190V - 265V	9.7A	NEMA 1 Indoor
	3-Wire / 1-Phase	1			
PID-6-9A7-3	2-Wire*/1-Phase	3/4	190V - 265V	9.7A	NEMA 3R Outdoor
	3-Wire / 1-Phase	1			
PID-6-12A2-1	2-Wire*/1-Phase	3/4	190V - 265V	12.2A	NEMA 1 Indoor
	3-Wire / 1-Phase	2			
PID-6-12A2-3	2-Wire*/1-Phase	3/4	190V - 265V	12.2A	NEMA 3R Outdoor
	3-Wire / 1-Phase	2			
1-Phase Input / 3-Phase Output					
PID-1-4A7-1	3-Wire / 3-Phase**	1	190V - 265V	4.7A	NEMA 1 Indoor
PID-1-4A7-3	3-Wire / 3-Phase**	1	190V - 265V	4.7A	NEMA 3R Outdoor
PID-1-7A6-1	3-Wire / 3-Phase**	2	190V - 265V	7.6A	NEMA 1 Indoor
PID-1-7A6-3	3-Wire / 3-Phase**	2	190V - 265V	7.6A	NEMA 3R Outdoor
PID-1-10A1-1	3-Wire / 3-Phase**	3	190V - 265V	10.1A	NEMA 1 Indoor
PID-1-10A1-3	3-Wire / 3-Phase**	3	190V - 265V	10.1A	NEMA 3R Outdoor

*Only compatible with PENTEK® brand 2-Wire motors. **Submersible or above ground applications.

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PENTEK Intellidrive™



Keyhole Mount
For fast / easy installation

User Interface with LCD Display
Quick installation and status indication in easy-to-understand language (not codes)

Robust EMI / RFI Filter
Superior noise and interference protection (including AM radio)

Spacious Wiring Area
Easy installation

Accessible Conduit Openings
Fits 1/2", 3/4" or 1-1/4". Openings align with appropriate terminals for straight-in accessibility

Electronic Pressure Transducer
Robust design – more accurate, durable and reliable than mechanical pressure switch. Features piezo resistive technology specially designed to withstand water hammer



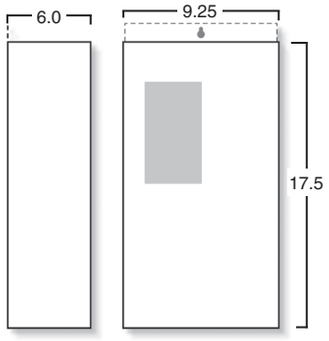
Temperature-Sensitive Intelligent Fan
Operates as necessary, supporting quieter operation and conserving energy and maintenance costs

Spring Terminals
Easy installation and secure connections – no special tools required

Programmable Input / Output Relays
Support application versatility

Removable Terminal Blocks
Ease of wiring motor and power supply – field replaceable

OUTLINE DIMENSIONS



Dimensions are for estimating purposes only.

BERKELEY®

PENTEK INTELLIKIT™
HOME WATER MANAGEMENT SYSTEM

PENTEK Intellikit™

Pre-Specified and Packaged Constant Pressure Systems for Residential Well Water

Maintain constant water pressure for submersible well pump systems, similar to municipal water systems



Kit contains:

- PENTEK® Submersible Motor
- Berkeley® Submersible Pump
- PENTEK Intellidrive™ Variable Frequency Drive

The PENTEK Intellidrive Water Pressure Control Center automatically adjusts motor speeds to meet changes in water demand. Instantaneous feedback from an electronic pressure transducer instructs the drive to change the submersible well pump motor speed to maintain constant pressure throughout the system.

PENTEK® and Berkeley® are registered trademarks of Pentair Water. PENTEK Intellidrive™ and PENTEK Intellikit™ are trademarks of Pentair Water.

1 *PENTEK Submersible Motor*

- Built with the latest design, manufacturing and testing technology
- Encapsulated stainless steel design and professional-grade insulation provide longer life in harsh environments
- 100% factory pressure- and run-tested

2 *Berkeley Submersible Pump*

- Submersible pumps deliver efficient and dependable performance even in rough, aggressive water
- One of the few manufacturers of both pumps and pressurized water storage tanks, now sold in over 100 countries

3 *PENTEK Intellidrive Variable Frequency Drive*

- Maintains constant pressure output regardless of fluctuating demand
- Extends life of pump and motor
- Utilizes a smaller pressure tank for a space-saving solution
- Energy savings from managed speed

BERKELEY®

PENTEK INTELLIKIT™
HOME WATER MANAGEMENT SYSTEM

PENTEK Intellikit™

ORDERING INFORMATION

60 Hz NEMA 1 Kits		60 Hz NEMA 3 Kits						At Max Runout			
Catalog Number	Drive	Catalog Number	Drive	Flow Series	HP	Shut Off Head TDH (ft)	At Rated Flow TDH (ft)	Flow (gpm)	TDH (ft)	Pump	Motor
B5PIK-10-A1	PID-1-4A7-1	B5PIK-10-A3	PID-1-4A7-3	5	1	650	475	7	300	L5P4EMGS	P43B0010A3
B5PIK-15-A1	PID-1-7A6-1	B5PIK-15-A3	PID-1-7A6-3	5	1.5	885	640	7	400	L5P4FMGS	P43B0015A3
B7PIK-10-A1	PID-1-4A7-1	B7PIK-10-A3	PID-1-4A7-3	7	1	540	380	10	140	L7P4EMGS	P43B0010A3
B7PIK-15-A1	PID-1-7A6-1	B7PIK-15-A3	PID-1-7A6-3	7	1.5	740	475	10	190	L7P4FMGS	P43B0015A3
B7PIK-20-A1	PID-1-7A6-1	B7PIK-20-A3	PID-1-7A6-3	7	2	920	610	10	210	L7P4GMGS	P43B0020A3
B10PIK-10-A1	PID-1-4A7-1	B10PIK-10-A3	PID-1-4A7-3	10	1	495	300	15	110	L10P4EMGS	P43B0010A3
B10PIK-15-A1	PID-1-7A6-1	B10PIK-15-A3	PID-1-7A6-3	10	1.5	629	410	15	150	L10P4FMGS	P43B0015A3
B10PIK-20-A1	PID-1-7A6-1	B10PIK-20-A3	PID-1-7A6-3	10	2	795	498	15	200	L10P4GMGS	P43B0020A3
B10PIK-30-A1	PID-1-10A1-1	B10PIK-30-A3	PID-1-10A1-3	10	3	1100	710	15	250	L10P4HMGS	P43B0030A3
B15PIK-10-A1	PID-1-4A7-1	B15PIK-10-A3	PID-1-4A7-3	15	1	310	200	21	95	L15P4EMGS	P43B0010A3
B15PIK-15-A1	PID-1-7A6-1	B15PIK-15-A3	PID-1-7A6-3	15	1.5	420	280	21	120	L15P4FMGS	P43B0015A3
B15PIK-20-A1	PID-1-7A6-1	B15PIK-20-A3	PID-1-7A6-3	15	2	522	350	21	150	L15P4GMGS	P43B0020A3
B15PIK-30-A1	PID-1-10A1-1	B15PIK-30-A3	PID-1-10A1-3	15	3	770	520	21	230	L15P4HMGS	P43B0030A3
B20PIK-10-A1	PID-1-4A7-1	B20PIK-10-A3	PID-1-4A7-3	20	1	250	185	28	80	L20P4EMGS	P43B0010A3
B20PIK-15-A1	PID-1-7A6-1	B20PIK-15-A3	PID-1-7A6-3	20	1.5	335	232	28	110	L20P4FMGS	P43B0015A3
B20PIK-20-A1	PID-1-7A6-1	B20PIK-20-A3	PID-1-7A6-3	20	2	420	310	28	150	L20P4GMGS	P43B0020A3
B20PIK-30-A1	PID-1-10A1-1	B20PIK-30-A3	PID-1-10A1-3	20	3	640	460	28	200	L20P4HMGS	P43B0030A3
B30PIK-20-A1	PID-1-7A6-1	B30PIK-20-A3	PID-1-7A6-3	30	2	275	195	42	85	L30P4GMGS	P43B0020A3
B30PIK-30-A1	PID-1-10A1-1	B30PIK-30-A3	PID-1-10A1-3	30	3	410	295	42	120	L30P4HMGS	P43B0030A3
B50PIK-20-A1	PID-1-7A6-1	B50PIK-20-A3	PID-1-7A6-3	50	2	180	119	63	80	L50P4GMGS	P43B0020A3
B50PIK-30-A1	PID-1-10A1-1	B50PIK-30-A3	PID-1-10A1-3	50	3	240	162	63	110	L50P4HMGS	P43B0030A3
B90PIK-20-A1	PID-1-7A6-1	B90PIK-20-A3	PID-1-7A6-3	90	2	109	58	120	40	L90BF20	P43B0020A3
B90PIK-30-A1	PID-1-10A1-1	B90PIK-30-A3	PID-1-10A1-3	90	3	150	80	120	55	L90BF30	P43B0030A3

80 Hz NEMA 1 Kits		80 Hz NEMA 3 Kits						At Max Runout			
Catalog Number	Drive	Catalog Number	Drive	Flow Series	HP	Shut Off Head TDH (ft)	At Rated Flow TDH (ft)	Flow (gpm)	TDH (ft)	Pump	Motor
B7PIK-15-B1	PID-1-7A6-1	B7PIK-15-B3	PID-1-7A6-3	7	1.5	740	475	10	190	L7P4DMGS	P43B0015A3
B7PIK-20-B1	PID-1-7A6-1	B7PIK-20-B3	PID-1-7A6-3	7	2	920	610	10	210	L7P4EMGS	P43B0020A3
B7PIK-30-B1	PID-1-10A1-1	B7PIK-30-B3	PID-1-10A1-3	7	3	1205	805	10	290	L7P4FMGS	P43B0030A3
B10PIK-15-B1	PID-1-7A6-1	B10PIK-15-B3	PID-1-7A6-3	10	1.5	629	410	15	150	L10P4DMGS	P43B0015A3
B10PIK-20-B1	PID-1-7A6-1	B10PIK-20-B3	PID-1-7A6-3	10	2	795	498	15	200	L10P4EMGS	P43B0020A3
B10PIK-30-B1	PID-1-10A1-1	B10PIK-30-B3	PID-1-10A1-3	10	3	1100	710	15	250	L10P4FMGS	P43B0030A3
B15PIK-15-B1	PID-1-7A6-1	B15PIK-15-B3	PID-1-7A6-3	15	1.5	420	280	21	120	L15P4DMGS	P43B0015A3
B15PIK-20-B1	PID-1-7A6-1	B15PIK-20-B3	PID-1-7A6-3	15	2	522	350	21	150	L15P4EMGS	P43B0020A3
B15PIK-30-B1	PID-1-10A1-1	B15PIK-30-B3	PID-1-10A1-3	15	3	770	520	21	230	L15P4FMGS	P43B0030A3
B20PIK-15-B1	PID-1-7A6-1	B20PIK-15-B3	PID-1-7A6-3	20	1.5	335	232	28	110	L20P4DMGS	P43B0015A3
B20PIK-20-B1	PID-1-7A6-1	B20PIK-20-B3	PID-1-7A6-3	20	2	420	310	28	150	L20P4EMGS	P43B0020A3
B20PIK-30-B1	PID-1-10A1-1	B20PIK-30-B3	PID-1-10A1-3	20	3	640	460	28	200	L20P4FMGS	P43B0030A3
B30PIK-20-B1	PID-1-7A6-1	B30PIK-20-B3	PID-1-7A6-3	30	2	275	195	42	85	L30P4EMGS	P43B0020A3
B30PIK-30-B1	PID-1-10A1-1	B30PIK-30-B3	PID-1-10A1-3	30	3	410	295	42	120	L30P4FMGS	P43B0030A3
B50PIK-30-B1	PID-1-10A1-1			50	3	240	162	63	110	L50P4FMGS	P43B0030A3
B90PIK-30-B1	PID-1-10A1-1			90	3	150	80	120	55	L90BF20	P43B0030A3

NOTE: 80Hz Kits utilize an undersized liquid end running at higher speed to match pump performance of the curve equivalent to the driving motor. Maximum life expectancy of the liquid end is obtained during 60Hz solutions.

PENTEK® Pump Controllers PPC3 and PPC5



PPC5
(NEMA 12)



PPC5
(NEMA 1)



PPC3
(NEMA 1)



PENTEK Pump Controllers provide innovative pumping solutions for maximizing pump functionality, optimizing pump system design and reducing operating energy costs.

PENTEK PPCs can be used on all centrifugal motor-driven pumps including close-coupled motor drive, frame mount, submersible and line shaft turbine pumps, in a wide range of applications.

APPLICATIONS

- Turf irrigation, water transfer, light commercial water systems and agricultural.

PENTEK® is a registered trademark of Pentair Water.

SPECIFICATIONS

HP Ratings –
PPC3: 1 - 30; *PPC5:* 1/2 - 200

Voltage –
PPC3: 230, 460; *PPC5:* 230, 460, 575

Frequency – 50/60 Hz

Floating Choke – PPC5 only

Harmonic Signature –
PPC3: Good; *PPC5:* Best

Number of Relays –
PPC3: 1; *PPC5:* 3 (ext. to 6 available)

Digital Inputs – *PPC3:* 5; *PPC5:* 6

Multiple Pump Capable – PPC5 only

Mod. Bus – PPC5 only

Enclosure Type –
PPC3: NEMA 1; *PPC5:* NEMA 1, 12

NOTE: The output current (or amps) of the PPC must be greater than or equal to the maximum rated motor current.

FEATURES

PPC Controller

Variable Speed Control – Meets requirements of process control with constant pressure at variable flow conditions or constant flow at variable pressure conditions.

Reduced Energy Costs – Calculate energy savings online using BEC2 software at www.bec2.net.

Pump Protection – From loss of prime, dead head and blocked suction.

Motor Protection – From ground fault, short circuit, phase loss and imbalance, overload, undervoltage and overvoltage.

System Protection (PPC5 only) – From harmonics, featuring an input choke that exceeds the performance of a fixed 5% impedance line reactor.

Phase Conversion – The PPC5 will convert 1-phase power into 3-phase power, allowing the use of a 3-phase motor with a 50% de-rate; the PPC3 is available in both 1- and 3-phase models.

PENTEK Assistant

Auto-Restart Functionality – Re-starts pump after power loss.

Easily Configured for Constant Flow Applications – By adjusting 2 additional menu parameters.

Multiple System Setpoints or Operating Condition – Includes two independent process control setpoints to allow operation under a second process.

Time Function – Supports 4 daily and weekly Start/Stop/Boost times.

PENTEK® Pump Controllers PPC3 and PPC5

ORDERING INFORMATION

PPC3 200-240 VOLT – 1-Phase IN, 3-Phase OUT

Output Amps	Enclosure Size	Mounting	Model Number NEMA 1
4.7	R1	WALL	**PPC3-1-4A7-1**
6.7	R1	WALL	**PPC3-1-6A7-1**
7.5	R2	WALL	**PPC3-1-7A5-1**
9.8	R2	WALL	**PPC3-1-9A8-1**

PPC3 200-240 VOLT – 3-Phase IN, 3-Phase OUT

4.7	R1	WALL	**PPC3-2-4A7-1**
6.7	R1	WALL	**PPC3-2-6A7-1**
7.5	R1	WALL	**PPC3-2-7A5-1**
9.8	R2	WALL	**PPC3-2-9A8-1**
17.6	R2	WALL	**PPC3-2-17A6-1**
24.4	R3	WALL	**PPC3-2-24A4-1**
31.0	R4	WALL	**PPC3-2-31A0-1**
46.2	R4	WALL	**PPC3-2-46A2-1**

PPC3 380-480 VOLT – 3-Phase IN, 3-Phase OUT

2.4	R1	WALL	**PPC3-4-2A4-1**
3.3	R1	WALL	**PPC3-4-3A3-1**
4.1	R1	WALL	**PPC3-4-4A1-1**
5.6	R1	WALL	**PPC3-4-5A6-1**
8.8	R1	WALL	**PPC3-4-8A8-1**
12.5	R3	WALL	**PPC3-4-12A5-1**
15.6	R3	WALL	**PPC3-4-15A6-1**
23.1	R3	WALL	**PPC3-4-23A1-1**
31.0	R4	WALL	**PPC3-4-31A0-1**
38.0	R4	WALL	**PPC3-4-38A0-1**
44.0	R4	WALL	**PPC3-4-44A0-1**

NOTE: The output current (or amps) of the PPC must be greater than or equal to the maximum rated motor current.

Specifications are based on a 3-phase supply voltage, 208 volt or 230 volt. For operation on 1-phase input power, de-rate the drive output current by 50%. Drive output is always 3-phase voltage.

ORDERING INFORMATION

PPC5 208-240 VOLT – 3-Phase IN, 3-Phase OUT

Output Amps	Enclosure Size	Mounting	Model Number NEMA 1	Model Number NEMA 12
4.6	R1	WALL	PPC5-2-4A6-1	**PPC5-2-4A6-12**
6.6	R1	WALL	PPC5-2-6A6-1	**PPC5-2-6A6-12**
7.5	R1	WALL	PPC5-2-7A5-1	**PPC5-2-7A5-12**
11.8	R1	WALL	PPC5-2-11A-1	**PPC5-2-11A-12**
16.7	R1	WALL	PPC5-2-16A-1	**PPC5-2-16A-12**
24.2	R2	WALL	PPC5-2-24A-1	**PPC5-2-24A-12**
30.8	R2	WALL	PPC5-2-30A-1	**PPC5-2-30A-12**
46.2	R3	WALL	PPC5-2-46A-1	**PPC5-2-46A-12**
59.4	R3	WALL	PPC5-2-59A-1	**PPC5-2-59A-12**
74.8	R4	WALL	PPC5-2-74A-1	**PPC5-2-74A-12**
88	R4	WALL	PPC5-2-88A-1	**PPC5-2-88A-12**
114	R4	WALL	PPC5-2-114A-1	**PPC5-2-114A-12**
143	R6	WALL	PPC5-2-143A-1	—
178	R6	WALL	PPC5-2-178A-1	—
221	R6	WALL	PPC5-2-221A-1	—
248	R6	WALL	PPC5-2-248A-1	—

PPC5 400-480 VOLT – 3-Phase IN, 3-Phase OUT

3.3	R1	WALL	PPC5-4-3A3-1	**PPC5-4-3A3-12**
4.1	R1	WALL	PPC5-4-4A1-1	**PPC5-4-4A1-12**
6.9	R1	WALL	PPC5-4-6A9-1	**PPC5-4-6A9-12**
8.8	R1	WALL	PPC5-4-8A8-1	**PPC5-4-8A8-12**
11.9	R1	WALL	PPC5-4-11A-1	**PPC5-4-11A-12**
15.4	R2	WALL	PPC5-4-15A-1	**PPC5-4-15A-12**
23	R2	WALL	PPC5-4-23A-1	**PPC5-4-23A-12**
31	R3	WALL	PPC5-4-31A-1	**PPC5-4-31A-12**
38	R3	WALL	PPC5-4-38A-1	**PPC5-4-38A-12**
44	R4	WALL	PPC5-4-44A-1	**PPC5-4-44A-12**
59	R4	WALL	PPC5-4-59A-1	**PPC5-4-59A-12**
72	R4	WALL	PPC5-4-72A-1	**PPC5-4-72A-12**
77	R5	WALL	PPC5-4-77A-1	**PPC5-4-77A-12**
96	R5	WALL	PPC5-4-96A-1	**PPC5-4-96A-12**
124	R6	WALL	PPC5-4-124A-1	—
157	R6	WALL	PPC5-4-157A-1	—
180	R6	WALL	PPC5-4-180A-1	—
196	R7	FLOOR	PPC5-4-196A-1	—
245	R7	FLOOR	PPC5-4-245A-1	—

PPC5 500-600 VOLT – 3-Phase IN, 3-Phase OUT

2.7	R1	WALL	PPC5-5-2A7-1	**PPC5-5-2A7-12**
3.9	R1	WALL	PPC5-5-3A9-1	**PPC5-5-3A9-12**
6.1	R1	WALL	PPC5-5-6A1-1	**PPC5-5-6A1-12**
9	R1	WALL	PPC5-5-9A0-1	**PPC5-5-9A0-12**
11	R1	WALL	PPC5-5-11A-1	**PPC5-5-11A-12**
17	R2	WALL	PPC5-5-17A-1	**PPC5-5-17A-12**
22	R2	WALL	PPC5-5-22A-1	**PPC5-5-22A-12**
27	R3	WALL	PPC5-5-27A-1	**PPC5-5-27A-12**
32	R3	WALL	PPC5-5-32A-1	**PPC5-5-32A-12**
41	R4	WALL	PPC5-5-41A-1	**PPC5-5-41A-12**
52	R4	WALL	PPC5-5-52A-1	**PPC5-5-52A-12**
62	R4	WALL	PPC5-5-62A-1	**PPC5-5-62A-12**
77	R5	WALL	PPC5-5-77A-1	**PPC5-5-77A-12**
99	R6	WALL	PPC5-5-99A-1	**PPC5-5-99A-12**

6" Hitachi® Submersible Motors



Hitachi Motors are designed for long service life and years of dependable operation. Innovative design and robust characteristics make this the perfect motor for your pumping applications.

Combined with exceptional insulation and a patented epoxy fill resin, these motors exceed NEMA requirements for high water temperature by 18°F (-7.7°C). Designed with internal lubrication and cooling blend of water, antifreeze, and an anti-rust mixture, Hitachi submersible motors are unique in providing the industry with innovative and robust design features that will extend the serviceable life of your installation.

APPLICATIONS

- High-thrust water well applications.

SPECIFICATIONS

Motor Sleeve – Stainless steel construction

Castings – Baked epoxy-coated gray iron

Fasteners – Stainless steel

Shaft – NEMA splined stainless steel

Flange – NEMA standard type

Rotor – Double epoxy-coated

Thrust Bearings – Kingsbury-type 420 stainless steel

Mechanical Seal – Nitrile rubber (NBR), grease packed

Diaphragm – Nitrile rubber

Sand Cap – Polyurethane

Sand Slinger – Stainless steel

Lead Wire (or Cable) – Double-insulated, heat and water-resistant, 167°F/75°C, 600V

ISO 14001
EC97J1095

ISO 9001
JQA-1153

Hitachi submersible motors in this brochure are produced at the factory registered under the ISO 14001 standard for environmental management system and the ISO 9001 standard for motor quality management system.

FEATURES

Higher Efficiencies and Lower Current Consumption – For reduced energy costs.

Corrosion-Resistant Design – For long life.

High-Capacity Kingsbury-type Bearings – For dependable performance.

Low-Profile NEMA Design – For ease of installation.

Replaceable Plug-in Motor Lead – For ease of maintenance.

Dual Voltage Type – For application versatility (5 HP – 30 HP 3-Phase Motors).

VFD-Compatible

Hitachi Control Box



- **Type 1 NEMA Enclosure**
- **In-Panel Circuit Breaker**
- **Magnetic Contactor**
- **Terminal Blocks for External Controls**
- **UL Recognized**

6" Hitachi® Submersible Motors

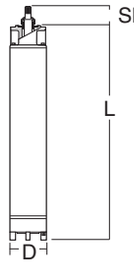
ORDERING INFORMATION

Hp	Kw	Volts	Ph	Service Factor	Catalog Number	Rated Input Amps	Service Factor Input Amps	Winding Resistance (ohms)	Thrust Capacity	Length (L)		Diameter (D)		Weight	
										In.	mm	In.	mm	Lbs.	Kg
6" Diameter 60 Hz															
5	3.7	200	3	1.15	6HIT2-5-8	17.5	19.5		3,500	22.95"	582.9	5.5"	139.7	95	43.0
5	3.7	230	1	1.15	6HIT2-5-1	24	27.5	R-Y, B-Y, R-B, 2.172, 0.512, 2.627	3,500	26.97"	685.0	5.5"	139.7	110	49.9
5	3.7	230	3	1.15	6HIT2-5-2	15	17	0.806	3,500	22.95"	582.9	5.5"	139.7	95	43.0
5	3.7	460	3	1.15	6HIT2-5-4	7.5	8.5	3.05	3,500	22.95"	582.9	5.5"	139.7	95	43.0
7.5	5.5	200	3	1.15	6HIT2-7-8	25.4	28.5		3,500	24.80"	629.9	5.5"	139.7	99	43.0
7.5	5.5	230	1	1.15	6HIT2-7-1	36	41	R-Y, B-Y, R-B, 1.401, 0.400, 1.774	3,500	29.92"	760.0	5.5"	139.7	128	58.1
7.5	5.5	230	3	1.15	6HIT2-7-2	22	26	0.651	3,500	24.80"	629.9	5.5"	139.7	99	43.0
7.5	5.5	460	3	1.15	6HIT2-7-4	11	13	2.43	3,500	24.80"	629.9	5.5"	139.7	99	43.0
10	7.5	200	3	1.15	6HIT2-10-8	33.3	37.2		3,500	26.97"	685.0	5.5"	139.7	110	49.9
10	7.5	230	1	1.15	6HIT2-10-1	50	58	R-Y, B-Y, R-B, 1.052, 0.316, 1.310	3,500	29.92"	760.0	5.5"	139.7	128	58.1
10	7.5	230	3	1.15	6HIT2-10-2	29	33	0.448	3,500	26.97"	685.0	5.5"	139.7	110	49.9
10	7.5	460	3	1.15	6HIT2-10-4	14.5	16.5	1.619	3,500	26.97"	685.0	5.5"	139.7	110	49.9
15	11	200	3	1.15	6HIT2-15-8	47.4	53.5		3,500	29.92"	760.0	5.5"	139.7	128	58.1
15	11	230	1	1.15	6HIT2-15-1	72	85	R-Y, B-Y, R-B, 0.678, 0.230, 0.850	3,500	33.46"	849.9	5.5"	139.7	148	67.1
15	11	230	3	1.15	6HIT2-15-2	42	46	0.312	3,500	29.92"	760.0	5.5"	139.7	128	58.1
15	11	460	3	1.15	6HIT2-15-4	21	23	1.074	3,500	29.92"	760.0	5.5"	139.7	128	58.1
20	15	200	3	1.15	6HIT2-20-8	61.2	69.5		3,500	31.5"	800.1	5.5"	139.7	137	62.1
20	15	230	3	1.15	6HIT2-20-2	54	60	0.258	3,500	31.5"	800.1	5.5"	139.7	137	62.1
20	15	460	3	1.15	6HIT2-20-4	27	30	0.861	3,500	31.5"	800.1	5.5"	139.7	137	62.1
25	18.5	200	3	1.15	6HIT2-25-8	77.3	87.5		3,500	36.22"	920.0	5.5"	139.7	161	73.0
25	18.5	230	3	1.15	6HIT2-25-2	68	76	0.21	3,500	36.22"	920.0	5.5"	139.7	161	73.0
25	18.5	460	3	1.15	6HIT2-25-4	34	38	0.666	3,500	36.22"	920.0	5.5"	139.7	161	73.0
30	22	200	3	1.15	6HIT2-30-8	91.8	104		3,500	38.19"	970.0	5.5"	139.7	176	79.8
30	22	230	3	1.15	6HIT2-30-2	82	94	0.166	3,500	39.19"	970.0	5.5"	139.7	176	79.8
30	22	460	3	1.15	6HIT2-30-4	41	47	0.554	3,500	38.19"	970.0	5.5"	139.7	176	79.8
40	30	460	3	1.15	6HIT2-40-4	56	61	0.358	5,000	40.55"	1,030.0	5.5"	139.7	187	84.8
8" Diameter 60 Hz															
50	37	460	3	1.15	86HIT2-50-4*	65	73	0.331	5,000	45.28"	1,150.0	7.52"	191.0	353	160.1
60	45	460	3	1.15	86HIT2-60-4*	80	90	0.278	5,000	48.03"	1,220.0	7.52"	191.0	408	185.1

NOTE: motors are 3450 rpm, 60 Hz, 1.15 SF.

*8" Motors with 6" motor fits

OUTLINE DIMENSIONS



Shaft Extension 2.87" (72.9 mm)

For lengths, refer to Ordering Information tables.

Dimensions are for estimating purposes only.

ORDERING INFORMATION

HP	kW	Volts	PH	Catalog Number
Hitachi Control Box				
5	3.7	230	1	HIT-5CBD
7.5	5.5	230	1	HIT-7.5CBD
10	7.5	230	1	HIT-10CBD
15	11	230	1	HIT-15CBD

6" Hitachi® Submersible Motors

CABLE SELECTION

COPPER CABLE SIZE – From Control Box to Motor (in feet)

Motor				Conductor Size AWG, MCM															
		Fuse																	
HP	Volts/ Hz	STD	Dual Element	12	10	8	6	4	2	0	00	000	0000	250	300	350	400	500	600
Three Phase																			
5	230/60	45	20	240	380	620	960	1500	2370										
	460/60	25	10	1000	1590	2600													
7.5	230/60	70	30	160	260	420	650	1010	1600	2560									
	460/60	35	15	690	1100	1800	2790												
10	230/60	80	40		190	300	470	730	1160	1850	2320								
	460/60	40	20	510	820	1330	2070												
15	230/60	125	60			200	300	470	750	1190	1490	1890							
	460/60	60	30	350	550	900	1400	2170											
20	230/60	175	70				210	330	530	840	1060	1340	1690	2060					
	460/60	90	35		410	670	1050	1600	2570										
25	230/60	200	90					250	390	630	790	1000	1260	1530	1840				
	460/60	100	45			530	830	1280	2040										
30	230/60	250	110						350	560	710	900	1130	1380	1650	1920			
	460/60	125	50			450	690	1080	1710	2730									
40	460/60	150	70				490	760	1210	1930	2430								
50		200	90					590	930	1490	1870	2370							
60		225	100						810	1290	1620	2060							
75		300	150						700	1110	1400	1770	2230						
100		400	175							860	1080	1370	1720	2100					
125		500	225								710	1060	1330	1620	1940				
150		600	250									860	1080	1320	1580	1840			
175		700	300										1000	1220	1460	1700	1950		
200		800	350											1050	1260	1470	1680	2100	
250		900	450														1310	1640	1970
300		1200	600															1440	1720
Single Phase																			
5	230/60	80	35		170	280	440	680	1080	1730									
7.5		125	45			170	270	410	650	1040	1310								
10		175	60				170	270	430	680	850	1080							
15		250	100					150	250	390	490	620	780	960					

SJH series - stainless steel

Self-Priming Shallow Well Jet Pumps



C US
UL778/CSA108

SJH models provide excellent performance with good pressure for wells to 25' deep. Self-priming after the priming chamber has been filled with water.

APPLICATIONS

- **Water systems and sprinkling...** for homes, farms and cottages.

SPECIFICATIONS

Maximum Liquid Temperature Limits – 122°F (50°C)

Max. Inlet Pressure: 50 PSI

Average Priming Time at 20 Feet:

07SJH11C = 5.3 min.
10SJH11C = 4.2 min.

Body – 304 Stainless steel

Jet Assembly, Diffuser, Impeller – Noryl®

Shaft – One-piece threaded, 416 grade stainless steel

Base – Polypropylene

ORDERING INFORMATION

Catalog No.	HP	Switch Setting	Description	Pipe Tapping Sizes		Motor Voltage	Approx. Wt. Lbs.
				Suct.	Disch.		
7SJH	3/4	30-50	Shallow Well Jet	1-1/4"	1"	115/230	26
10SJH	1	40-60	Shallow Well Jet	1-1/4"	1"	115/230	29

FEATURES

Corrosion Free – Stainless steel pump body provides maximum resistance to corrosion

Built-in Jet – High strength thermoplastic components are corrosion resistant.

Mechanical Shaft Seal – Highly polished carbon-ceramic and stainless steel construction.

Motor Windings – Superior insulation materials protect against excessive moisture and contaminants... assure prolonged motor life.

Balanced Rotor – Die cast under high pressures for uniform performance and greater efficiency, dynamically balanced.

Heavy-duty Ball Bearings – Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.

Pump and Motor Shaft – Stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive and alignment.

Dustproof Cover – All electrical components are protected from dirt, dust and insects by a dustproof canopy; ventilating air cannot contaminate vital switching components.

Pressure Switch – Quality, fixed differential (20 PSI).

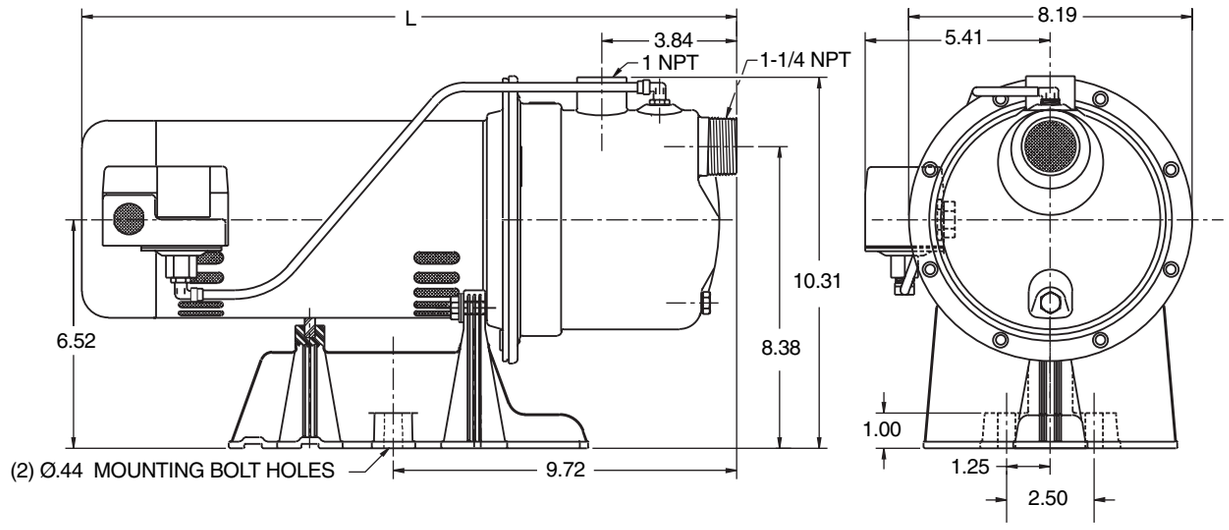
Noryl® is a registered trademark of General Electric Co. PRO-Source™ is a trademark of Pentair Water.

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

SJH series - stainless steel

Self-Priming Shallow Well Jet Pumps

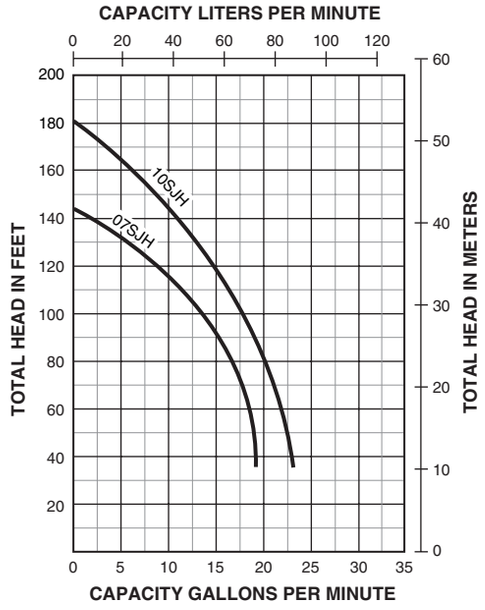
OUTLINE DIMENSIONS



Cat. No.	L
7SJH	18.19
10SJH	19.25

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE



2.31 FT. OF HEAD = 1 PSI
1 FT. OF HEAD = .433 PSI

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

Catalog Number	HP	Disch. Pressure	Depth to Water					Shut-Off Pressure
		PSI	5'	10'	15'	20'	25'	PSI
07SJH11C	3/4	30	16.1	14.4	12.6	10.1	7.5	64
		40	11	11	11	9	7.2	
		50	5.8	5.8	5.8	5.8	5.8	
10SJH11C	1	30	16.8	15.2	12.9	10.8	7.6	80
		40	15.4	14.3	12.3	10.3	7.3	
		50	9.5	9.5	9.5	9.5	7.1	

Tested and rated in accordance with Water Systems Council Standards.

NOTE: 7SJH used 30-50 PSI pressure switch, 10SJH used 40-60 PSI pressure switch.

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.

ProJet™ HN series - cast iron

Self-Priming Shallow Well Jet Pumps



C SA US
UL778/CSA108

The ProJet™ HN models provide excellent performance with good pressure for wells to 25' deep. Self-priming after the priming chamber has been filled with water.

APPLICATIONS

- **Water systems and sprinkling...** for homes, farms and cottages.

SPECIFICATIONS

Max. Liquid Temperature – 140°F
Max. Inlet Pressure – 50 PSI
Average Priming time at 15 feet – 5HN = 1.7; 7HN = 1.1; 10HN = 1.3
Average Priming time at 25 feet – 5HN = 4.4; 7HN = 4.4; 10HN = 2.6
Body – Close-grained cast iron
Nozzle – High strength Lexan®
Venturi – Lexan®
Impeller – Noryl®
Diffuser – Reinforced polypropylene
Shaft – One-piece threaded, 416 grade stainless steel
Base – Steel, 12 gauge

ORDERING INFORMATION

Catalog Number	HP	Switch Setting	Description	Pipe Tapping Sizes		Motor Voltage	Approx. Wt. Lbs.
				Suct.	Disch.		
5HN	1/2	30-50	Shallow Well Jet	1-1/4"	1"	115/230	47
7HN	3/4	30-50	Shallow Well Jet	1-1/4"	1"	115/230	65
10HN	1	30-50	Shallow Well Jet	1-1/4"	1"	115/230	70

FEATURES

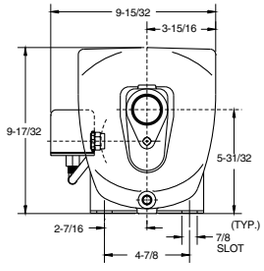
Quality Construction – Close-grained cast iron body, specially treated for corrosion resistance. Drain port provided for easy winterizing.
Built-in Jet – High strength Lexan® nozzle and venturi for maximum resistance to corrosion and abrasion. Clean out plug provided for ease of service.
Noryl® Impeller – Precision-molded for perfect balance... ultra-smooth for highest performance and efficiency.
Precision Molded Diffuser – Pump primes faster, handles more air, with multi-port, precision-molded, reinforced polypropylene diffuser.
Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication.
Motor Windings – Superior insulation materials protect against excessive moisture and contaminants... assure prolonged motor life.
Balanced Rotor – Die cast under high pressures for uniform performance and greater efficiency, dynamically balanced.
Heavy-duty Ball Bearings – Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.
Pump and Motor Shaft – Stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive and alignment.
Pressure Switch – Professional quality, allows cut-in and differential adjustments.

Lexan® and Noryl® are registered trademarks of General Electric Co. ProJet™ and PRO-Source™ are trademarks of Pentair Water.
In order to provide the best products possible, specifications are subject to change.

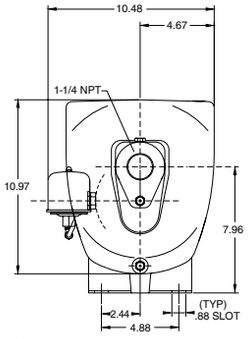
ProJet™ HN series - cast iron

Self-Priming Shallow Well Jet Pumps

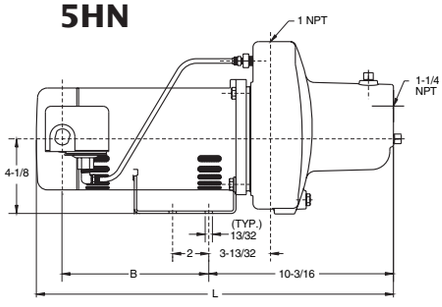
OUTLINE DIMENSIONS



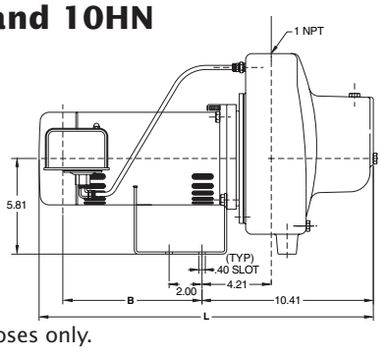
Cat. No.	L	B
5HN	18.7	7.1
7HN	21.3	7.0
10HN	22.4	8.0



5HN

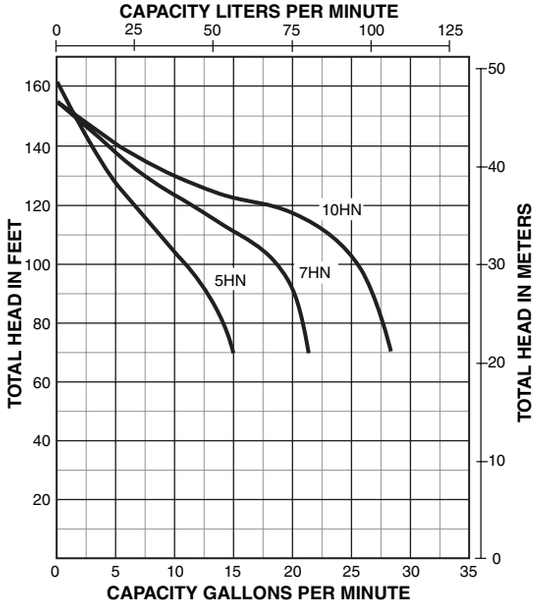


7HN and 10HN



Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE



2.31 FT. OF HEAD = 1 PSI
1 FT. OF HEAD = .433 PSI

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

Catalog Number	HP	Disch. Pressure PSI	Dynamic Suction Lift 5'	10'	15'	20'	25'	Shut-Off Pressure PSI
5HN	1/2	30	15.0	13.0	11.6	8.7	6.9	70
		40	12.5	11.4	10.1	8.2	6.8	
		50	8.0	6.8	6.1	4.8	3.5	
7HN	3/4	30	21.4	19.1	16.5	13.3	9.5	67
		40	20.8	18.7	15.8	13.2	9.3	
		50	13.5	11.6	10.1	7.4	2.4	
10HN	1	30	28.5	25.0	21.4	17.4	12.6	67
		40	28.3	24.4	21.0	17.2	12.3	
		50	21.5	18.3	10.9	3.1	1.6	

Pump will operate at all depths shown, with pressure switch set at 30-50 PSI.
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.

ProJet™ SN series - cast iron

Self-Priming Shallow Well Jet Pumps



C SP US
UL778/CSA108

The ProJet™ SN Series Pumps provide excellent performance with good pressure for wells to 25' deep. Self-priming after the priming chamber has been filled with water.

APPLICATIONS

- **Water systems and sprinkling...** for homes, farms and cottages.

SPECIFICATIONS

Max. Liquid Temperature: 140°F

Max. Inlet Pressure: 50 PSI

Average Priming Time (in minutes) at 15 Feet:
5SN = 2.3; **7SN** = 1.7
10SN = 1.3; **15SN** = 1.1

Average Priming Time at 25 Feet:
5SN = 6.4; **7SN =** 4.4
10SN = 4.4; **15SN =** 2.6

Body – Close-grained cast iron

Nozzle – High strength Lexan®

Venturi – Lexan®

Impeller – Noryl®

Diffuser – Reinforced polypropylene

Shaft – One-piece threaded, 416 grade stainless steel

Base – Steel, 12 gauge

ORDERING INFORMATION

Catalog Number	HP	Switch Setting	Description	Pipe Tapping Sizes		Motor Voltage	Approx. Wt. Lbs.
				Suct.	Disch.		
5SN	1/2	30-50	Shallow Well Jet	1-1/4"	1"	115/230	45
7SN	3/4	30-50	Shallow Well Jet	1-1/4"	1"	115/230	47
10SN	1	30-50	Shallow Well Jet	1-1/4"	1"	115/230	55
15SN	1-1/2	30-50	Shallow Well Jet	1-1/4"	1"	115/230	60

Lexan® and Noryl® are registered trademarks of General Electric Co. ProJet™ and PRO-Source™ are trademarks of Pentair Water.
In order to provide the best products possible, specifications are subject to change.

FEATURES

Quality Construction – Close-grained cast iron body. Drain port provided for easy winterizing.

Built-in Jet – High strength Lexan® nozzle and venturi for maximum resistance to corrosion and abrasion. Clean out plug provided for ease of service.

Noryl® Impeller – Precision-molded for perfect balance... ultra-smooth for highest performance and efficiency.

Precision Molded Diffuser – Pump primes faster, handles more air, with multi-port, precision-molded, reinforced polypropylene diffuser.

Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication.

Motor Windings – Superior insulation materials protect against excessive moisture and contaminants... assure prolonged motor life.

Balanced Rotor – Die cast under high pressures for uniform performance and greater efficiency, dynamically balanced.

Heavy-duty Ball Bearings – Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.

Pump and Motor Shaft – Stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive and alignment.

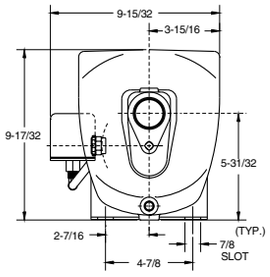
Dustproof Cover – All electrical components are protected from dirt, dust and insects by a dustproof canopy; ventilating air cannot contaminate vital switching components.

Pressure Switch – Professional quality, allows cut-in adjustments.

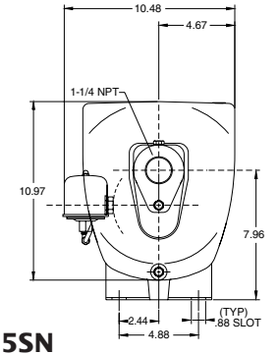
ProJet™ SN series - cast iron

Self-Priming Shallow Well Jet Pumps

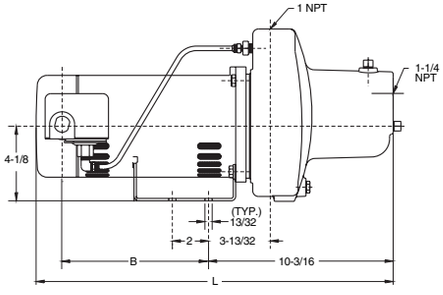
OUTLINE DIMENSIONS



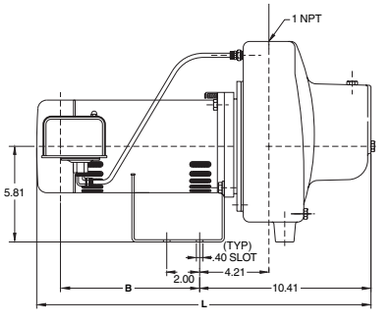
Cat. No.	L	B
5SN	18.7	7.1
7SN	18.7	7.1
10SN	21.3	7.0
15SN	22.4	8.0



5SN and 7SN

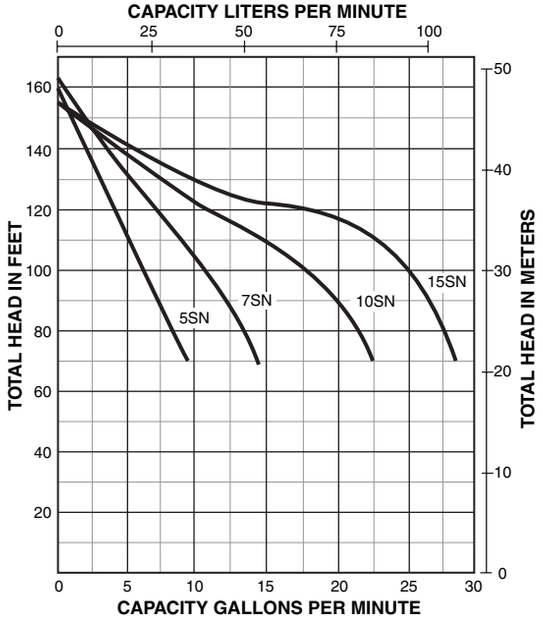


10SN and 15SN



Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE



2.31 FT. OF HEAD = 1 PSI
1 FT. OF HEAD = .433 PSI

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

Catalog Number	HP	Disch. Pressure PSI	Dynamic Suction Lift 5'	10'	15'	20'	25'	Shut-Off Pressure PSI
5SN	1/2	30	9.7	8.3	7.4	5.9	4.3	70
		40	7.9	7.2	6.4	5.6	4.1	
		50	4.5	3.8	3.1	2.7	1.8	
7SN	3/4	30	15.0	13.0	11.6	8.7	6.9	70
		40	12.5	11.4	10.1	8.2	6.8	
		50	8.0	6.8	6.1	4.8	3.5	
10SN	1	30	21.4	19.1	16.5	13.3	9.5	67
		40	20.8	18.7	15.8	13.2	9.3	
		50	13.5	11.6	10.1	7.4	2.4	
15SN	1-1/2	30	28.5	25.0	21.4	17.4	12.6	67
		40	28.3	24.4	21.0	17.2	12.3	
		50	21.5	18.3	10.9	3.1	1.6	

Pump will operate at all depths shown, with pressure switch set at 30-50 PSI.

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.

FN series - cast iron

Self-Priming Shallow Well Jet Pumps



C US
UL778/CSA108

The FN Series provides strong performance with good pressure for wells to 25' deep. Self-priming after the priming chamber has been filled with water.

APPLICATIONS

- **Water systems and sprinkling...** for homes, farms and cottages.

SPECIFICATIONS

5FN Priming Time:
at 15': 2.25 minutes max.
at 25': 6.5 minutes max.
7FN Priming Time:
at 15': 1.7 minutes max.
at 25': 4.4 minutes max.

Max. Liquid Temperature: 140°F
5FN Max. Inlet Pressure: 60 PSI
7FN Max. Inlet Pressure: 50 PSI
Max. Inlet PSI + Pump Discharge PSI: not to exceed 100 PSI
Body and Base – Close-grained cast iron
Nozzle – High strength polycarbonate
Venturi – Polycarbonate
Impeller – Noryl®
Diffuser – Reinforced polypropylene
Shaft – One-piece threaded stainless steel

ORDERING INFORMATION

Catalog Number	HP	Switch Setting	Description	Pipe Tapping Sizes		Motor Voltage	Approx. Wt. Lbs.
				Suct.	Disch.		
5FN	1/2	30-50	Shallow Well Jet	1-1/4"	1"	115/230	46
7FN	3/4	30-50	Shallow Well Jet	1-1/4"	1"	115/230	47

FEATURES

Quality Construction – Close-grained cast iron body and base, specially treated for corrosion resistance. Drain port provided for easy winterizing.

Built-in Jet – High strength polycarbonate nozzle and venturi for maximum resistance to corrosion and abrasion. Clean out plug provided for ease of service.

Noryl® Impeller – Precision-molded for perfect balance... ultra-smooth for highest performance and efficiency.

Precision Molded Diffuser – Pump primes faster, handles more air, with multi-port, precision-molded, reinforced polypropylene diffuser.

Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees contiuous water lubrication.

Motor Windings – Superior insulation materials protect against excessive moisture and contaminants... assure prolonged motor life.

Balanced Rotor – Die cast under high pressures for uniform performance and greater efficiency, dynamically balanced.

Heavy-duty Ball Bearings – Sealed, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.

Pump and Motor Shaft – Stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive and alignment.

Dustproof Cover – All electrical components are protected from dirt, dust and insects by a dustproof canopy; ventilating air cannot contaminate vital switching components.

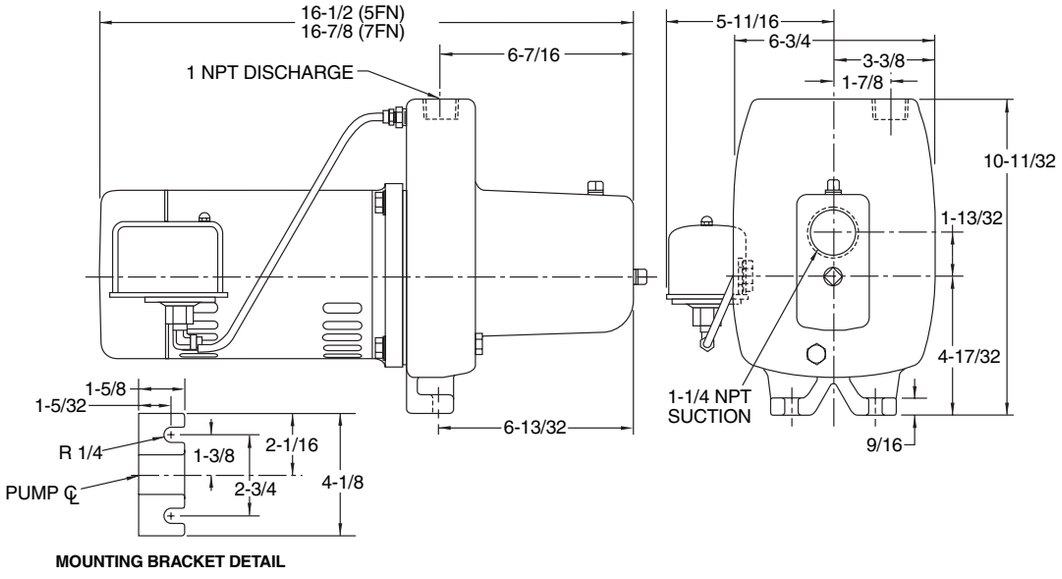
Pressure Switch – Adjustable cut-in and fixed differential (20 PSI).

Noryl® is a registered trademark of General Electric Co. PRO-Source™ is a trademark of Pentair Water.
In order to provide the best products possible, specifications are subject to change.

FN series - cast iron

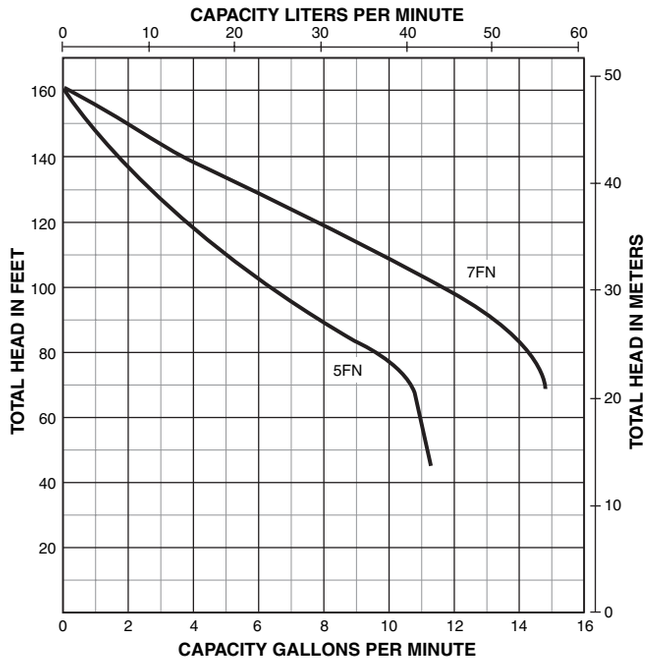
Self-Priming Shallow Well Jet Pumps

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE



PUMP PERFORMANCE

Cat. No.	HP	Disch. Pressure		Dynamic Suction Lift					Shut-Off Pressure PSI
		PSI	Feet Head	5'	10'	15'	20'	25'	
5FN	1/2	20	46.2	9.8	8.8	7.5	6.2	4.5	69
		30	69.3	9.2	8.2	7.2	5.9	4.2	
		40	92.4	6.9	6.0	5.3	4.5	4.0	
		50	115.5	3.8	3.5	2.7	1.9	1.4	
7FN	3/4	30	69.3	15.0	13.0	11.6	8.7	6.9	70
		40	92.4	12.5	11.4	10.1	8.2	6.8	
		50	115.5	8.0	6.8	6.1	4.8	3.5	

Pump will operate at all depths shown, with pressure switch set at 30-50 PSI.

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.

PN series - corrosion-resistant

Self-Priming Shallow Well Jet Pumps



C US
UL778/CSA108

PN Series Shallow Well Jet Pumps are corrosion- and abrasion-resistant and are ideal for wells with pumping levels of 25' or less.

Self-priming after the pump housing is initially filled with water.

Capacities to 18 GPM. Available in 1/2, 3/4 and 1 HP models.

Supplied with the industry standard 30-50 pressure switch setting.

APPLICATIONS

- **Water Systems**
- **Booster Pump**
- **Marine Use**
- **Mist Sprayers – Poultry**
- **Fountains and Water Features**

SPECIFICATIONS

Body and Seal Plate – Fiberglass-reinforced thermoplastic

Impeller – Engineered polymer

Base – 12-gauge steel

Nozzle, Venturi, Diffuser – Polypropylene

FEATURES

Quality Construction – Fiberglass-reinforced thermoplastic body provides total corrosion resistance and high resistance to abrasion.

Built-in Jet – Shallow-well jet has corrosion-resistant polypropylene nozzle and venturi.

Impeller – Precision-molded for perfect balance... ultra-smooth for highest performance and efficiency.

Precision Molded Diffuser – Polypropylene diffuser allows pump to prime faster, handle more air.

Heavy-duty Motor – Stainless steel shaft and dual heavy-duty ball bearings.

Heavy-duty Ball Bearings – Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.

Dual Voltage Capability – Dual voltage motors are shipped at the 230 Volt setting.

Professional Quality, Pre-set 30-50 PSI – Allows for cut-in pressure adjustments.

New Nozzle Clean-out – Easy plug removal and access for ease of service.

New Drain Plug – Bottom-mounted for easy draining and winterization.

ORDERING INFORMATION

Catalog Number	HP	Description	Pipe Tapping Sizes		Motor Voltage	Approx. Wt. Lbs./Kg.
			Suct.	Disch.		
5PN	1/2	Shallow Well Jet	1-1/4"	1"	115/230	21/9.5
7PN	3/4	Shallow Well Jet	1-1/4"	1"	115/230	24/11
10PN	1	Shallow Well Jet	1-1/4"	1"	115/230	26/12

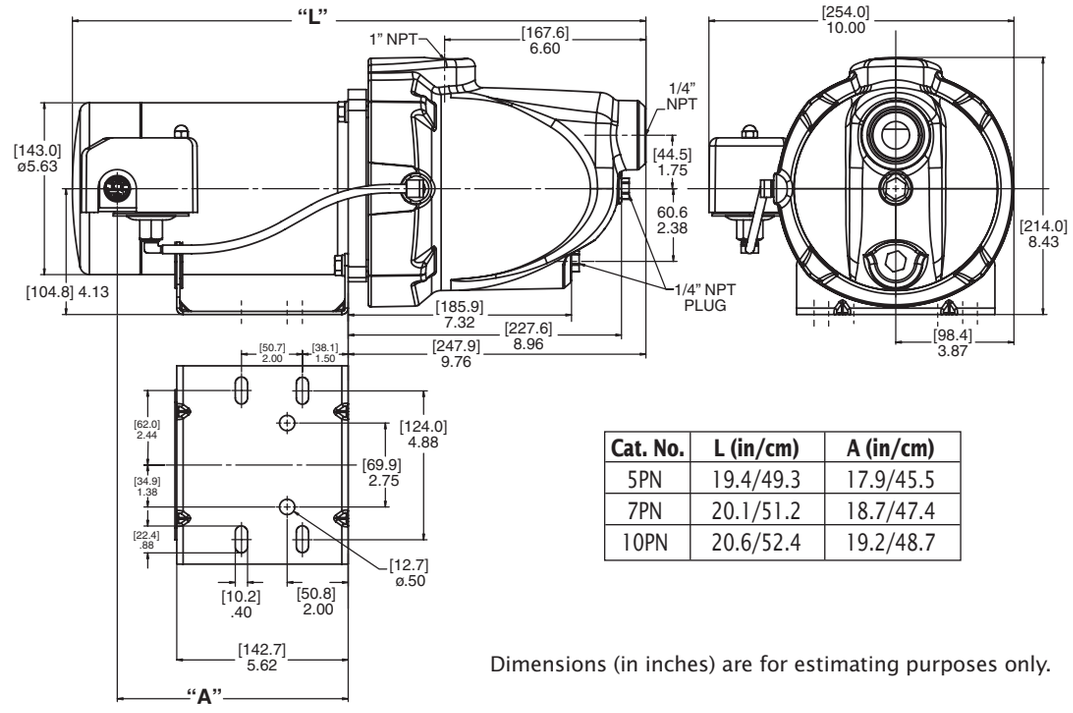
PRO-Source™ is a trademark of Pentair Water.

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

PN series - corrosion-resistant

Self-Priming Shallow Well Jet Pumps

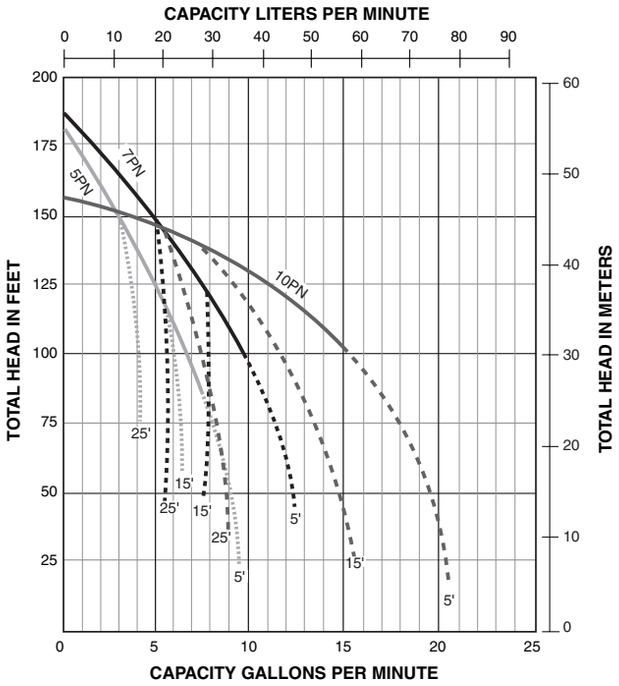
OUTLINE DIMENSIONS



Cat. No.	L (in/cm)	A (in/cm)
5PN	19.4/49.3	17.9/45.5
7PN	20.1/51.2	18.7/47.4
10PN	20.6/52.4	19.2/48.7

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE – 10 GPM



PUMP PERFORMANCE *(Capacity in Gallons/Liters Per Minute)*

Catalog Number	HP	Total Suction Lift Ft/M	Discharge Pressure PSI / Bar			Shut Off PSI / Bar
			30/2.1	40/2.8	50/3.5	
5PN	1/2	5/1.5	8.5/32.2	7.4/28.0	5.2/19.7	77/5.30
		10/3.0	7.1/26.9	6.4/24.2	5.1/19.3	
		15/4.6	6.5/24.6	6.1/23.1	4.5/17.0	
		20/6.1	5.4/20.4	5.1/19.3	4.1/15.5	
		25/7.6	4.1/15.5	4.0/15.1	3.4/12.9	
7PN	3/4	5/1.5	12.1/45.8	10.7/40.5	8.5/32.2	78/5.37
		10/3.0	10.7/40.5	10.2/38.6	8.4/31.8	
		15/4.6	9.0/34.1	8.5/32.2	8.1/30.7	
		20/6.1	7.6/28.8	7.3/27.6	7.1/26.9	
		25/7.6	5.3/20.1	5.7/21.6	5.1/19.3	
10PN	1	5/1.5	18.0/68.1	16.8/63.6	13.5/51.1	67/4.62
		10/3.0	17.1/64.7	16.1/60.9	13.4/50.7	
		15/4.6	14.9/56.4	14.4/54.5	13.0/49.2	
		20/6.1	12.6/47.7	12.2/46.2	12.0/45.4	
		25/7.6	8.8/33.3	8.5/32.2	8.1/30.7	

Pumps will operate at all depths shown, with pressure switch set at 30-50 PSI. 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.

ProJet™ HL series - cast iron

Self-Priming Convertible Jet Pumps





Pressure Gauge (included)

C US
UL778/CSA108

The ProJet HL convertible jet pumps offer a proven cast iron self-priming design available in 1/2 – 1 HP models. The ProJet HL convertible jets utilize built-in regulators offering easier priming and better range of performance from a complete line of shallow well, 4" double pipe, 2" and 3" single pipe jet packages.

APPLICATIONS

- **Water systems and sprinkling...** for homes, farms and cottages.

SPECIFICATIONS

Body and Seal Plate – Close-grained cast iron
Impeller – High strength Noryl®
Diffuser – Reinforced polypropylene with brass wear ring
Shaft – One-piece threaded 416 stainless steel
Base – Steel, 12 gauge
Max. Liquid Temperature – 140°F
Max. Inlet Pressure – 50 PSI
Pressure Switch Pre-Set – 30-50 PSI
Suction Ports – "Suction-over Drive"
Pressure Gauge – 0-100 PSI

ORDERING INFORMATION

Catalog Number	HP	Description	Pipe Tapping Sizes			Motor Voltage	Approx. Wt. Lbs.
			Suct.	Drive	Disch.		
5HL	1/2	Deep Well Jet	1-1/4"	1"	1"	115/230	42
7HL	3/4	Deep Well Jet	1-1/4"	1"	1"	115/230	60
10HL	1	Deep Well Jet	1-1/4"	1"	1"	115/230	65

A Jet Package should be ordered with every Series HL Pump.

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 flow of pump at relief pressure.

Noryl® is registered trademark of General Electric Co. ProJet™ and PRO-Source™ are trademarks of Pentair Water.
In order to provide the best products possible, specifications are subject to change.

FEATURES

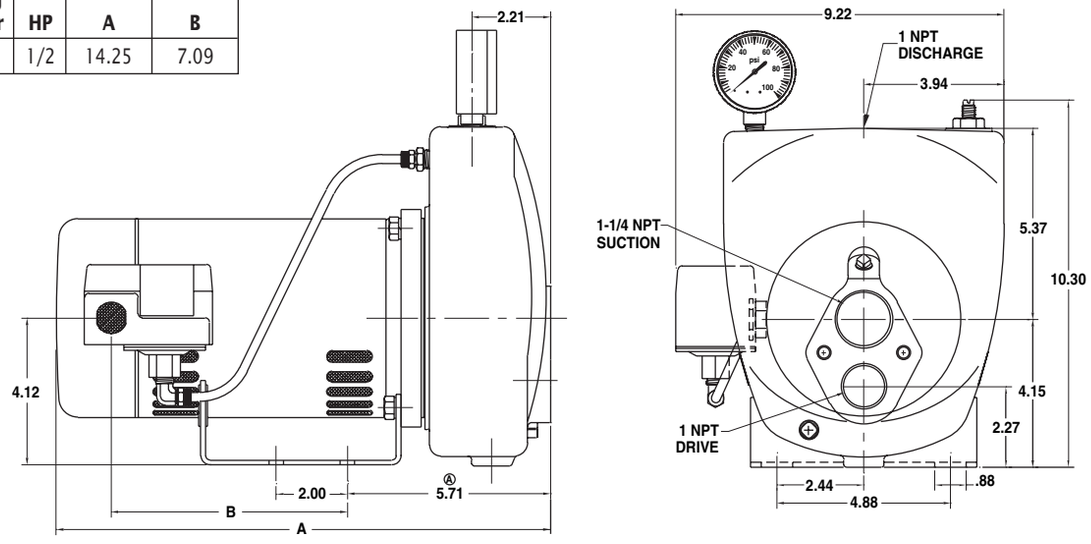
Quality Construction – Close-grained cast iron pump body, is rugged one-piece unit, specially treated to resist corrosion. Drain port provided for easy winterizing.
Noryl® Impeller – Precision-molded for perfect balance... ultra-smooth for highest performance and efficiency.
Precision Molded Diffuser – Pump primes faster, handles more air, with multi-port, precision-molded, reinforced polypropylene diffuser.
Pressure Switch – High quality, cut-in and differential pressure setting are adjustable.
Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication for maximum protection.
Motor Windings – Superior insulation materials protect against excessive moisture and contaminants... assures prolonged motor life.
Balanced Rotor – Die cast under high pressures for uniform performance and greater efficiency... dynamically balanced.
Heavy-duty Ball Bearings – Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.
Pump and Motor Shaft – 416 stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive and alignment.

Self-Priming Convertible Jet Pumps

OUTLINE DIMENSIONS

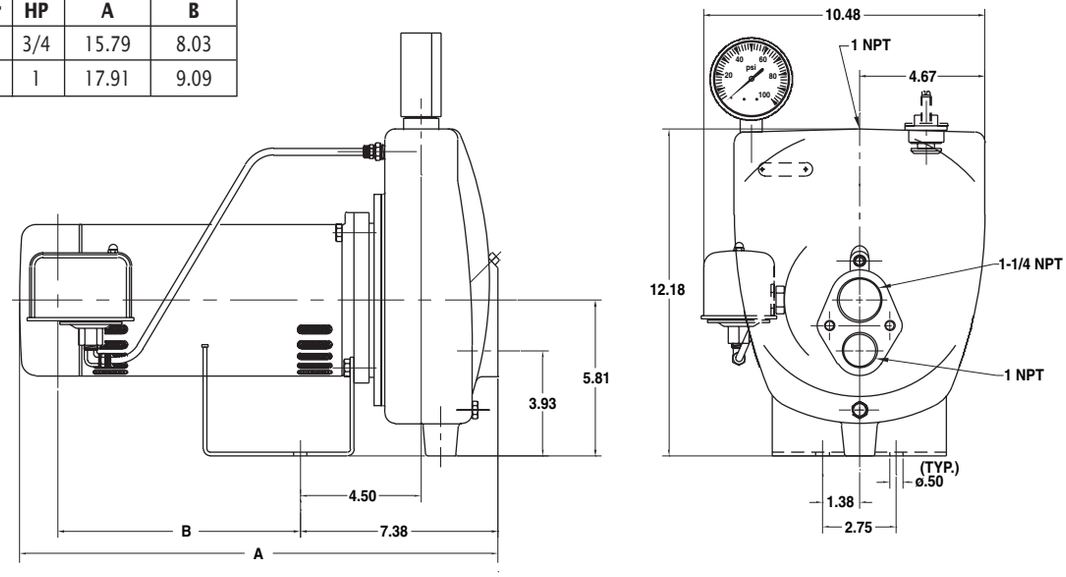
5HL

Catalog Number	HP	A	B
5HL	1/2	14.25	7.09



7HL and 10HL

Catalog Number	HP	A	B
7HL	3/4	15.79	8.03
10HL	1	17.91	9.09



Dimensions (in inches) are for estimating purposes only.

NOTE: 1/4 NPT, 0-100 PSI pressure gauge supplied uninstalled to prevent shipping damage.

Self-Priming Convertible Jet Pumps

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

SHALLOW WELL, 5' 10' 15' 20' 25' PUMPING DEPTHS

Cat. No.	HP	Disch. Press.	Pumping Depth to Water in Feet																								
			5 Ft. lift					10 ft. lift					15 ft. lift					20 ft. lift					25 ft. lift				
5HL	1/2	**Jet Package**	**11SD**	**10SD**	**29SD**	**CK5**		**11SD**	**10SD**	**29SD**	**CK5**		**11SD**	**10SD**	**29SD**	**CK5**		**11SD**	**10SD**	**29SD**	**CK5**		**11SD**	**10SD**	**29SD**	**CK5**	
		Venturi N32P-_	-68B	-67B	-66B	-66B		-68B	-67B	-66B	-66B		-68B	-67B	-66B	-66B		-68B	-67B	-66B	-66B		-68B	-67B	-66B	-66B	
		Nozzle J43P-_	-44	-44	-41	-45		-44	-44	-41	-45		-44	-44	-41	-45		-44	-44	-41	-45		-44	-44	-41	-45	
		20 PSI	20.6	14.4	10.1	6.6		19.0	13.2	9.3	6.1		16.5	11.5	8.1	5.3		13.3	9.5	6.9	4.5		9.8	6.9	5.3	3.4	
		30 PSI	19.6	14.3	9.9	6.5		18.1	13.1	9.1	6.0		15.7	11.4	7.9	5.2		13.3	9.5	6.7	4.4		9.8	6.9	5.1	3.4	
		40 PSI	10.3	12.1	9.8	6.4		9.4	11.2	9.0	5.9		8.2	9.7	7.8	5.1		6.4	8.3	6.6	4.3		3.1	6.3	5.1	3.3	
		50 PSI		4.6	7.3	6.3			4.3	6.7	5.8			3.7	5.8	5.0			2.6	4.9	4.3			1.0	3.8	3.3	
		60 PSI			3.5	5.8				3.2	5.3				2.8	4.6				2.4	3.9					3.0	
		Shut Off-PSI	**55**	**59**	**70**	**72**		**53**	**57**	**66**	**67**		**50**	**55**	**64**	**65**		**48**	**53**	**61**	**63**		**46**	**51**	**59**	**61**	
7HL	3/4	**Jet Package**	**12SD**	**11SD**	**CK1**	**CK5**	**CK1**	**12SD**	**11SD**	**CK1**	**CK5**	**CK1**	**12SD**	**11SD**	**CK1**	**CK5**	**CK1**	**12SD**	**11SD**	**CK1**	**CK5**	**CK1**	**12SD**	**11SD**	**CK1**	**CK5**	**CK1**
		Venturi N32P-_	-65	-68B	-72E	-67B	-72	-65	-68B	-72E	-67B	-72	-65	-68B	-72E	-67B	-72	-65	-68B	-72E	-67B	-72	-65	-68B	-72E	-67B	-72
		Nozzle J34P-_	-44	-44	-43	-45	-43	-44	-44	-43	-45	-43	-44	-44	-43	45	-43	-44	-44	-43	-45	-43	-44	-44	-43	-45	-43
		20 PSI	24.2	20.3	14.5	12.6	8.6	23.2	19.4	13.9	12.1	8.3	20.2	16.9	12.1	10.5	7.2	17.7	13.6	10.3	8.2	6.1	12.5	10.4	7.9	6.2	4.7
		30 PSI	24.0	20.3	14.4	12.4	8.5	23.0	19.4	13.8	11.8	8.2	20.0	16.9	12.0	10.3	7.1	17.7	13.6	10.2	8.0	6.0	12.5	10.4	7.8	6.0	4.6
		40 PSI	16.7	16.4	13.7	12.2	8.3	16.0	15.8	13.1	11.7	7.9	13.9	13.7	11.4	10.2	6.9	16.0	11.5	9.7	7.8	5.9	10.3	8.3	7.4	5.8	4.5
		50 PSI			12.6	12.0	8.2			12.1	11.5	7.8			10.5	10.0	6.8			8.9	7.7	5.8			6.8	5.7	4.4
		60 PSI			6.0	8.2	6.1			5.8	7.8	5.9			5.0	6.8	5.1			4.3	5.8	4.3			3.3	4.8	3.3
		70 PSI				4.2	2.9				4.0	2.8				3.5	2.4				2.8	2.0				2.0	1.6
		Shut Off-PSI	**61**	**62**	**71**	**80**	**82**	**59**	**60**	**69**	**78**	**79**	**57**	**58**	**67**	**76**	**77**	**54**	**55**	**65**	**74**	**75**	**52**	**53**	**63**	**72**	**73**
10HL	1	**Jet Package**	**12SD**	**CK2**	**60SD**			**12SD**	**CK2**	**60SD**			**12SD**	**CK2**	**60SD**			**12SD**	**CK2**	**60SD**			**12SD**	**CK2**	**60SD**		
		Venturi N32P-_	-65	-64	-64			-65	-64	-64			-65	-64	-64			-65	-64	-64			-65	-64	-64		
		Nozzle J34P-_	-44	-44	-45			-44	-44	-45			-44	-44	-45			-44	-44	-45			-44	-44	-45		
		20 PSI	26.8	21.6	18.4			24.6	19.9	16.9			21.4	17.3	14.7			18.2	14.7	12.5			13.9	11.2	9.6		
		30 PSI	26.5	21.5	18.1			24.4	19.8	16.7			21.2	17.2	14.5			18.0	14.6	12.3			13.8	11.2	9.4		
		40 PSI	22.9	21.3	17.5			21.0	19.6	16.1			18.3	17.0	14.0			15.6	14.5	11.9			11.9	11.1	9.1		
		50 PSI	15.1	16.8	17.3			13.9	15.4	15.9			12.1	13.4	13.8			10.3	11.4	11.7			7.9	8.7	9.0		
		60 PSI		4.0	15.6				3.7	14.4				3.2	12.5				2.7	10.6				2.1	8.1		
		70 PSI			4.1					3.8					3.3					2.8							
		Shut Off-PSI	**61**	**71**	**77**			**59**	**69**	**75**			**57**	**67**	**73**			**55**	**65**	**71**			**53**	**63**	**68**		

NOTE: Pumps are supplied with 30 - 50 pressure switch setting. Cut-in / Cut-out pressure settings are adjustable.

Self-Priming Convertible Jet Pumps

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*
DEEP WELL (40 PSI) 4" DOUBLE PIPE

Cat. No.	HP	Jet. No.	Uses Venturi	Uses Nozzle	Pumping Depth in Feet										Max. Pump Shut Off Press. PSI	
					20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	Jet at 20 ft. Depth	Jet at Max. Depth
5HL	1/2	CK3	J32P-26	J34P-41	9.4	8.0	6.6									77	68
		54SD	J32P-22	J34P-44	8.0	6.9	5.7	4.8	3.8	3.2						94	70
		CK5	N32P-66B	J34P-45	7.3	6.2	5.0	4.0								83	69
		55SD	J32P-18	J34P-43	5.0	4.3	3.7	3.2	2.6	2.2	1.8	1.5				96	63
7HL	3/4	CK1	N32P-72	J34P-43	13.2	10.8	8.4	6.3	4.2							74	56
		CK2	J32P-24	J34P-44	13.0	11.5	9.9	8.7	7.5	6.6	5.4					105	80
		54SD	J32P-22	J34P-44	8.5	7.7	6.7	6.3	5.8	5.4	4.8	4.0	3.7	3.4	2.7	122	73
10HL	1	54SD	J32P-22	J34P-44	9.5	8.5	7.4	6.9	6.5	6.0	5.4	4.8	4.2	3.6	2.9	127	76

NOTE: Tank body on 10HL pump tapped 1-1/4" x 1". On 10HL pump drop pipe should be increased to 1-1/2" x 1-1/4" to ensure adequate capacity from pump.

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

Cat. No.	HP	Jet. No.	Uses Venturi	Uses Nozzle	Pumping Depth in Feet										Max. Pump Shut Off Press. PSI	
					20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	Jet at 20 ft. Depth	Jet at Max. Depth
5HL	1/2	54AP	J32P-22	J34P-44	7.4	6.3	5.2	3.9	2.5	2.0						82	54
7HL	3/4	10AP	J32P-24	J34P-44	10.5	10.0	8.1	6.2								96	79
		54AP	J32P-22	J34P-44	6.0	5.3	4.8	4.2	4.1	3.7	3.5	2.8	2.1	1.6		95	53
10HL	1	9AP	J32P-29	J34P-44	11.7	11.1	9.8	6.8								69	57
		8AP	J32P-18	J34P-42	6.7	5.8	5.3	4.7	4.5	4.1	3.8	3.1	2.6	2.0	1.6	129	72
5HL	1/2	9CP	J32P-26	J34P-41	9.4	8.0	6.6									77	68
		54CP	J32P-22	J34P-44	8.0	6.9	5.7	4.8	3.8	3.2						94	70
7HL	3/4	18CP	J32P-24	J34P-44	13.0	11.5	9.9	8.7	7.5	6.6	5.4					106	80
		54CP	J32P-22	J34P-44	8.5	7.7	6.7	6.3	5.8	5.4	4.8	4.0	3.7	3.4	2.7	122	73
		57CP	J32P-33	P122-10B	18.0	15.4	12.8	10.8								81	68
10HL	1	54CP	J32P-22	J34P-44	9.5	8.5	7.4	6.9	6.5	6.0	5.4	4.8	4.2	3.6	2.9	127	76

Tank body on 10HL pump tapped 1-1/4" x 1". Drop pipe should be increased to 1-1/2" x 1-1/4" to ensure adequate capacity from pump. 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.

ProJet™ SL/SLJ* series - cast iron

Self-Priming Convertible Jet Pumps



C US
UL778/CSA108

The ProJet SL convertible jet pumps offer a proven cast iron self-priming design available in 1/2 – 1-1/2 HP models. The ProJetSL convertible jets utilize the BERKELEY® built-in regulators offering easier priming and better range of performance from a complete line of shallow well, 4" double pipe, 2" and 3" single pipe jet packages.

APPLICATIONS

- **Water systems and sprinkling…** for homes, farms and cottages.

SPECIFICATIONS

Body and Seal Plate – Close-grained cast iron
Impeller – High strength Noryl®
Diffuser – Reinforced polypropylene with brass wear ring
Shaft – One-piece threaded 416 stainless steel
Base – Steel, 10 gauge
Max. Liquid Temperature – 140°F
Max. Inlet Pressure – 50 PSI
Pressure Switch Pre-Set – 30-50 PSI
Suction Ports – "Suction-over-Drive"

ORDERING INFORMATION

Catalog Number	HP	Description	Pipe Tapping Sizes			Motor Voltage	Approx. Wt. Lbs.
			Suct.	Drive	Disch.		
5SL/5SLJ*	1/2	Base Mounted Pump	1-1/4"	1"	1"	115/230	40
7SL/7SLJ*	3/4	Base Mounted Pump	1-1/4"	1"	1"	115/230	42
10SL/10SLJ*	1	Base Mounted Pump	1-1/4"	1"	1"	115/230	60
15SL/15SLJ*	1-1/2	Base Mounted Pump	1-1/4"	1"	1"	115/230	65

* SLJ Models include ejector package.
A Jet Package should be ordered with every SL Series Pump.

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 flow of pump at relief pressure.

BERKELEY® is a registered trademark of Pentair Water. Noryl® is a registered trademark of General Electric Co. PRO-Source™ is a registered trademark of Pentair Water.
In order to provide the best products possible, specifications are subject to change.

FEATURES

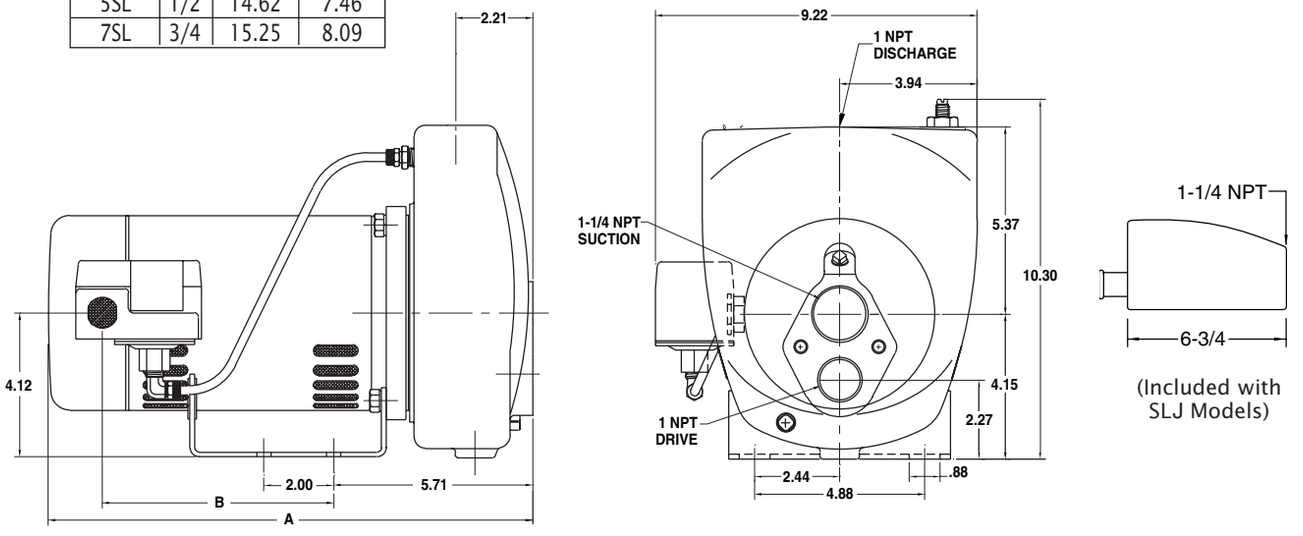
Quality Construction – Close-grained cast iron pump body, is rugged one-piece unit, specially treated to resist corrosion. Drain port provided for easy winterizing.
Noryl® Impeller – Precision-molded for perfect balance… ultra-smooth for highest performance and efficiency.
Precision Molded Diffuser – Pump primes faster, handles more air, with multi-port, precision-molded, reinforced polypropylene diffuser.
Pressure Switch – High quality, cut-in pressure setting are adjustable. Fixed 20 PSI differential.
Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication for maximum protection.
Motor Windings – Superior insulation materials protect against excessive moisture and contaminants… assures prolonged motor life.
Balanced Rotor – Die cast under high pressures for uniform performance and greater efficiency… dynamically balanced.
Heavy-duty Ball Bearings – Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.
Pump and Motor Shaft – 416 stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive and alignment.
Dustproof Cover – Dustproof canopy protects all electrical components from dirt, dust and insects; ventilating air cannot contaminate vital switching components… eliminates the most common cause of motor failure.

Self-Priming Convertible Jet Pumps

OUTLINE DIMENSIONS

5SL and 7SL

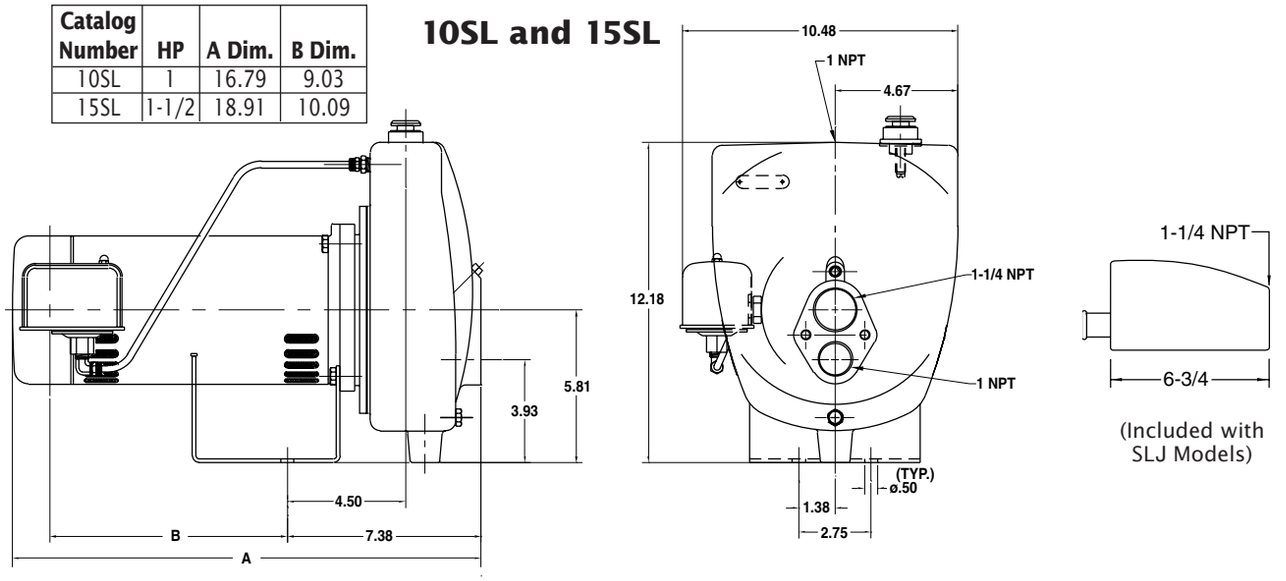
Catalog Number	HP	A Dim.	B Dim.
5SL	1/2	14.62	7.46
7SL	3/4	15.25	8.09



(Included with SLJ Models)

10SL and 15SL

Catalog Number	HP	A Dim.	B Dim.
10SL	1	16.79	9.03
15SL	1-1/2	18.91	10.09



(Included with SLJ Models)

Dimensions (in inches) are for estimating purposes only.

Self-Priming Convertible Jet Pumps

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*
SHALLOW WELL, 5' 10' 15' 20' 25' PUMPING DEPTHS

Cat. No.	HP	Disch. Press.	Pumping Depth to Water in Feet																							
			5 ft. lift					10 ft. lift					15 ft. lift					20 ft. lift					25 ft. lift				
5SL	1/2	**Jet Package**	**10SD**	**29SD**	**CK3**			**10SD**	**29SD**	**CK3**			**10SD**	**29SD**	**CK3**			**10SD**	**29SD**	**CK3**			**10SD**	**29SD**	**CK3**		
		Venturi N32P-_	-67B	-66B	-78B			-67B	-66B	-78B			-67B	-66B	-78B			-67B	-66B	-78B			-67B	-66B	-78B		
		Nozzle J34P-_	-44	-41	-41			-44	-41	-41			-44	-41	-41			-44	-41	-41			-44	-41	-41		
		20 PSI	12.0	9.1	5.9			9.7	8.4	5.4			12.0	7.3	4.7			9.7	6.2	4.0			6.7	4.7	3.1		
		30 PSI	10.8	9.0	5.8			9.5	8.3	5.3			10.8	7.2	4.6			9.5	6.1	3.9			6.7	4.7	3.0		
		40 PSI	5.2	7.9	5.6			4.2	7.2	5.2			5.2	6.3	4.5			4.2	5.4	3.8			2.5	4.1	2.9		
		50 PSI		4.1	4.5				3.8	4.1				3.3	3.6				2.8	3.1				2.1	2.3		
		60 PSI			2.4					2.2					1.9					1.6							
		Shut Off-PSI	**53**	**61**	**70**			**51**	**58**	**66**			**49**	**56**	**64**			**47**	**54**	**61**			**45**	**52**	**58**		
7SL	3/4	**Jet Package**	**11SD**	**10SD**	**29SD**	**CK5**		**11SD**	**10SD**	**29SD**	**CK5**		**11SD**	**10SD**	**29SD**	**CK5**		**11SD**	**10SD**	**29SD**	**CK5**		**11SD**	**10SD**	**29SD**	**CK5**	
		Venturi N32P-_	-68B	-67B	-66B	-66B		-68B	-67B	-66B	-66B		-68B	-67B	-66B	-66B		-68B	-67B	-66B	-66B		-68B	-67B	-66B	-66B	
		Nozzle J43P-_	-44	-44	-41	-45		-44	-44	-41	-45		-44	-44	-41	-45		-44	-44	-41	-45		-44	-44	-41	-45	
		20 PSI	20.6	14.4	10.1	6.6		19.0	13.2	9.3	6.1		16.5	11.5	8.1	5.3		13.3	9.5	6.9	4.5		9.8	6.9	5.3	3.4	
		30 PSI	19.6	14.3	9.9	6.5		18.1	13.1	9.1	6.0		15.7	11.4	7.9	5.2		13.3	9.5	6.7	4.4		9.8	6.9	5.1	3.4	
		40 PSI	10.3	12.1	9.8	6.4		9.4	11.2	9.0	5.9		8.2	9.7	7.8	5.1		6.4	8.3	6.6	4.3		3.1	6.3	5.1	3.3	
		50 PSI		4.6	7.3	6.3			4.3	6.7	5.8			3.7	5.8	5.0			2.6	4.9	4.3			1.0	3.8	3.3	
		60 PSI			3.5	5.8				3.2	5.3				2.8	4.6				2.4	3.9					3.0	
		Shut Off-PSI	**55**	**59**	**70**	**72**		**53**	**57**	**66**	**67**		**50**	**55**	**64**	**65**		48	53	61	63		46	51	59	61	
10SL	1	**Jet Package**	**12SD**	**11SD**	**CK1**	**CK5**	**CK1**	**12SD**	**11SD**	**CK1**	**CK5**	**CK1**	**12SD**	**11SD**	**CK1**	**CK5**	**CK1**	**12SD**	**11SD**	**CK1**	**CK5**	**CK1**	**12SD**	**11SD**	**CK1**	**CK5**	**CK1**
		Venturi N32P-_	-65	-68B	-72E	-67B	-72	-65	-68B	-72E	-67B	-72	-65	-68B	-72E	-67B	-72	-65	-68B	-72E	-67B	-72	-65	-68B	-72E	-67B	-72
		Nozzle J34P-_	-44	-44	-43	-45	-43	-44	-44	-43	-45	-43	-44	-44	-43	45	-43	-44	-44	-43	-45	-43	-44	-44	-43	-45	-43
		20 PSI	24.2	20.3	14.5	12.6	8.6	23.2	19.4	13.9	12.1	8.3	20.2	16.9	12.1	10.5	7.2	17.7	13.6	10.3	8.2	6.1	12.5	10.4	7.9	6.2	4.7
		30 PSI	24.0	20.3	14.4	12.4	8.5	23.0	19.4	13.8	11.8	8.2	20.0	16.9	12.0	10.3	7.1	17.7	13.6	10.2	8.0	6.0	12.5	10.4	7.8	6.0	4.6
		40 PSI	16.7	16.4	13.7	12.2	8.3	16.0	15.8	13.1	11.7	7.9	13.9	13.7	11.4	10.2	6.9	11.8	11.5	9.7	7.8	5.9	10.3	8.3	7.4	5.8	4.5
		50 PSI			12.6	12.0	8.2			12.1	11.5	7.8			10.5	10.0	6.8			8.9	7.7	5.8			6.8	5.7	4.4
		60 PSI			6.0	8.2	6.1			5.8	7.8	5.9			5.0	6.8	5.1			4.3	5.8	4.3			3.3	4.8	3.3
		70 PSI				4.2	2.9				4.0	2.8				3.5	2.4				2.8	2.0				2.0	1.6
		Shut Off-PSI	**61**	**62**	**71**	**80**	**82**	**59**	**60**	**69**	**78**	**79**	**57**	**58**	**67**	**76**	**77**	**54**	**55**	**65**	**74**	**75**	**52**	**53**	**63**	**72**	**73**
15SL	1-1/2	**Jet Package**	**12SD**	**CK2**	**60SD**			**12SD**	**CK2**	**60SD**			**12SD**	**CK2**	**60SD**			**12SD**	**CK2**	**60SD**			**12SD**	**CK2**	**60SD**		
		Venturi N32P-_	-65	-64	-64			-65	-64	-64			-65	-64	-64			-65	-64	-64			-65	-64	-64		
		Nozzle J34P-_	-44	-44	-45			-44	-44	-45			-44	-44	-45			-44	-44	-45			-44	-44	-45		
		20 PSI	26.8	21.6	18.4			24.6	19.9	16.9			21.4	17.3	14.7			18.2	14.7	12.5			13.9	11.2	9.6		
		30 PSI	26.5	21.5	18.1			24.4	19.8	16.7			21.2	17.2	14.5			18.0	14.6	12.3			13.8	11.2	9.4		
		40 PSI	22.9	21.3	17.5			21.0	19.6	16.1			18.3	17.0	14.0			15.6	14.5	11.9			11.9	11.1	9.1		
		50 PSI	15.1	16.8	17.3			13.9	15.4	15.9			12.1	13.4	13.8			10.3	11.4	11.7			7.9	8.7	9.0		
		60 PSI		4.0	15.6				3.7	14.4				3.2	12.5				2.7	10.6				2.1	8.1		
		70 PSI			4.1					3.8					3.3					2.8							
		Shut Off-PSI	**61**	**71**	**77**			**59**	**69**	**75**			**57**	**67**	**73**			**55**	**65**	**71**			**53**	**63**	**68**		

Pumps are supplied with 30 – 50 pressure switch setting. Cut-in pressure settings are adjustable.

PUMP PERFORMANCE – SLJ MODELS*

Catalog Number	Ejector Package (Included)	Shallow Well		Deep Well	
		Nozzle	Venturi	Nozzle	Venturi
5SLJ	J198-26	J34P-41	N32P-66B	J34P-42	J32P-18
7SLJ	J198-27	J34P-41	N32P-66B	J34P-43	J32P-18
10SLJ	J198-28	J34P-43	N32P-72E	J34P-44	J32P-22
15SLJ	J198-29	J34P-44	N32P-64	J34P-44	J32P-22

*SLJ Models use venturis and nozzles as shown. Specific performances are shown in the SL Models charts.

Self-Priming Convertible Jet Pumps

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

DEEP WELL (40 PSI) 4" DOUBLE PIPE

Cat. No.	HP	Jet. No.	Uses Venturi	Uses Nozzle	Pumping Depth in Feet										Max. Pump Shut Off Press. PSI	
					20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	Jet at 20 ft. Depth	Jet at Max. Depth
5SL	1/2	4SD	J32P-24	J34P-41	5.9	4.5	3.4	2.3								68	54
		CK3	N32P-78B	J34P-41	4.9	3.9	2.9									71	61
		15SD	J32P-18	J34P-42	4.6	3.9	3.3	2.8	2.3	1.7						84	59
7SL	3/4	CK3	J32P-26	J34P-41	9.4	8.0	6.6									77	68
		54SD	J32P-22	J34P-44	8.0	6.9	5.7	4.8	3.8	3.2						94	70
		CK5	N32P-66B	J34P-45	7.3	6.2	5.0	4.0								83	69
		55SD	J32P-18	J34P-43	5.0	4.3	3.7	3.2	2.6	2.2	1.8	1.5				96	63
10SL	1	CK1	N32P-72	J34P-43	13.2	10.8	8.4	6.3	4.2							74	56
		CK2	J32P-24	J34P-44	13.0	11.5	9.9	8.7	7.5	6.6	5.4					105	80
		54SD	J32P-22	J34P-44	8.5	7.7	6.7	6.3	5.8	5.4	4.8	4.0	3.7	3.4	2.7	122	73
15SL	1-1/2	54SD	J32P-22	J34P-44	9.5	8.5	7.4	6.9	6.5	6.0	5.4	4.8	4.2	3.6	2.9	127	76

Tank body on 15SL pump tapped 1-1/4" x 1". On 15SL pump drop pipe should be increased to 1-1/2" x 1-1/4" to ensure adequate capacity from pump.

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

DEEP WELL (40 PSI) 2" SINGLE PIPE

Cat. No.	HP	Jet. No.	Uses Venturi	Uses Nozzle	Pumping Depth in Feet										Max. Pump Shut Off Press. PSI	
					20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	Jet at 20 ft. Depth	Jet at Max. Depth
5SL	1/2	8AP	J32P-18	J34P-42	4.7	4.1	3.4	2.5	1.9	1.5						84	58
7SL	3/4	54AP	J32P-22	J34P-44	7.4	6.3	5.2	3.9	2.5	2.0						82	54
10SL	1	10AP	J32P-24	J34P-44	10.5	10.0	8.1	6.2								96	79
		54AP	J32P-22	J34P-44	6.0	5.3	4.8	4.2	4.1	3.7	3.5	2.8	2.1	1.6		95	53
15SL	1-1/2	9AP	J32P-29	J34P-44	11.7	11.1	9.8	6.8								69	57
		8AP	J32P-18	J34P-42	6.7	5.8	5.3	4.7	4.5	4.1	3.8	3.1	2.6	2.0	1.6	129	72
DEEP WELL (40 PSI) 3" SINGLE PIPE																	
5SL	1/2	19CP	J32P-24	J34P-41	5.9	4.5	3.4	2.3								68	54
		16CP	J32P-18	J34P-42	4.6	3.9	3.3	2.8	2.3	1.7						84	59
		9CP	J32P-26	J34P-41	9.4	8.0	6.6									77	68
7SL	3/4	54CP	J32P-22	J34P-44	8.0	6.9	5.7	4.8	3.8	3.2						94	70
10SL	1	18CP	J32P-24	J34P-44	13.0	11.5	9.9	8.7	7.5	6.6	5.4					106	80
		54CP	J32P-22	J34P-44	8.5	7.7	6.7	6.3	5.8	5.4	4.8	4.0	3.7	3.4	2.7	122	73
		57CP	J32P-33	P122-10B	18.0	15.4	12.8	10.8								81	68
15SL	1-1/2	54CP	J32P-22	J34P-44	9.5	8.5	7.4	6.9	6.5	6.0	5.4	4.8	4.2	3.6	2.9	127	76

Tank body on 15SL pump tapped 1-1/4" x 1". Drop pipe should be increased to 1-1/2" x 1-1/4" to ensure adequate capacity from pump. 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.

FL/FLJ* series - cast iron

Self-Priming Convertible Jet Pumps



C US
UL778/CSA108

FL Series Pumps feature a proven self-priming "converible" design. The same convertible jet can be attached to pump for use on shallow well installation, or be utilized in 4" or larger wells for use as a double pipe deep well jet.

FL Series Pumps provide high capacities up to 11 GPM... depths to 90 feet. They are rated for 30-50 PSI operation.

APPLICATIONS

- **Water systems and sprinkling...** for homes, farms and cottages.

SPECIFICATIONS

Body and Base – Close-grained cast iron

Impeller – Lexan®

Diffuser – Reinforced polypropylene

Shaft – One-piece threaded 416 stainless steel

Pressure Switch Pre-Set – 30-50 PSI

Suction Ports – Drive-over-Suction

ORDERING INFORMATION

Catalog Number	HP	Description	Pipe Tapping Sizes			Motor Voltage	Approx. Wt. Lbs.
			Suction	Drive	Disch.		
5FL/5FLJ*	1/2	Base Mounted Pump	1-1/4"	1"	1"	115/230	44
7FL/7FLJ*	3/4	Base Mounted Pump	1-1/4"	1"	1"	115/230	45

*FLJ Models include ejector package.

A Jet Package should be ordered with every FL Series Pump.

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 flow of pump at relief pressure.

BERKELEY® is a registered trademark of Pentair Water. Lexan® is a registered trademark of General Electric Co. PRO-Source™ is a registered trademark of Pentair Water.

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

FEATURES

Quality Construction – Close-grained cast iron pump body and base are rugged one-piece unit, specially treated to resist corrosion. Drain port provided for easy winterizing.

Pressure Regulator – Simple, built-in regulator is performance proven. Adjustable for best performance on all deep well installations.

Lexan® Impeller – Precision-molded for perfect balance... ultra-smooth for highest performance and efficiency.

Precision Molded Diffuser – Pump primes faster; handles more air, with multi-port, precision-molded, reinforced polypropylene diffuser.

Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication for maximum protection.

Motor Windings – Superior insulation materials protect against excessive moisture and contaminants... assures prolonged motor life.

Balanced Rotor – Die cast under high pressures for uniform performance and greater efficiency... dynamically balanced.

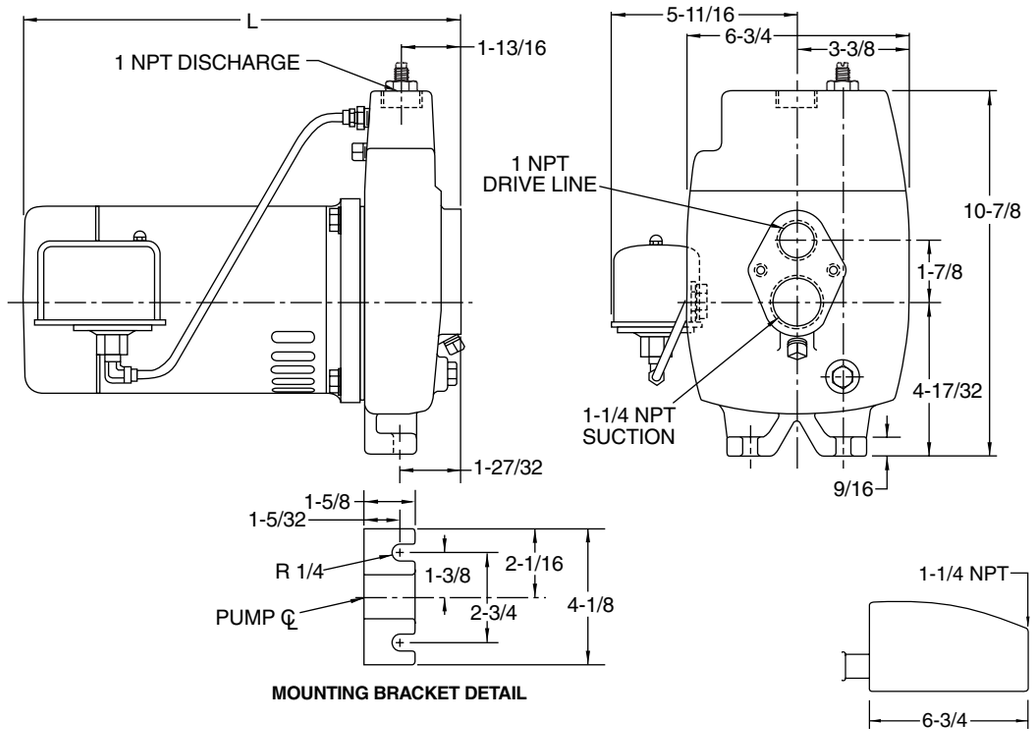
Heavy-duty Ball Bearings – Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.

Pump and Motor Shaft – Stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive and alignment.

Dustproof Cover – Dustproof canopy protects all electrical components from dirt, dust and insects; ventilating air cannot contaminate vital switching components... eliminates the most common cause of motor failure.

Self-Priming Convertible Jet Pumps

OUTLINE DIMENSIONS



Cat. No.	L
5FL	12 - 13/16
7FL	13 - 9/16

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE – FLJ MODELS*

Catalog Number	Ejector Package (Included)	Shallow Well		Deep Well	
		Nozzle	Venturi	Nozzle	Venturi
5FLJ	J198-26	J34P-41	N32P-66B	J34P-42	J32P-18
7FLJ	J198-27	J34P-41	N32P-66B	J34P-43	J32P-18

*FLJ Models use venturis and nozzles shown below. Specific performances are shown in the FL Models charts.

Self-Priming Convertible Jet Pumps

PUMP PERFORMANCE *(Capacity in Gallons per Minute)*

SHALLOW WELL, 5' 10' 15' 20' 25' PUMPING DEPTHS

HP	Cat. No.	Disch. Press.	Pumping Depth to Water in Feet														
			5 Ft. lift			10 ft. lift			15 ft. lift			20 ft. lift			25 ft. lift		
5FL	1/2	**Jet Package**	**10SD**	**29SD**		**10SD**	**29SD**		**10SD**	**29SD**		**10SD**	**29SD**		**10SD**	**29SD**	
		Venturi N32P-_	-67B	-66B		-67B	-66B		-67B	-66B		-67B	-66B		-67B	-66B	
		Nozzle J34P-_	-44	-41		-44	-41		-44	-41		-44	-41		-44	-41	
		20 PSI	12.0	9.1		9.7	8.4		12.0	7.3		9.7	6.2		6.7	4.7	
		30 PSI	10.8	9.0		9.5	8.3		10.8	7.2		9.5	6.1		6.7	4.7	
		40 PSI	5.2	7.9		4.2	7.2		5.2	6.3		4.2	5.4		2.5	4.1	
		50 PSI		4.1			3.8			3.3			2.8			2.1	
		60 PSI															
		Shut Off-PSI	**53**	**61**		**51**	**58**		**49**	**56**		**47**	**54**		**45**	**52**	
7FL	3/4	**Jet Package**	**11SD**	**10SD**	**29SD**	**11SD**	**10SD**	**29SD**	**11SD**	**10SD**	**29SD**	**11SD**	**10SD**	**29SD**	**11SD**	**10SD**	**29SD**
		Venturi N32P-_	-68B	-67B	-66B	-68B	-67B	-66B	-68B	-67B	-66B	-68B	-67B	-66B	-68B	-67B	-66B
		Nozzle J43P-_	-44	-44	-41	-44	-44	-41	-44	-44	-41	-44	-44	-41	-44	-44	-41
		20 PSI	20.6	14.4	10.1	19.0	13.2	9.3	16.5	11.5	8.1	13.3	9.5	6.9	9.8	6.9	5.3
		30 PSI	19.6	14.3	9.9	18.1	13.1	9.1	15.7	11.4	7.9	13.3	9.5	6.7	9.8	6.9	5.1
		40 PSI	10.3	12.1	9.8	9.4	11.2	9.0	8.2	9.7	7.8	6.4	8.3	6.6	3.1	6.3	5.1
		50 PSI		4.6	7.3		4.3	6.7		3.7	5.8		2.6	4.9		1.0	3.8
		60 PSI			3.5			3.2			2.8			2.4			
		Shut Off-PSI	**55**	**59**	**70**	**53**	**57**	**66**	**50**	**55**	**64**	**48**	**53**	**61**	**46**	**51**	**59**

NOTE: Pumps are supplied with 30 – 50 pressure switch setting. Cut-in pressure settings are adjustable.

PUMP PERFORMANCE *(Capacity in Gallons per Minute)*

DEEP WELL (40 PSI) 4" DOUBLE PIPE

Cat No.	HP	Jet. No.	Uses Venturi	Uses Nozzle	Pumping Depth to Water in Feet								Max. Pump Shut Off Press. PSI	
					20'	30'	40'	50'	60'	70'	80'	90'	Jet at 20 ft. Depth	Jet at Max. Depth
5FL	1/2	4SD	J32P-24	J34P-41	5.9	4.5	3.4	2.3					68	54
		15SD	J32P-18	J34P-42	4.6	3.9	3.3	2.8	2.3	1.7			84	59
7FL	3/4	54SD	J32P-22	J34P-44	8.0	6.9	5.7	4.8	3.8	3.2			94	70
		55SD	J32P-18	J34P-43	5.0	4.3	3.7	3.2	2.6	2.2	1.8	1.5	96	63
DEEP WELL (40 PSI) 2" SINGLE PIPE														
5FL	1/2	8AP	J32P-18	J34P-42	4.7	4.1	3.4	2.5	1.9	1.5			84	58
7FL	3/4	54AP	J32P-22	J34P-44	7.4	6.3	5.2	3.9	2.5	2.0			82	54
DEEP WELL (40 PSI) 3" SINGLE PIPE														
5FL	1/2	19CP	J32P-24	J34P-41	5.9	4.5	3.4	2.3					68	54
		16CP	J32P-18	J34P-42	4.6	3.9	3.3	2.8	2.3	1.7			84	59
7FL	3/4	9CP	J32P-26	J34P-41	9.4	8.0	6.6						77	68
		54CP	J32P-22	J34P-44	8.0	6.9	5.7	4.8	3.8	3.2			94	70

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.

PL series - corrosion-resistant

Convertible Deep Well Jet Pumps



C SA US
UL778/CSA108

Durability and corrosion resistance are built into every PL Series Pump, due to the rugged fiberglass reinforced thermoplastic pump construction. The engineered composite components are lightweight yet extremely resistant to sand and abrasive wear. The non-corrosive design and exceptional strength assure years of trouble-free operation.

APPLICATIONS

- **Water systems and sprinkling...** for homes, farms and cottages.

SPECIFICATIONS

Pump Body and Seal Plate – Dura-Glas®
Impeller – Noryl®
Nozzle – Noryl
Venturi – Noryl
O-Ring – Buna-N
Clamp – Stainless steel
Shaft – Stainless steel
Diffuser – Reinforced polypropylene with brass wear ring
Shallow Well Jet – Sold separately
Pressure Switch Pre-Set – 30-50 PSI
Suction Ports – Suction-over-Drive

ORDERING INFORMATION

Catalog Number	HP	Pipe Tapping Sizes			Motor Voltage	Approx. Wt. Lbs.
		Suct.	Drive	Disch.		
5PL	1/2	1-1/4"	1"	1"	115/230	27
7PL	3/4	1-1/4"	1"	1"	115/230	28
10PL	1	1-1/4"	1"	1"	115/230	30
15PL	1 1/2	1-1/4"	1"	1"	115/230	36

A Jet Package should be ordered with every PL Series pump.

FEATURES

Superior Rustproof Construction – Pump body is Dura-Glas® fiberglass reinforced thermoplastic – lightweight, rust-proof and exceptionally strong. All components in contact with water are resistant to the corrosive and abrasive forces found in the most aggressive water conditions.

Precision Diffuser – Multi-port, reinforced polypropylene design primes faster and handles more air.

Precision Molded Impeller – Precision molded Noryl® gives perfect balance and ultra-smoothness for highest performance and efficiency.

Pressure Regulator and Gauge – Performance-proven, simple, built-in pressure regulator is adjustable for best performance on all deep well installations. Pressure gauge included.

Shaft Seal – Stainless steel heat sink provides maximum cooling of the mechanical shaft seal.

Heavy-duty Motor – Dustproof canopy completely encloses electrical components and provides dust, dirt and insect protection. Ventilating air cannot contaminate vital switching components. Permanently lubricated, heavy-duty ball bearings ensure smooth, quiet operation and extended motor life.

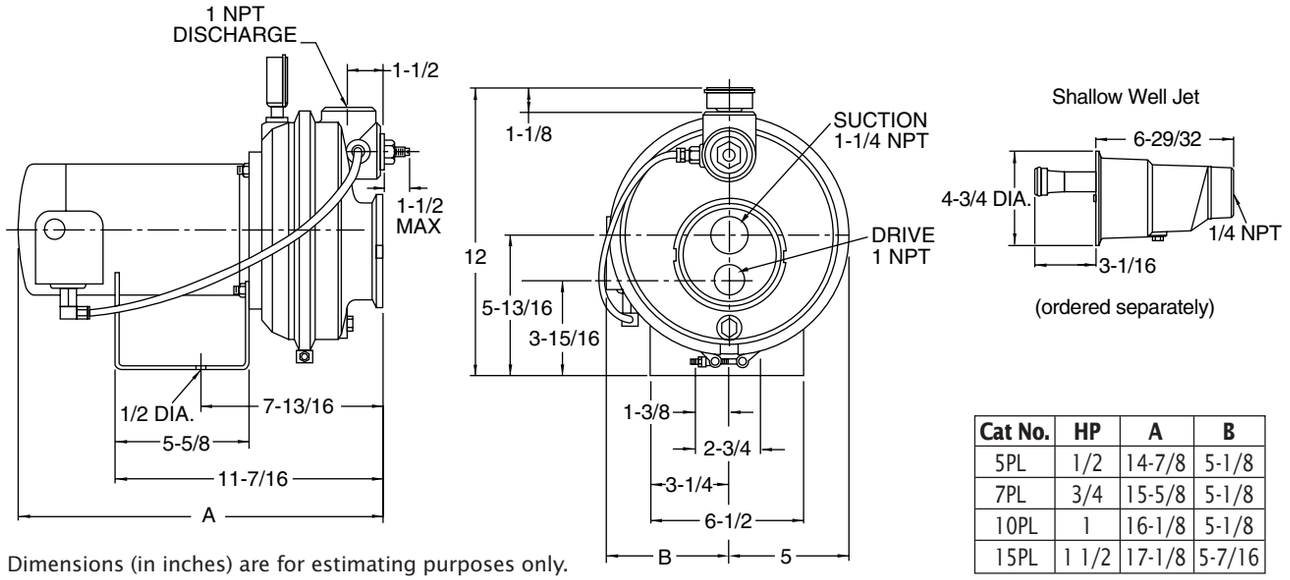
Easy Serviceability – PL pumps are disassembled by removing the stainless steel clamp. Piping does not have to be disturbed. Seal replacement takes only a few minutes. "Control room" motor design makes all components easily accessible.

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

Convertible Deep Well Jet Pumps

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

Cat No.	HP	A	B
5PL	1/2	14-7/8	5-1/8
7PL	3/4	15-5/8	5-1/8
10PL	1	16-1/8	5-1/8
15PL	1 1/2	17-1/8	5-7/16

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

SHALLOW WELL

Catalog Number	HP	S.W. Jet No.	Press. Switch Setting	Dynamic Suct. Lift Ft.	Discharge Pressure — PSI					Shut Off Press. PSI
					20	30	40	50	60	
5PL	1/2	PKG 1-21N	30-50	5’	9.5	9.2	9.0	5.8	3.0	72
				10’	8.2	8.0	7.8	5.2	2.3	70
				15’	7.2	6.8	6.8	4.5	1.8	68
				20’	5.7	5.7	5.7	3.8		66
				25’	4.3	4.3	4.3	3.2		62
7PL	3/4	PKG 1-22N	30-50	5’	16.2	15.8	15.3	8.7	1.3	62
				10’	14.2	14.0	13.8	7.2		60
				15’	12.2	12.0	11.8	5.3		58
				20’	9.7	9.7	9.2	3.7		55
				25’	7.2	6.8	6.8			52
10PL	1	PKG 1-23N	30-50	5’	21.3	21.0	20.7	13.2	4.2	62
				10’	18.8	18.7	18.3	11.1	1.7	60
				15’	16.0	15.8	15.7	8.9		58
				20’	12.8	12.7	12.3	5.7		55
				25’	8.5	8.5	8.5			52
15PL	1 1/2	PKG 1-24N	30-50	5’	26.3	26.2	26.2	21.3	7.7	64
				10’	23.7	23.3	23.2	19.2	3.5	62
				15’	20.3	20.2	20.0	16.3		60
				20’	16.2	16.0	15.8	11.2		57
				25’	11.5	11.3	11.3			54

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.

Convertible Deep Well Jet Pumps

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

DEEP WELL 4" DOUBLE PIPE – 40 PSI

Cat. No.	HP	Jet No.	Uses Venturi	Uses Nozzle	Pumping Depth in Feet										
					20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'
5PL	1/2	4SD	J32P-24	J34P-41		4.5	3.5	2.3	1.3						
		10SD	N32P-67B	J34P-44		9.5	7.0	4.5	2.0						
7PL	3/4	4SD	J32P-24	J34P-41		6.5	5.1	4.0	3.0	1.8	0.8				
10PL	1	4SD	J32P-24	J34P-41		8.4	7.3	6.2	5.0	4.1	2.9	2.0	1.1		
15PL	1 1/2	11SD	N32P-68B	J34P-44		11.5	9.4	8.0	6.5	5.3	3.8	2.5	1.1		

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

Cat. No.	HP	Jet No.	Uses Venturi	Nozzle	Pumping Depth in Feet										
					20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'
DEEP WELL 2" SINGLE PIPE – 40 PSI															
5PL	1/2	13AP	J32P-26	J34P-44	5.8	3.8	1.0								
		10AP	J32P-24	J34P-44	4.3	3.0	1.6								
		8AP	J32P-18	J34P-42	3.8	3.3	2.6	2.0	1.5						
7PL	3/4	14AP	J32P-32	J34P-45	9.2	6.7	4.3								
		10AP	J32P-24	J34P-44	6.2	4.8	3.7	2.3	1.2						
		8AP	J32P-18	J34P-42	4.1	3.7	3.1	2.6	2.1	1.6	1.2	0.8			
10PL	1	15AP	J32P-33	J34P-41	12.3	9.2	5.7								
		9AP	J32P-29	J34P-44	10.6	7.4	4.7	2.2							
		8AP	J32P-18	J34P-42	5.0	4.7	4.2	3.8	3.3	2.7	2.3	1.8	1.3		
15PL	1 1/2	16AP	J32P-38	J34P-45	15.3	11.8	8.5	5.2							
		9AP	J32P-29	J34P-44		12.3	9.3	6.4	4.0						
		8AP	J32P-18	J34P-42		5.7	5.0	4.6	4.2	3.7	3.3	2.8	2.4	1.8	1.3
DEEP WELL 3" SINGLE PIPE – 40 PSI															
5PL	1/2	25CP	J32P-26	J34P-44	5.8	4.0	2.1								
		19CP	J32P-24	J34P-41		4.5	3.5	2.3	1.3						
7PL	3/4	11CP	J32P-32	J34P-45	9.5	7.0	4.5	2.0							
		19CP	J32P-24	J34P-41		6.5	5.1	4.0	3.0	1.8	0.8				
10PL	1	26CP	J32P-33	J34P-41	13.0	9.8	6.0								
		17CP	J32P-29	J34P-44		11.5	8.0	5.2	2.6						
		19CP	J32P-24	J34P-41		8.4	7.3	6.2	5.0	4.1	2.9	2.0	1.1		
15PL	1 1/2	10CP	J32P-38	J34P-45	16.6	13.3	9.5	6.0							
		15CP	J32P-22	J34P-43		8.6	7.9	6.9	6.2	5.4	4.4	3.2	2.2	1.5	0.9

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.

LT2 series

Horizontal Multi-Stage Jet/Centrifugal Pumps



C US
UL778/CSA108

LT2 Series Multi-Stage Jet Pumps are the highest performing pumps available in its category. The LT2 Series Convertible Jets utilize the BERKELEY® built-in regulator, offering easier priming and better range of performance from a complete line of Shallow Well, 4" Double Pipe, 2" and 3" Single Pipe Jet Packages. Pump may also be operated as a self-priming centrifugal (to 25 ft.) to provide a wide range of high pressure applications.

APPLICATIONS

- **Water systems and sprinkling...** for homes, farms and cottages.

SPECIFICATIONS

Body – One-piece rugged cast iron

Pump and Motor Shaft – 416 stainless steel

Impeller – Polycarbonate

Diffuser – Corrosion-resistant cast iron

Pressure Switch Pre-Set – 30-50 PSI

Suction Ports – Drive-over-Suction

ORDERING INFORMATION

Catalog Number	HP	Pipe Tapping Sizes			Stages	Motor Voltage	Approx. Wt. Lbs.
		Suct.	Drive	Disch.			
7LT2	3/4	1-1/4"	1"	1"	2	115/230	50
10LT2	1	1-1/4"	1"	1"	2	115/230	80
15LT2	1-1/2	1-1/4"	1"	1"	2	115/230	85

AUTOMATIC PRESSURE REGULATOR – DEEP WELL

Catalog Number	Description	Application	Approx. Wt. Lbs.
PKG 107	Regulator, tubing, pipe plug and compression fitting.	Required for ALL deep well installations.	4

Order pump and pressure regulator if required, from ordering information tables above. A jet package and the automatic pressure regulator, described above, are required on all deep well installations.

BERKELEY® is a registered trademark of Pentair Water;
In order to provide the best products possible, specifications are subject to change.

FEATURES

Automatic Pressure Regulator – Faster-acting and quieter, design eliminates "hunting" for correct drive pressure. New improved stem and guide are precisely molded to assure efficient, trouble-free performance on all deep wells. See ordering information (Deep well only).

Quality Construction – Close-grained cast iron pump body is rugged, one-piece unit, specially treated to resist corrosion. Drain port provided for easy winterizing.

Precision-machined Diffusers – Assure faster priming.

Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication for maximum protection.

Polycarbonate Impellers – Precision molded for perfect balance, and ultra-smooth for highest performance and efficiency.

Motor Windings – Superior insulation materials protect against excessive moisture and contaminants to ensure prolonged motor life.

Dustproof Cover – All electrical components are protected from dirt, dust and insects by a dustproof canopy. Ventilating air cannot contaminate vital switching components. This eliminates the most common cause of motor failure.

Balanced Rotor – Rotor is die cast under high pressures for uniform performance and greater efficiency; dynamically balanced.

Heavy-duty Ball Bearings – Shielded, permanently lubricated bearings are extensively tested to ensure extended life and smooth, quiet operation.

Pump and Motor Shaft – One piece threaded shaft for positive impeller drive and alignment. Shaft is stainless steel for maximum corrosion resistance.

Horizontal Multi-Stage Jet/Centrifugal Pumps

PUMP PERFORMANCE
SHALLOW WELL

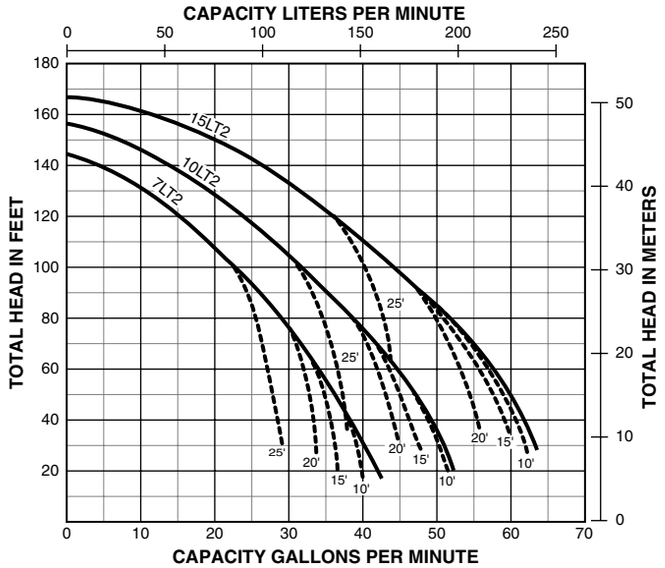
Catalog Number	HP	Jet* Number	Uses Venturi	Uses Nozzle	Disch Press. PSI	Total Suction Lift Ft. 5'	10'	15'	20'	25'
7LT2	3/4	PKG 1 29SD	N32P-66B	J34P-41	20	9.6	8.2	7.0	5.8	3.9
					30	9.1	7.9	6.5	5.6	3.9
					40	8.8	7.7	6.3	5.6	3.9
					50	8.5	7.6	6.2	5.6	3.9
					60	7.7	7.3	6.2	5.6	3.9
					70	5.5	5.1	4.7	4.2	3.6
					80	3.5	3.1	2.8	2.3	1.9
					**S.O.	102	96	96	96	90
10LT2	1	PKG 1 10SD	N32P-67B	J34P-44	20	13.0	11.2	9.8	7.8	5.8
					30	12.5	11.0	9.5	7.6	5.7
					40	12.2	10.9	9.4	7.6	5.7
					50	12.1	10.8	9.2	7.6	5.7
					60	12.0	10.8	9.2	7.6	5.7
					70	10.2	9.6	8.6	7.4	5.7
					80	7.4	6.8	6.2	5.5	4.8
					**S.O.	108	108	108	102	102
15LT2	1-1/2	PKG 1 10SD	N32P-67B	J34P-44	20	15.9	13.3	12.2	9.6	7.0
					30	15.6	13.2	12.2	9.5	7.0
					40	15.3	13.1	12.1	9.4	6.9
					50	14.9	13.0	11.9	9.3	6.8
					60	14.4	12.9	11.7	9.2	6.7
					70	13.7	12.7	11.5	9.0	6.6
					80	12.6	12.1	10.8	8.7	6.4
					90	9.5	8.5	7.8	7.2	5.7
					100	5.9	5.0	4.4	3.8	3.2
					**S.O.	120	120	114	114	108

* Order Jet Package separately. **S.O. = Shut Off Pressure in PSI.

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.

PUMP PERFORMANCE



NOTE: Dotted lines indicate performance reduction at high suction lift.

LT2 series

Horizontal Multi-Stage Jet/Centrifugal Pumps

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

CENTRIFUGAL APPLICATION

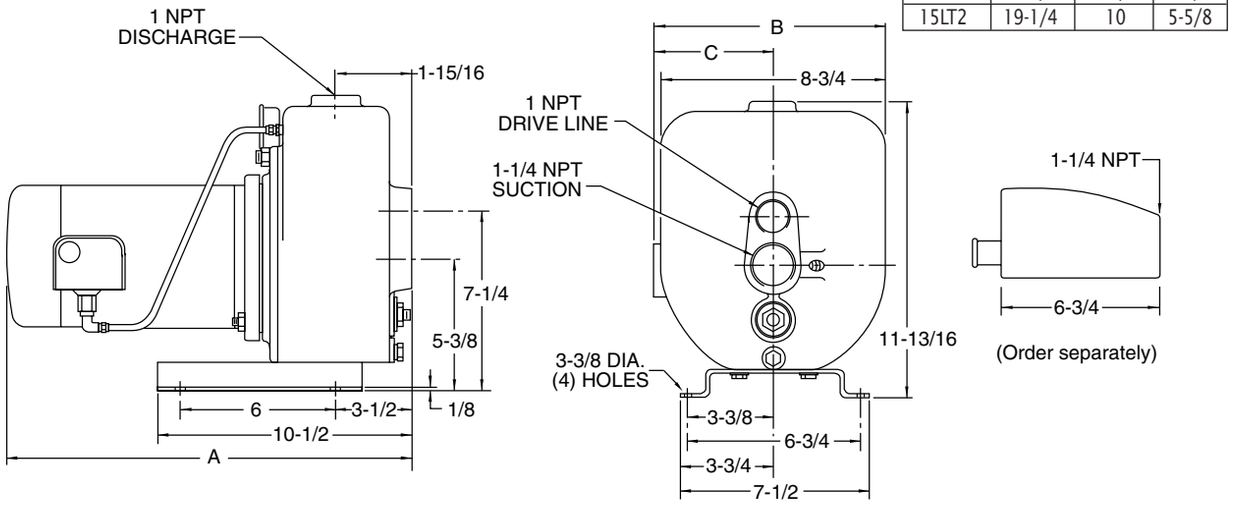
Catalog Number	HP	Total Suct. Lift Ft.	Discharge Pressure – PSI					Shut Off Pressure PSI
			20	30	40	50	60	
7LT2	3/4	5	37	30	24	15	–	60
		10	35	29	21	13	–	60
		15	33	27	19	9	–	60
		20	32	26	17	6	–	60
		25	31	24	15	–	–	60
10LT2	1	5	47	40	33	24	10	65
		10	46	38	31	21	7	65
		15	44	36	28	18	–	65
		20	42	35	26	15	–	65
		25	41	33	24	12	–	65
15LT2	1-1/2	5	60	53	46	36	23	68
		10	58	52	43	33	21	68
		15	56	49	41	30	16	68
		20	55	47	39	27	12	68
		25	54	41	36	25	–	68

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.

OUTLINE DIMENSIONS

Cat. No.	A	B	C
7LT2	17-7/8	9-1/2	5-1/8
10LT2	18-3/4	9-1/2	5-1/8
15LT2	19-1/4	10	5-5/8



Dimensions (in inches) are for estimating purposes only.

LT2 series

Horizontal Multi-Stage Jet/Centrifugal Pumps

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

Cat. No.	HP	Jet No.	Use Venturi	Use Nozzle	Pumping Depth in Feet'														
					20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	150'	160'
DEEP WELL 2" SINGLE PIPE – 40 PSI																			
7LT2	3/4	13AP	J32P-26	J34P-44	12.0	10.8	9.6	8.1	6.9	5.5									
		22AP	J32P-22	J34P-43					7.9	6.7	5.5	4.7	3.9	3.0					
		8AP	J32P-18	J34P-42									4.0	3.6	3.1	2.7	2.2		
10LT2	1	5AP	J32P-29	J34P-41	16.3	15.6	14.1	12.0	9.9	8.2	6.0								
		4AP	J32P-24	J34P-41					8.9	7.9	7.0	5.8	4.7	3.6	2.5				
		19AP	J32P-20	J34P-43											4.0	3.2	2.3	1.8	1.3
15LT2	1-1/2	15AP	J32P-33	J34P-41	20.0	18.5	17.0	13.6	10.4	7.6	5.0								
		2AP	J32P-26	J34P-41					10.6	9.2	8.0	6.0	4.5	3.7	3.0	2.2			
		23AP	J32P-20	J34P-44											4.3	3.5	2.7	2.4	2.0
DEEP WELL 3" SINGLE PIPE – 40 PSI																			
7LT2	3/4	17CP	J32P-29	J34P-44	12.8	11.5	10.2	8.9	7.6	6.1									
		18CP	J32P-24	J34P-44					7.8	6.9	6.0	5.3	4.5	3.6					
		16CP	Factory Installed										5.0	4.4	3.9	3.4	3.0	2.5	2.0
10LT2	1	7CP	J32P-32	J34P-41	17.8	16.2	14.6	13.0	11.4	9.6	7.7								
		9CP	J32P-26	J34P-41					10.7	9.8	9.0	7.9	6.7	5.8	5.0	4.1			
15LT2	1-1/2	10CP	J32P-38	J34P-45	21.7	19.7	17.9	15.9	14.0	11.0	8.0								
		9CP	J32P-26	J34P-41					11.1	10.8	10.6	9.7	8.9	7.5	6.5	5.5			
		19CP	Factory Installed	J34P-41											6.9	6.1	5.3	4.6	4.1
DEEP WELL 4" DOUBLE PIPE – 40 PSI																			
7LT2	3/4	CK2	J32P-29	J34P-44	12.8	11.5	10.2	8.9	7.6	6.1									
		CK2	J32P-24	J34P-44					7.8	6.9	6.0	5.3	4.5	3.6					
		15SD	Factory Installed										5.0	4.4	3.9	3.4	3.0	2.5	2.0
10LT2	1	CK3	J32P-32	J34P-41	17.8	16.2	14.6	13.0	11.4	9.6	7.7								
		CK3	J32P-26	J34P-41					10.7	9.8	9.0	7.9	6.7	5.8	5.0	4.1			
		CK1	J32P-20	J34P-43											5.0	4.5	3.9	3.5	3.0
15LT2	1-1/2	CK4	J32P-38	J34P-45	21.7	19.7	17.9	15.9	14.0	11.0	8.0								
		CK3	J32P-26	J34P-41					11.1	10.8	10.6	9.7	8.9	7.5	6.5	5.5			
		4SD	Factory Installed												6.9	6.1	5.3	4.6	4.1

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.

Jet Tank Packages



NSF/ANSI 61
Drinking Water

PRO-Source™ Water System Packages are handy and economical pump/tank packages for the professional contractor. The PRO-Source Water System Packages utilize the ProJet™ cast iron jet pumps and the dependable PRO-Source quality pressurized steel tanks. Plumbing connections are made using galvanized fittings and 3-ply nylon reinforced vinyl tubing with stainless steel hose clamps. Ideal for installations where there is limited space.

APPLICATIONS

- **Water systems, sprinkling and pressure boosting...** for homes, farms and cottages.

SPECIFICATIONS

Max. Liquid Temperature – 120˚F (49˚C)
Max. Inlet Pressure – 50 PSI
Pump Discharge PSI – Not to exceed 100 PSI

FEATURES

ProJet Jet Pumps

Body – Close-grained cast iron
Nozzle – High strength polycarbonate
Venturi – Polycarbonate
Impeller – Noryl®
Diffuser – Reinforced polypropylene
Shaft – 416 stainless steel
Base – Steel, 10 gauge

PRO-Source Pressurized Tanks

Shell – Heavy gauge steel
Base – High-impact composite; polypropylene
Finish – Baked-on polyester paint
Water Cell – PVC made from FDA listed material
Flange – Reinforced polypropylene
Connections – Galvanized
Tubing – 3-ply nylon reinforced vinyl with stainless steel hose clamps

ORDERING INFORMATION

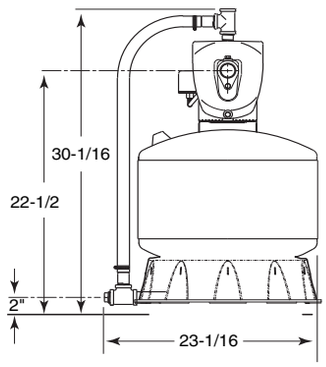
Jet/Tank Catalog Number	HP	Jet Pump Type	Pump Cat. No	Tank Cat. No.	Tank Style	Tank Capacity U.S. Gal.	Drawdown @30-50 PSI Switch Set.	Connection Size Female	Approx. Wt. Lbs.
5HNP42	1/2	Shallow Well	5HN	PS19S-T02	Vertical	19	5.8	1"NPT	120
5SNP42	1/2	Shallow Well	5SN	PS19S-T02	Vertical	19	5.8	1" NPT	120
5SLP42*	1/2	Deep Well	5SL	PS19S-T02	Vertical	19	5.8	1" NPT	127
7SLP42*	3/4	Deep Well	7SL	PS19S-T02	Vertical	19	5.8	1" NPT	130

*Shallow well/deep well jet package included.

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

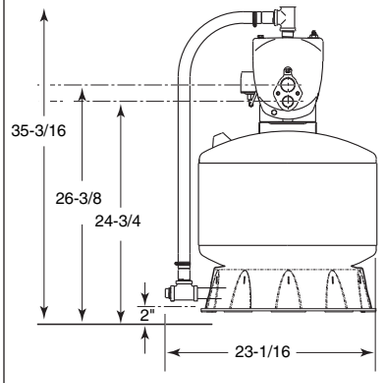
Jet Tank Packages

OUTLINE DIMENSIONS – SHALLOW WELL



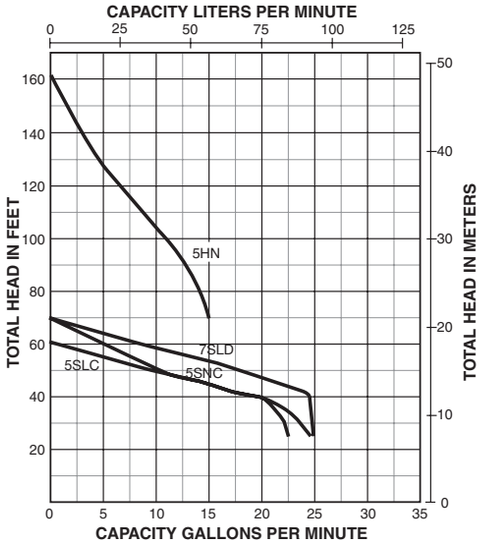
Dimensions (in inches) are for estimating purposes only.

OUTLINE DIMENSIONS – DEEP WELL



Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE



TANK DRAWDOWN *(In Gallons)*

Tank Catalog Number	Pressure Switch Setting		
	20-40	30-50	40-60
PS19S-T02	6.9	5.8	5.0

SHALLOW WELL PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

Catalog Number	HP	Total Suction Lift	Discharge Pressure (PSI)			Shut Off PSI
			30	40	50	
5SNC	1/2	5'	9.7	7.9	4.5	67
		10'	8.3	7.2	3.8	65
		15'	7.4	6.4	3.1	62
		20'	5.9	5.6	2.7	60
		25'	4.3	4.1	1.8	58

Catalog Number	HP	Disch. Pressure PSI	Dynamic Suction Lift					Shut-Off Pressure PSI
			5'	10'	15'	20'	25'	
5HN	1/2	30	15.0	13.0	11.6	8.7	6.9	70
		40	12.5	11.4	10.1	8.2	6.8	
		50	8.0	6.8	6.1	4.8	3.5	

NOTE: Pump will operate at all depths shown, with pressure switch set at 30-50 PSI. Pumps installed with Pro-Source™ tank require a 100 PSI relief valve.

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

Catalog Number	HP	Use Venturi/ Nozzle	Ejector Pkg.*	Shallow Well Jet Combinations					
				Total Suction Lift	Discharge Pressure (PSI)				Shut Off PSI
					30	40	50	60	
5SLC	1/2	N32P-66B	29SD	5'	9.0	7.9	4.1	–	61
		J34P-41		15'	7.2	6.3	3.3	–	56
				25'	4.7	4.1	2.1	–	52
7SLD	3/4	N32P-66B	29SD	5'	9.9	9.8	7.3	3.5	70
		J34P-41		15'	7.9	7.8	5.8	2.8	64
				25'	5.1	5.0	3.8	1.7	59

Catalog Number	HP	Use Venturi/ Nozzle	Ejector Pkg.*	Deep Well Jet Combinations							
				Discharge Pressure PSI	Discharge Pressure (PSI)						Shut Off Min. Depth
					30	40	50	60	70	80	
5SLC	1/2	J32P-24	4SD	30	7.3	5.8	4.5	3.3	2.3	–	68
		J34P-41		40	4.5	3.4	2.3	–	–	–	
7SLD	3/4	J32P-24	4SD	30	8.9	7.3	6.4	5.0	4.0	2.5	75
		J34P-41		40	6.5	5.1	4.0	3.0	1.8	0.8	

MS series

Vertical Multi-Stage Deep Well Jet Pumps



The MS Series Vertical Jet Pumps are the industry standard deep well jet pumps for over-the-well "bolt-on" installations.

The MS Series Jet Pumps include the pre-plumbed BERKELEY® external automatic regulator, pressure gauge, pressure switch, and a complete line of casing adapters to drive the 4" double pipe or 2" and 3" single pipe jet packages.

APPLICATIONS

- **Water systems and sprinkling...** for homes, farms and cottages.

SPECIFICATIONS

Body – Rugged cast iron

Pump and Motor Shaft – 416 stainless steel

Impellers – Noryl®

Diffuser – Close-grained cast iron

ORDERING INFORMATION

Cat. No.	HP	Description	Max. Press. Reg. Setting	Pipe Tapping Sizes			Motor Voltage	Approx. Wt. Lbs.
				Suct.	Drive	Disch.		
10MS	1	Base Mounted Pump	60 PSI	1-1/4"	1-1/4"	1"	115/230	73
15MS	1-1/2	Base Mounted Pump	85 PSI	1-1/4"	1-1/4"	1"	230	120
20MS	2	Base Mounted Pump	95 PSI	1-1/4"	1-1/4"	1"	230	125

ADAPTER FLANGE

Catalog Number	Description	Used With
J216-26	1-1/4" x 1"	Offset single pipe, 4" double pipe through 3/4 HP
J216-27	1-1/4" x 1-1/4"	4" double pipe 1, 1-1/2 and 2 HP

Order pump from ordering information table above. A Jet Package should be ordered with every Series MS Pump. All installations require an appropriate size adapter flange or casing adapter if bolt-on feature is desired.

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

FEATURES

Automatic Pressure Regulator – Faster-acting and quieter, design eliminates "hunting" for correct drive pressure. New improved stem and guide are precisely molded to assure efficient, trouble-free performance on all deep wells.

Quality Construction – Precision-machined, close-grained cast iron pump body and base are specially treated to resist corrosion.

Noryl® Impellers – Precision molded for perfect balance, and ultra-smooth for highest performance and efficiency.

Pressure Switch – High quality. Differential and cut-in/cut-out pressure settings are adjustable.

Motor Windings – Superior insulation materials protect against excessive moisture and contaminants to ensure prolonged motor life.

Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication for maximum protection.

Dustproof Cover – All electrical components are protected from dirt, dust and insects by a dustproof canopy. Ventilating air cannot contaminate vital switching components. This eliminates the most common cause of motor failure.

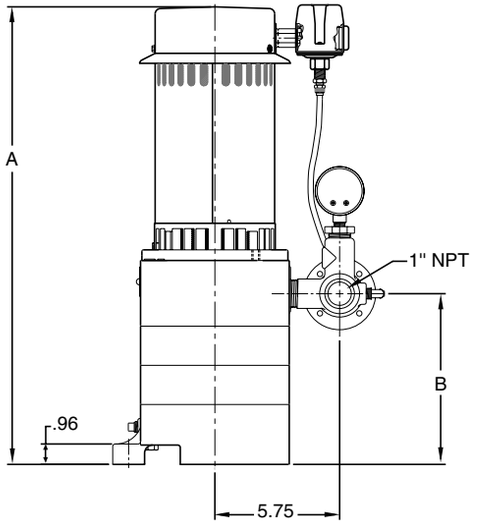
Balanced Rotor – Rotor is die cast under high pressures for uniform performance and greater efficiency; dynamically balanced.

Heavy-duty Ball Bearings – Permanently lubricated sealed bearings are extensively tested to ensure extended life and smooth, quiet operation.

Pump and Motor Shaft – One piece threaded shaft for positive impeller drive and alignment. Shaft is stainless steel for maximum corrosion resistance.

Vertical Multi-Stage Deep Well Jet Pumps

OUTLINE DIMENSION



Cat. No.	A	B
10MS	18.94	6.20
15MS	21.53	8.04
20MS	21.53	8.04

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

DEEP WELL (40 PSI) 4" DOUBLE PIPE

Cat. No.	HP	Jet No.	Uses Venturi	Uses Nozzle	Pumping Depth in Feet																			Max. Pump Shut Off Press. (PSI)	
					30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	180'	200'	220'	240'	260'	280'	300'	320'	Jet at Min. Depth	Jet at Max. Depth
10MS	1	23SD	J32P-24	J34P-42	12.1	11.7	11.6	11.1	10.2	9.2	7.8	6.4	5.0	4.0	3.0										120	76
		15SD	J32P-18	J34P-42	5.5	5.5	5.5	5.4	5.3	5.3	5.2	5.1	5.1	5.0	4.8	4.5	3.3	2.7	2.0	1.3	1.0				200	97
15MS	1-1/2	23SD	J32P-24	J34P-42	12.2	12.2	12.2	12.2	11.7	11.3	10.7	9.9	9.0	8.3	7.0	4.0	1.3								164	95
		15SD	J32P-18	J34P-42	5.5	5.5	5.5	5.5	5.5	5.5	5.3	5.3	5.2	5.1	5.1	5.0	4.8	4.7	4.5	4.3	4.0	3.3	2.7		314	172
20MS	2	23SD	J32P-24	J34P-42	12.2	12.2	12.2	12.2	11.8	11.3	11.2	11.1	11.0	10.0	8.7	7.0	4.0	2.0							195	110
		15SD	J32P-18	J34P-42	5.5	5.5	5.5	5.5	5.5	5.5	5.3	5.3	5.2	5.1	5.1	5.0	5.0	4.8	4.8	4.5	4.3	4.0	3.3	2.7	314	172

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.

Vertical Multi-Stage Deep Well Jet Pumps

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*
DEEP WELL (40 PSI) 2" SINGLE PIPE

Cat. No.	HP	Jet No.	Uses Venturi	Uses Nozzle	Pumping Depth to Water in Feet																Max. Pump Shut Off Press. (PSI)	
					30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	180'	200'	220'	240'	260'	Jet at Min. Depth	Jet at Max. Depth
10MS	1	12AP	J32P-24	J34P-42	12.1	11.3	11.2	10.0	8.8	7.6	6.5	5.6	3.3	1.8								118	80
		8AP	J32P-18	J34P-42	5.5	5.5	5.3	5.3	5.2	5.1	5.0	5.0	5.0	5.0	4.5	4.2	2.0					198	126
15MS	1-1/2	12AP	J32P-24	J34P-42	12.2	12.0	12.0	12.0	11.5	11.2	9.7	8.3	6.8	5.5	4.2	3.3						162	110
		8AP	J32P-18	J34P-42	5.5	5.5	5.5	5.5	5.5	5.3	5.2	5.1	5.0	5.0	5.0	4.8	4.3	3.5	2.7	1.7		266	158
20MS	2	12AP	J32P-24	J34P-42	12.2	12.0	12.0	12.0	11.7	11.2	11.0	10.3	8.3	7.5	6.3	5.3						193	139
		8AP	J32P-18	J34P-42	5.5	5.5	5.5	5.5	5.5	5.3	5.2	5.2	5.1	5.1	5.0	4.8	4.7	4.3	3.7	3.2	2.5	312	192

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*
DEEP WELL (40 PSI) 3" SINGLE PIPE

Cat. No.	HP	Jet No.	Uses Venturi	Uses Nozzle	Pumping Depth to Water in Feet																			Max. Pump Shut Off Press. (PSI)	
					30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	180'	200'	220'	240'	260'	280'	300'	320'	Jet at Min. Depth	Jet at Max. Depth
10MS	1	23CP	J32P-24	J34P-42	12.1	11.7	11.6	11.1	10.2	9.2	7.8	6.4	5.0	4.0	3.0										120	76
		16CP	J32P-18	J34P-42	5.5	5.5	5.5	5.4	5.3	5.3	5.2	5.1	5.1	5.0	4.8	4.5	3.3	2.7	2.0	1.3	1.0				200	97
15MS	1-1/2	23CP	J32P-24	J34P-42	12.2	12.2	12.2	12.2	11.7	11.3	10.7	9.9	9.0	8.3	7.0	4.0	1.3								164	95
		22CP	J32P-20	J34P-42	7.7	7.7	7.7	7.5	7.5	7.4	7.3	7.3	7.2	7.2	7.0	7.0	4.3	4.0	3.2	2.2					210	110
		16CP	J32P-18	J34P-42	5.5	5.5	5.5	5.5	5.5	5.5	5.3	5.2	5.2	5.1	5.0	5.0	4.9	4.7	4.0	3.8	3.0	2.3	1.7		268	132
20MS	2	23CP	J32P-24	J34P-42	12.2	12.2	12.2	12.2	11.8	11.3	11.2	11.1	11.0	10.0	8.7	7.0	4.0	2.0							195	110
		22CP	J32P-20	J34P-42	7.7	7.7	7.7	7.5	7.5	7.4	7.3	7.3	7.2	7.2	7.0	7.0	5.3	5.0	4.7	4.0	3.0	2.2			250	128
		16CP	J32P-18	J34P-42	5.5	5.5	5.5	5.5	5.5	5.5	5.3	5.3	5.2	5.1	5.1	5.0	5.0	4.8	4.7	4.5	4.3	4.0	3.3	2.7	314	172

Tested and rated in accordance with Water Systems Council Standards.

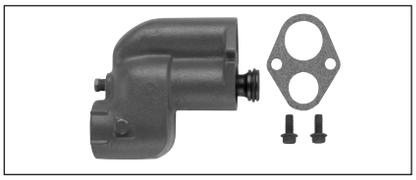
NOTE: Pumps installed with a PRO-Source™ tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

Jet Packages and Accessories

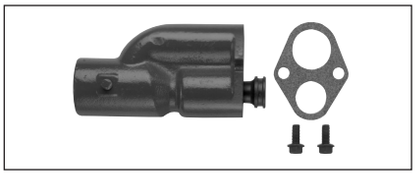
ORDERING INFORMATION

Package	Jet Number	Used With Pump Series
SHALLOW WELL WITH NOZZLE CLEAN-OUT		
PKG 1 - ☐☐S ▪ For all shallow well applications with nozzle clean-out	PKG 1-10S	SL, HL
	PKG 1-11S	SL, HL
	PKG 1-12S	SL, HL
	PKG 1-29S	SL, HL, LT2, FL
	PKG 1-60S	SL, HL
	PKG 1-CK1-S	SL, HL
	PKG 1-CK2-S	SL, HL
	PKG 1-CK3-S	SL, HL
SHALLOW WELL AND 4" DEEP WELL DOUBLE PIPE		
PKG 1 - ☐☐SD ▪ For shallow well applications ▪ For all 4" double pipe applications	PKG 1-4SD	SL, HL, FL, LT2
	PKG 1-10SD	SL, HL, FL, LT2
	PKG 1-11SD	SL, HL, FL, LT2
	PKG 1-12SD	SL, HL, FL, LT2
	PKG 1-15SD	SL, HL, FL, LT2
	PKG 1-23SD	MS, PL
	PKG 1-27SD	SL, HL, FL
	PKG 1-29SD	SL, HL, FL, LT2
	PKG 1-54SD	SL, HL, FL
	PKG 1-55SD	SL, HL, FL
	PKG 1-60SD	SL, HL
SHALLOW WELL AND 4" DEEP WELL DOUBLE PIPE - KITS		
PKG CK ☐ ▪ Same as SD jets above, with three (3) venturis	PKG CK1	SL, HL, LT2
	PKG CK2	SL, HL, LT2
	PKG CK3	SL, HL, LT2, FL
	PKG CK4	LT2
	PKG CK5	SL, HL, LT2
4" DEEP WELL DOUBLE PIPE WITH ACCESSORY PACKAGES		
PKG 2A - ☐☐SD	PKG 2A-4SD	SL, HL, FL, LT2
	PKG 2A-15SD	SL, HL, FL, LT2
	PKG 2A-23SD	MS, PL
	PKG 2A-54SD	SL, HL, FL
	PKG 2A-55SD	SL, HL, FL
PL SERIES PLASTIC SHALLOW WELL JET PACKAGES		
PKG 1 - ☐☐N ▪ For all shallow well applications	PKG 1-21N	PL
	PKG 1-22N	PL
	PKG 1-23N	PL
	PKG 1-24N	PL

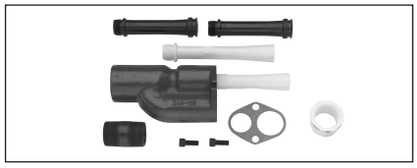
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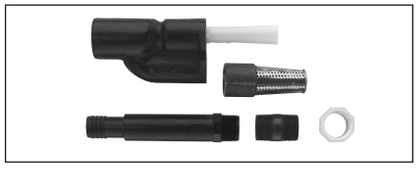
PKG 1- ☐☐ S
Shallow Well w/Nozzle Clean-out



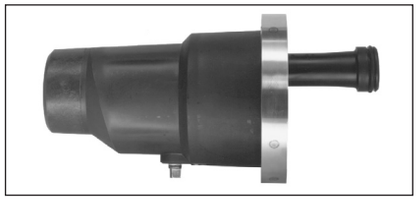
PKG 1- ☐☐ SD
Shallow Well & Deep Well



PKG CK ☐



PKG 2A- ☐☐ SD
Double Pipe

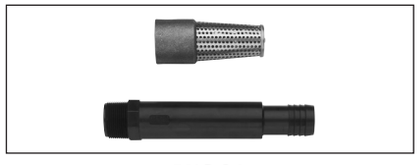


PKG 1- ☐☐ N
PL Shallow Well

ORDERING INFORMATION

ACCESSORY PACKAGE

Catalog Number	Description	Approx. Wt. Lbs.
PKG 2A	Poly Pipe and Foot Valve Kit	3



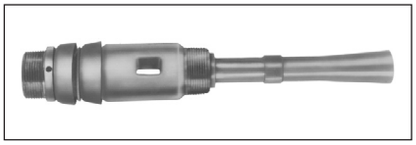
PKG 2A
Accessory Package

Jet Packages and Accessories

ORDERING INFORMATION *(Cont'd.)*

Package	Jet Number	Suction Tapping	Used With Pump Series
2" SINGLE PIPE*			
PKG 1-__ __ AP** **PKG 1-__ __ APB** **(4 lbs.)** ▪ Jet with built-in check valve ▪ For all 2" single pipe deep well applications	PKG 1-54 AP	1-1/4" M and 1" F	SL, HL, FL
	PKG 1-23 AP		LT2
	PKG 1-22 AP		LT2
	PKG 1-18 AP		LT2
	PKG 1-19 AP		LT2
	PKG 1-16 AP & APB		PL
	PKG 1-15 AP		PL, LT2
	PKG 1-14 AP		PL
	PKG 1-13 AP		PL, LT2
	PKG 1-12 AP & APB		MS
	PKG 1-10 AP & APB		SL, HL, PL
	PKG 1-9 AP & APB		SL, HL, PL
	PKG 1-8 AP & APB		SL, HL, PL, LT2, MS, FL
	PKG 1-7 AP & APB		LT2
	PKG 1-5 AP		LT2
	PKG 1-4 AP		LT2
	PKG 1-2 AP		LT2
3" SINGLE PIPE			
PKG 1__ __ CP** **(6 lbs.)** ▪ Jet with built-in check valve ▪ For all 3" single pipe deep well applications	PKG 1-57 CP	1-1/4" M and 1" F	SL, HL
	PKG 1-54 CP		SL, HL, FL
	PKG 1-26 CP		PL
	PKG 1-25 CP		PL
	PKG 1-23 CP		MS
	PKG 1-22 CP		LT2, MS
	PKG 1-19 CP		SL, HL, PL, LT2, FL
	PKG 1-18 CP		SL, HL, LT2
	PKG 1-17 CP		PL, LT2, MS,
	PKG 1-16 CP		SL, HL, LT2, MS, FL
	PKG 1-15 CP		PL
	PKG 1-11 CP		PL
	PKG 1-10 CP		PL, LT2
	PKG 1-9 CP		SL, HL, LT2, FL
	PKG 1-7 CP		LT2

*Order one (1) U11-1 turned coupling for each length of drop pipe.
**For casing adapter, please see following page.



PKG 1-__ __ AP
2" Single Pipe Cast Iron
or
PKG 1-__ __ APB
2" Single Pipe Brass
or
PKG 1-__ __ CP
3" Single Pipe

ORDERING INFORMATION

TURNED COUPLING

Catalog Number	Description	Approx. Wt. Lbs.
U11-1	Turned Coupling	1



Jet Packages and Accessories



Vertical – Straight Offset Casing Adapter



Vertical – Bolt-on Casing Adapter



Horizontal – Right Angle Casing Adapter Drive-Over-Suction



Horizontal – Right Angle Casing Adapter Suction-Over-Drive

ACCESSORIES			
Catalog Number	**Description**	**Approx. Wt. Lbs.**	**Use With Pump Series**
CASING ADAPTERS			
J216-13A	2" vertical – straight offset	6	General Usage
J216-14A	3" vertical – straight offset	8	General Usage
J216-21	2" vertical – bolt-on	6	MS
J216-23	3" vertical – bolt-on	7	MS
J216-16A	2" horizontal – right angle – drive-over-suction	7	FL, LT2
J216-18A	3" horizontal – right angle – drive-over-suction	9	FL, LT2
J37-4	Offset nipple	1	General Usage
J216-29B	2" concentric pipe – pitless adapter	6	MS
J216-42	2" concentric pipe – pitless adapter	6	FL, LT2
J216-44	2" horizontal right angle – suction-over-drive	7	SL, HL
FOOT VALVES			 **Foot Valves**
U212-28	3/4" foot valve and strainer	1	
U212-93	1" foot valve and strainer	1	
U212-94	1-1/4" foot valve and strainer	2	
U212-92	1-1/2" foot valve and strainer	3	
U212-16	2" foot valve and strainer	3	
PRESSURE REGULATOR			
PKG 107	Regulator, tubing, pipe plug and compression fitting	4	 **Pressure Regulator**
A JET PACKAGE SHOULD BE ORDERED WITH EVERY CONVERTIBLE OR DEEP WELL JET PUMP.			

Jet Packages and Accessories

ACCESSORIES *(Cont'd.)*		
AIR VOLUME CONTROLS		
Catalog Number	**Description**	**Approx. Wt. Lbs.**
U238-5A	AVC, 1/4" compression fitting for copper tube, nipple, instruction sheet	1
U238-5B	AVC, 1/4" compression fitting for plastic tube, nipple, instruction sheet	1
J238-10B	AVC, 1/4" plastic tubing, compression fittings, reducer bushing and instruction sheet	3
U238-4	AVC bulk. No fittings.	1
U238-5E	AVC boxed. No fittings or nipple.	1
U78-774P	Plastic AVC reducer bushing, 1-1/4" x 1/4"	1
TANK MOUNTING PACKAGES – PRO-Source™ TANKS		
PKG 111	For tank mounting PL and PN Series jet pumps	2
PKG 112	For tank mounting HN, SN, FN, HL, SL, and FL Series Jet Pumps	2
PKG 198	Jet Pump Mounting Bracket	3
PKG 207	Pump-to-Tank Fitting Package – all galvanized fittings	4
REVERSING ADAPTER		
PKG 108	Adapter, gasket, capscrews	4
PRESSURE GAUGES		
U239-2	Pressure gauge, bottom mount 1/4", 0-100 PSI	1
U239-3	Pressure gauge, bottom mount 1/8", 0-100 PSI	1
U239-3A	U239-3 with 1/4" x 1/8" reducer bushing	1
U239-8	Pressure gauge, bottom mount 1/4", 0-200 PSI	1
U78-107DT	Reducer bushing for U239-3 1/4" x 1/8"	1
U239-6	Compound gauge – press. & vac. 1/8"	1

PROSOURCE™ is a registered trademark of Pentair Water.



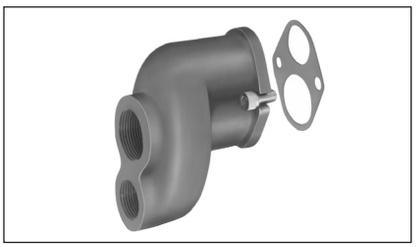
Air Volume Controls



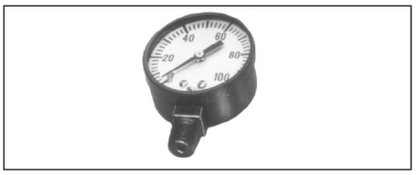
Reducer Bushing



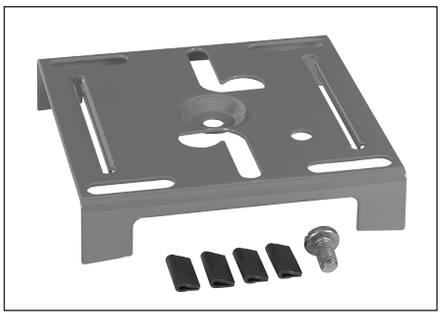
Tank Mounting Packages



Reversing Adapter

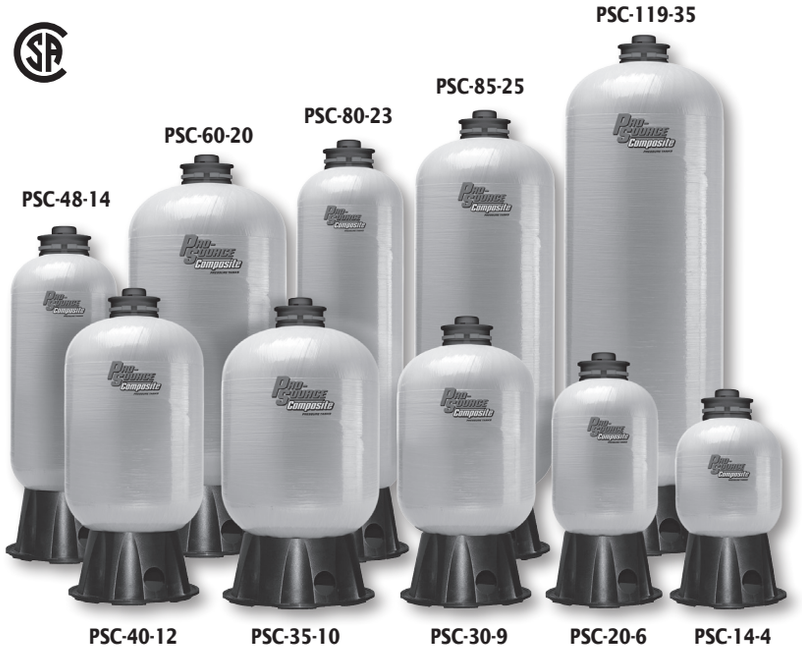


Pressure Gauge



PKG 198 Universal Jet Mounting Bracket

Fibrewound Pressure Tanks



NSF/ANSI 61
Drinking Water

Built Tough... for Quality –
Every PRO-Source™ Composite tank utilizes a durable, FDA approved air cell which is resistant to chlorine and will not promote taste or odor problems associated with iron bacteria that may be present in the water supply.

Built Tough... for Durability
Each tank is wrapped with more than three miles of over-lapping, continuous fiberglass strands, sealed with high grade epoxy resin, then oven cured. Tough composite construction means longer lasting tanks that will not rust, corrode, dent or scratch.

Built Tough... for Easy Installation and Service
Not only is composite construction tougher, it's also more lightweight... as little as half the weight of steel tanks. Installation is faster, easier and can be handled by one person. Repairable with the tank installed.

ORDERING INFORMATION

Catalog Number	Tank Capacity Gal./Liter	Tank Diameter Inch / cm	Tank Height Inch / cm	Discharge Tapping Inch / cm	Water Yield Per Pump Cycle Pressure Switch Setting		
					20-40 Gal./Liter	30-50 Gal./Liter	40-60 Gal./Liter
PSC-14-4	14 / 52.9	16 / 41	31.3 / 79.5	1 / 2.5	5.3 / 20.6	4.5 / 17.0	3.9 / 14.7
PSC-20-6	20 / 75.7	16 / 41	36.3 / 92.2	1 / 2.5	7.2 / 27.2	6.1 / 23.0	5.3 / 20.0
PSC-30-9	30 / 113.5	16 / 41	48.3 / 122.7	1 / 2.5	10.8 / 40.8	9.1 / 34.4	7.9 / 29.9
PSC-35-10	35 / 132.4	21 / 53	37 / 93.9	1.25 / 3.1	12.8 / 48.4	10.8 / 40.8	9.4 / 35.5
PSC-40-12	40 / 151.4	16 / 41	61.3 / 155.7	1 / 2.5	14.7 / 55.6	12.5 / 47.3	10.8 / 40.8
PSC-48-14	48 / 181.6	21 / 53	44 / 111.7	1.25 / 3.1	17.2 / 65.1	14.6 / 55.2	12.6 / 47.6
PSC-60-20	60 / 227.1	24 / 61	46.5 / 118.2	1.25 / 3.1	21.9 / 82.9	18.5 / 70.0	16.1 / 60.9
PSC-80-23	80 / 302.8	21 / 53	66 / 167.6	1.25 / 3.1	29.1 / 110.1	24.6 / 93.1	21.3 / 80.6
PSC-85-25	85 / 321.7	24 / 61	58.5 / 148.7	1.25 / 3.1	31.7 / 119.9	26.8 / 101.4	23.2 / 87.8
PSC-119-35	119 / 450.4	24 / 61	78.5 / 199.5	1.25 / 3.1	43.8 / 165.8	37.0 / 140.0	32.0 / 121.1

Maximum Operating Pressure = 125 PSI
Maximum Internal Water Temperature: 120ºF (49ºC)
Maximum Ambient Air Temperature: 120˚F (49ºC)
Distance from base to center line of connection is 2" (5.0 cm). Allow 12" (30.5 cm)

Certified to ANSI/NSF 61, Drinking Water System Components
PRO-Source™ and PRO-Source PLUS™ are trademarks of Pentair Water.
In order to provide the best products possible, specifications are subject to change.

Fibrewound Pressure Tanks

APPLICATIONS

- **Use wherever pressurized tanks are needed in water systems applications.**

SPECIFICATIONS

Inner Liner – One-piece high-density polyethylene

Outer Shell – Fiberglass-wound, oven-cured, and epoxy resin sealed

Exclusive Air Cell – Heavy gauge butyl, meets Water Quality Association standards

Base – Rotatable base with quick connect

Service Connection – Stainless steel, 300 grade

FEATURES

Durable Composite Construction – A rugged one-piece molded, inner-liner of premium high-density polyethylene.

- Miles of continuous overlapping fiberglass strands, sealed with oven cured epoxy make the outer-shell impervious to rust, dents, and ultra-violet rays (no paint to scratch and touch-up).

Air Cell – The air cell is molded from durable and extensively tested butyl.

- Butyl is resistant to chlorine.
- Butyl will not support iron bacteria growth that may be present in the water supply.
- PRO-Source Composite Fibrewound Pressure Tank assembly is classified to ANSI/NSF Standard 61 for water system components.

Tank Base – Rigid molded ABS is the sturdiest composite base on the market. Corrosion- and impact-resistant. Base rotates 360° for ease-of-service hook-up.

Replaceable Air Cell – With the tank installed! Air cell access is via a top mount design. Generous and accessible air cell opening facilitates easy removable and re-installation of replacement air cell (with the professional contractor in mind).

Stainless Steel Service Connection – 300 grade, the professional's choice

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

TANK SIZING RULE:

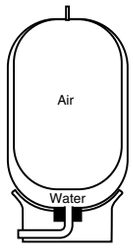
Size tank for one gallon of drawdown for each gallon per minute at pump capacity.

EXAMPLE: *For a 1 HP, 20 GPM unit pumping 20 gallons per minute on a 30-50 pressure switch setting, the properly sized PRO-Source PLUS™ tank is a PSP-FW85-25, which has a 25.1 gallon drawdown.*

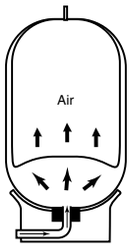
Fibrewound Pressure Tanks

OPERATING CYCLE

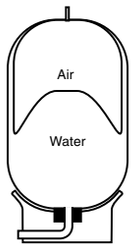
1. **PRO-Source™ Composite tank is nearly empty –** air cell is fully expanded



2. **Water is pumped into tank –** air in cell is compressed



3. **Pump-up cycle is complete –** air is now compressed to "cut off" setting of pressure switch



4. **Water is drawn from tank –** pressure in air cell provides water as needed, until tank is empty and cycle repeats

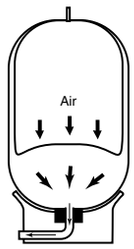


CHART A

TANK SELECTION CHART

Pump GPM	System Pressure Switch Setting – PSI					
	20-40		30-50		40-60	
	Run Times					
	1 Minute	2 Minute	1 Minute	2 Minute	1 Minute	2 Minute
5	PSC-20-6	PSC-35-10	PSC-20-6	PSC-35-10	PSC-20-6	PSC-35-10
7.5	PSC-30-9	PSC-48-14	PSC-30-9	PSC-48-14	PSC-30-9	PSC-60-20
10	PSC-35-10	PSC-60-20	PSC-35-10	PSC-60-20	PSC-40-12	PSC-85-25
12.5	PSC-40-12	PSC-60-20	PSC-48-14	PSC-85-25	PSC-48-14	PSC-85-25
15	PSC-48-14	PSC-85-25	PSC-60-20	PSC-119-35	PSC-60-20	PSC-119-35
20	PSC-60-20	PSC-119-35	PSC-85-25	PSC-85-25	PSC85-35	PSC-85-25 (2)
30	PSC-85-25	PSC-85-25 (2)	PSC-119-35	PSC-119-35 (2)	PSC-119-35 (2)	PSC-119-35 (2)
50	PSC-85-25 (2)	PSC-119-35 (3)	PSC-85-25 (2)	PSC-119-35 (3)	PSC-119-35 (2)	PSC-119-35 (3)

NOTE: Drawdown will be affected by operating temperature of the system, accuracy of the pressure switch and gauge, the actual precharge pressure, and rate of fill.

CHART B

DRAWDOWN VOLUME MULTIPLIER* (APPROXIMATE)

Pump Off Pressure PSI	Pump Start Pressure – PSI							
	10	20	30	40	50	60	70	80
20	0.26							
30	0.41	0.22						
40		0.37	0.18					
50		0.46	0.31	0.15				
60			0.40	0.27	0.13			
70			0.47	0.35	0.24	0.12		
80				0.42	0.32	0.21	0.11	
90				0.48	0.38	0.29	0.19	0.10
100					0.44	0.35	0.26	0.17

*Utilize this chart if proper selection cannot be made using tank selection chart. Drawdown based on Boyle's Law.

Procedure:

1. Identify drawdown multiplier relating to specific application.
2. Insert multiplier (X) into the following formula:

$$\frac{\text{Pump GPM x Min Run Time}}{\text{Multiplier (X)}} = \text{Minimum Tank Capacity Required}$$

3. Refer to "Ordering Information" Table – Max. Capacity Gals.

Fibrewound Tanks contact & sideport contact



NSF/ANSI 61
Drinking Water

Built Tough... for Quality
Professional grade composite construction means longer lasting tanks that will not rust, corrode, dent or scratch.

Built Tough... for Durability
Each tank is wrapped with more than three miles of over-lapping, continuous fiberglass strands, sealed with high grade epoxy resin, then oven cured.

Built Tough... for Easy Installation
Composite construction is light-weight... as little as half the weight of steel tanks. Installation is faster, easier and can be handled by one person.

APPLICATIONS
- **Residential Water Systems**
- **Industrial, Commercial and Agricultural**

SPECIFICATIONS
Inner Liner – One-piece high-density polyethylene

Outer Shell – Fiberglass-wound and epoxy resin sealed

Upper and Lower Flanges – Reinforced polypropylene

Base – One-piece ABS

Service Connections – Reinforced polypropylene

FEATURES
Durable Composite Construction – A rugged one-piece molded inner liner of premium high-density polyethylene. Miles of continuous overlapping fiberglass strands, sealed with oven-cured epoxy, make the outer shell impervious to rust, dents, and ultra-violet rays (no paint to scratch and touch-up).

Tank Base – Rigid ABS is the sturdiest composite base on the market. Corrosion and impact-resistant. Base rotates 360° for ease-of-service hook-up.

Composite Service Connection – Threaded for ease of installation.

ORDERING INFORMATION

FCT SERIES CONTACT TANKS

Catalog Number	Maximum Capacity Gal. / Liter	Maximum Operating Pressure PSI / kPa / Bar	Diameter Inch / cm	Overall Height Inch / cm	Height Inlet / Outlet to Floor Inch / cm	Top System Connection	Bottom System Connection	Assembly Weight Lbs. / kg
FCT-40	40 / 151	75 / 500 / 5.0	16 / 41	56.5 / 144	1.5 / 3.8	1-1/4" Socket	1-1/4" Socket	28 / 12.7
FCT-80	80 / 303	75 / 500 / 5.0	21 / 53	62 / 157	2 / 5.1	1-1/4" Socket	1-1/4" Socket	43 / 19.5
FCT-120	120 / 454	75 / 500 / 5.0	24 / 61	72.5 / 184	2 / 5.1	1-1/4" Socket	1-1/4" Socket	63 / 28.6

Maximum external operating temperature 120ºF (49ºC).
Maximum internal operating temperature 100ºF (38ºC).
Minimum operating temperature 40ºF (4ºC).

Certified to ANSI/NSF 61, Drinking Water System Components.
In order to provide the best products possible, specifications are subject to change.
PRO-Source™ is a trademark of Pentair Water.

Fibrewound Tanks contact & sideport contact

ORDERING INFORMATION

SP SERIES SIDEPORT CONTACT TANKS

Catalog Number	Maximum Capacity Gal. / Liter	Drawdown 30-50 Setting Gallons / Liters	Diameter Inch / cm	Overall Height Inch / cm	Height* Inlet / Outlet to Floor Inch / cm	Height SidePort to Floor Inch / cm	Unit Ship Weight Lbs. / kg
SP-7	30 / 114	7 / 26	16 / 41	43.75 / 111	1.5 / 3.8	14 / 35.6	26 / 11.8
SP-9	40 / 151	9 / 34	16 / 41	56.5 / 144	1.5 / 3.8	15.5 / 39.4	35 / 15.9
SP-9SQ	47 / 178	9 / 34	21 / 53	41.25 / 105	2 / 5.1	16.9 / 42.9	48 / 21.8
SP-18	80 / 303	18 / 67	21 / 53	62 / 157	2 / 5.1	18.3 / 46.5	67 / 30.5
SP-26	120 / 454	26 / 98	24 / 61	72.5 / 184	2 / 5.1	20.2 / 51.3	97 / 44.1
SP-35	205 / 776	35 / 132	36 / 91	73 / 185	7 / 17.8	31.5 / 80.0	290 / 131.8
SP-50	264 / 999	50 / 189	36 / 91	82 / 208	7 / 17.8	31.5 / 80.0	300 / 136.4

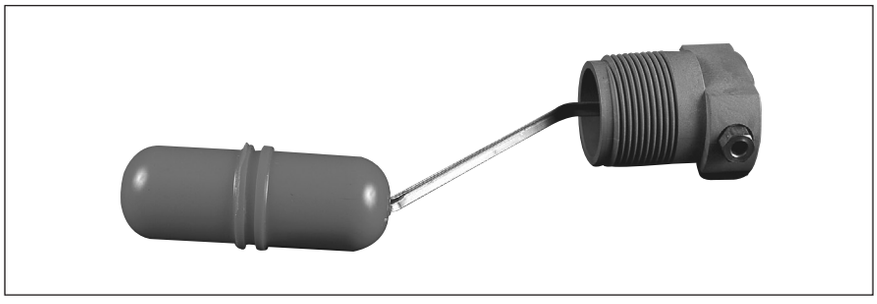
Maximum Operating Pressure = 100 PSI
1-1/4" System connections sidewall. Customer-supplied air control valve. Bottom, dual port 1-1/4" PVC.

TANK SELECTION CHART

Pump GPM	System Pressure Switch Setting – PSI		
	20-40	30-50	40-60
	1 Minute Run Time		
5	FCT-40	FCT-40	FCT-40
7.5	FCT-80	FCT-80	FCT-80
10	FCT-80	FCT-80	FCT-80
15	FCT-120	FCT-120	FCT-120
20	FCT-120	FCT-120 and FW-40	FCT-120 and FW-40
30	FCT-120 and FCT-80	FCT-120 (2)	FCT-120 (2) and FCT-40
50	FCT-120 (3)	FCT-120 (3)	FCT-120 (4)

TANK SIZING RULE:

Size tank for one gallon of drawdown for each gallon per minute at pump capacity.



E238-2 Air Volume Control (not included)

Premium Steel Pressurized Tanks



NSF/ANSI 61
Drinking Water

APPLICATIONS

- **Residential Water Systems**
- **Industrial, Commercial and Agricultural**

SPECIFICATIONS

Shell – Heavy gauge steel

Base – High-impact composite, ABS

Finish – Electrostatically applied, baked-on polyester paint

Water Cell – One piece seamless PVC, made from FDA listed material

Flange – 304SS

Service Connection – NPT threads, integral to flange

Air Valve – Nickel-plated brass, threaded for ease of service

☑ ***Stainless Steel Service Connection*** *– "The Professional's Choice"*

☑ ***Metal Air Valve Assembly*** *– "Field-Serviceable"*

☑ ***125 PSI Maximum Operating Pressure*** *– Four Sizes: PSP50, PSP62, PSP85 and PSP119*

PRO-Source PLUS™ is a trademark of Pentair Water.

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

ORDERING INFORMATION

Catalog Number	Maximum Capacity gal/liter	Diameter* inch/cm	Height* inch/cm	Precharge PSI/kPa	Connection Size Female	Drawdown in Gallons/Liter			Weight lbs/kg	Maximum Operating PSI
						20-40	30-50	40-60		
VERTICAL MODELS										
PSP19S-T02	**19** / 72	**20** / 51	**21** / 53.3	**40** / 276	1" NPT	**6.9** / 26.1	**5.8** / 21.9	**5.0** / 18.9	**49** / 22.2	100
PSP19T-T02	**19** / 72	**16** / 40.6	**27.5** / 70	**40** / 276	1" NPT	**6.9** / 26.1	**5.8** / 21.9	**5.0** / 18.9	**44** / 20.0	100
PSP32-T03	**32** / 121	**16** / 40.6	**43** / 109	**40** / 276	1" NPT	**11.6** / 43.9	**9.8** / 37.1	**8.5** / 32.2	**60** / 27.2	100
PSP35-T05	**35** / 133	**20** / 51	**33** / 84	**40** / 276	1" NPT	**12.7** / 48.1	**10.7** / 40.5	**9.3** / 35.2	**70** / 31.8	100
PSP50-T50	**50** / 189	**24** / 61	**32.5** / 83	**40** / 276	1-1/4" NPT	**18.3** / 69.3	**15.5** / 58.7	**13.4** / 50.7	**88** / 39.9	125
PSP62-T51	**62** / 235	**24** / 61	**39.5** / 100	**40** / 276	1-1/4" NPT	**21.4** / 81.0	**18.3** / 69.3	**16.0** / 60.6	**116** / 52.6	125
PSP85-T52	**85** / 322	**24** / 61	**51** / 130	**40** / 276	1-1/4" NPT	**30** / 113.6	**26** / 98.4	**22** / 83.3	**128** / 58.1	125
PSP119-TR50	**119** / 450	**24** / 61	**68** / 173	**40** / 276	1-1/4" NPT	**41.3** / 156.3	**35.4** / 134.0	**31.0** / 117.3	**140** / 63.5	125

*Subject to change without notice.

Maximum Liquid Temperature:120°F (49°C) Maximum External (Ambient) Temperature:125°F (52°C)

Premium Steel Pressurized Tanks

FEATURES

Service Connection – 304 stainless steel.

Air Valve – Nickel-plated brass.

Maximum Operating Pressure – 100 PSI on 16" and 20" tanks; 125 PSI on 24" tanks.

Heavy Gauge Metal Construction – Sturdy "welded wrapper and head design." Built to last.

Polyester Paint Finish – Electrostatically powder painted, then oven baked for a smooth high-gloss, appliance-quality finish. Resists corrosion.

Elongated, Seamless Water Cell –
– Controlled 2-dimensional cell expansion.
– Rugged, seamless "water cell" prevents the most common cause of pump failure – "waterlogging"
– Water never touches the steel tank material.
– Translucent bag material facilitates manufacturing quality control inspection.

NEW Stainless Service Connection –
– Corrosion-resistant.
– Stainless steel – the professional's choice.

Integral Stand Pipe – Promotes complete flushing of the water entering/exiting the tank.

Nitrogen-Rich Precharge – Decreases air permeation three to four times over straight air precharge.

40 PSI Precharge – Ready for use with 40/60 pressure range systems. Enables installer to reduce pressure depending on pressure switch setting.

Sturdy Base – Tested-tough composite construction.

TANK SIZING RULE:

Size tank for one gallon of drawdown for each gallon per minute at pump capacity.

EXAMPLE: *For a 1 HP, 20 GPM unit pumping 20 gallons per minute on a 30-50 pressure switch setting, the properly sized PRO-Source PLUS™ tank is a PSP85-T52 which has a 26 gallon drawdown.*

CHART A – TANK SELECTION CHART

Pump GPM	System Pressure Switch Setting – PSI					
	20-40		30-50		40-60	
	Run Times					
	1 Minute	2 Minute	1 Minute	2 Minute	1 Minute	2 Minute
5	PSP19T	PSP32	PSP19T	PSP35	PSP19T	PSP35
7-1/2	PSP32	PSP35	PSP32	PSP50	PSP32	PSP62
10	PSP32	PSP62	PSP35	PSP62	PSP35	PSP85
12-1/2	PSP35	PSP62	PSP50	PSP85	PSP50	PSP85
15	PSP50	PSP85	PSP50	PSP50 (2)	PSP62	PSP62 (2)
20	PSP62	PSP62 (2)	PSP62	PSP62 (2)	PSP85	PSP85 (2)
30	PSP85	PSP85 (2)	PSP50 (2)	PSP85 (2)	PSP200 (2)	PSP85 (3)
50	PSP62 + PSP85	PSP85 (3)	PSP85 (2)	PSP85 (4)	PSP85 (2)	PSP85 (5)
50	–	PSP119 (2) + PSP62	–	PSP119 (3)	PSP119 (2)	PSP119 (4)

NOTE: Drawdown will be affected by operating temperature of the system, accuracy of the pressure switch and gauge, the actual precharge pressure, and rate of fill.

Pumps installed with a PRO-Source PLUS™ tank require a relief valve equal to the tank's maximum operating pressure. Relief valve must be capable of relieving entire flow of pump at relief pressure.

CHART B – DRAWDOWN VOLUME MULTIPLIER* (APPROX.)

Pump Off Pressure PSI	Pump Start Pressure – PSI							
	10	20	30	40	50	60	70	80
20	0.26							
30	0.41	0.22						
40		0.37	0.18					
50		0.46	0.31	0.15				
60			0.40	0.27	0.13			
70			0.47	0.35	0.24	0.12		
80				0.42	0.32	0.21	0.11	
90				0.48	0.38	0.29	0.19	0.10
100					0.44	0.35	0.26	0.17

*Utilize this chart if proper selection cannot be made using Chart A. Drawdown based on Boyle's Law.

Procedure: 1. Identify drawdown multiplier relating to specific application.
2. Insert multiplier (X) into the following formula:

$$\frac{\text{Pump GPM x Min Run Time}}{\text{Multiplier (X)}} = \text{Minimum Tank Capacity Required}$$

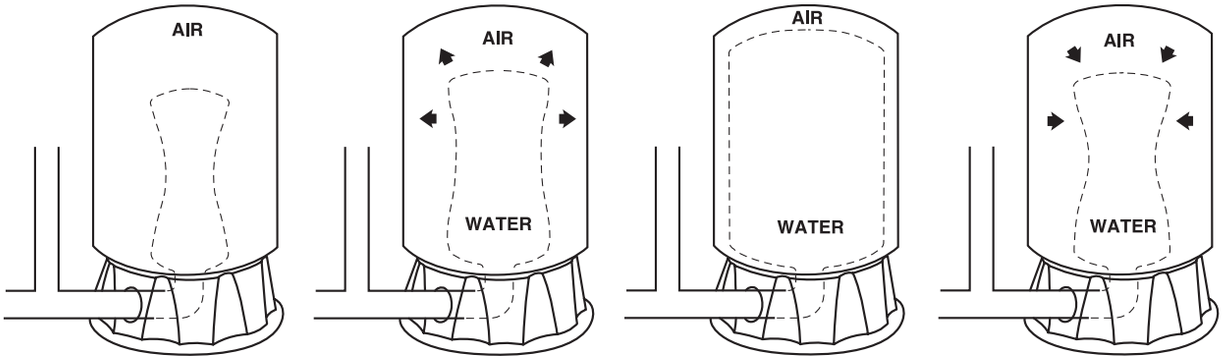
Example: An example of a 20 GPM pump with a minimum run time of 1 minute, installed on a 50 - 70 PSIG system pressure range:

$$\frac{\text{20 GPM x 1 minute}}{\text{.24 (factor) from Chart B}} = \text{83.3 minimum U.S. gal tank capacity required}$$

Referring to "Ordering Information" chart, the model PSP85-T52 has the closest U.S. gallon capacity that is greater or equal to the minimum volume requirement of 83.3 U.S. gallons.

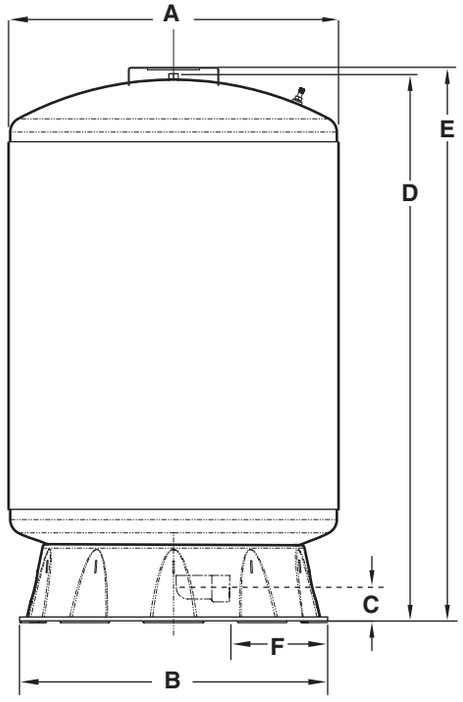
Premium Steel Pressurized Tanks

OPERATING CYCLE



1. **Separator is completely empty –** A new cycle is ready to begin. Simple, positive action produces maximum drawdown on every cycle.
2. **Water begins to enter the tank –** Air is compressed around the water separator as it fills with water.
3. **Pump up cycle completed –** Air is now compressed to the cut-off setting of pressure switch.
4. **Water is being drawn from the tank –** Compressed air in the tank forces water out of the separator.

OUTLINE DIMENSIONS



Catalog Number	Discharge NPT	A	B	C	D	E	F
PSP19T-T02	1"	16.1	15.5	2.0	27.8	–	3.9
PSP32-T02	1"	16.1	15.5	2.0	43.0	–	2.3
PSP19S-T02	1"	20.1	15.5	2.0	–	21.5	2.3
PSP35-T05	1"	20.1	15.5	2.0	33.0	–	2.3
PSP50-T50	1-1/4"	24.1	22.7	2.5	33.2	–	5.5
PSP62-T51	1-1/4"	24.1	22.7	2.5	40.1	–	5.5
PSP85-T52	1-1/4"	24.1	22.7	2.5	51.5	–	5.5
PSP119-TR50	1-1/4"	24.1	22.7	2.5	68.6	–	5.5

Dimensions (in inches) are for estimating purposes only.

Steel Pressurized Tanks



NSF/ANSI 61
Drinking Water

APPLICATIONS

- **Use wherever pressurized tanks are needed in water systems applications.**

SPECIFICATIONS

Shell – Heavy gauge steel

Base – High-impact composite, ABS

Finish – Electrostatically applied, baked-on polyester paint

Water Cell – One piece seamless PVC, made from FDA listed material

Flange – Reinforced polypropylene

Service Connection – Reinforced polypropylene integral to flange

Air Valve – Rubber stem/brass body Schrader valve assembly

UV Valve Cover – High density polyethylene

ORDERING INFORMATION

Catalog Number	Maximum Capacity gal/liter	Diameter* inch/cm	Height* inch/cm	Length inch/cm	Precharge PSI/kPa	Connection Size Female	Drawdown in Gallons/Liter			Weight lbs/kg
							20-40	30-50	40-60	
VERTICAL MODELS										
PS6-S02	**6.0** / 22.7	**12** / 30.5	**16.1** / 40.9	–	**40** / 276	3/4" NPT	**2.2** / 8.3	**1.8** / 6.8	**1.6** / 6.0	**18** / 8.2
PS19S-T02	**19** / 72	**16** / 40.6	**21** / 53.3	–	**40** / 276	1" NPT	**6.9** / 26.1	**5.8** / 21.9	**5.0** / 18.9	**45** / 20.4
PS19T-T02	**19** / 72	**16** / 40.6	**27.5** / 70	–	**40** / 276	1" NPT	**6.9** / 26.1	**5.8** / 21.9	**5.0** / 18.9	**40** / 18.1
PS32-T03	**32** / 122	**20** / 51	**43** / 109	–	**40** / 276	1" NPT	**11.6** / 43.9	**9.8** / 37.1	**8.5** / 32.2	**56** / 25.4
PS35-T05	**35** / 133	**16** / 40.6	**33** / 84	–	**40** / 276	1" NPT	**12.7** / 48.1	**10.7** / 40.5	**9.3** / 35.2	**66** / 29.9
PS50-T50	**50** / 189	**20** / 51	**32.5** / 83	–	**40** / 276	1-1/4" NPT	**18.3** / 69.3	**15.5** / 58.7	**13.4** / 50.7	**84** / 38.1
PS62-T51	**62** / 235	**24** / 61	**39.5** / 100	–	**40** / 276	1-1/4" NPT	**21.4** / 81.0	**18.3** / 69.3	**16.0** / 60.6	**112** / 50.8
PS85-T52	**85** / 322	**24** / 61	**51** / 130	–	**40** / 276	1-1/4" NPT	**30** / 113.6	**26** / 98.4	**22** / 83.3	**124** / 56.2
PS119-TR50	**119** / 450	**24** / 61	**68** / 173	–	**40** / 276	1-1/4" NPT	**41.3** / 156.3	**35.4** / 134.0	**31.0** / 117.3	**140**/ 63.5
IN-LINE VERTICAL MODELS										
PS2-S01	**2.0** / 7.6	**8.4** / 21.3	**12.6** / 32.0	–	**20** / 137.8	3/4" NPTM	**0.7** / 2.65	**0.6** / 2.2	NA	**12.6** / 5.7
PS5-S02	**5.0** / 18.9	**10.6** / 26.9	**16.2** / 41.1	–	**30** / 206.8	3/4" NPTM	**2.2** / 8.33	**1.8** / 6.8	**1.8** / 6.8	**16.2** / 7.3
HORIZONTAL MODELS										
PS6H-S05	**6.0** / 22.7	**12** / 30.5	**13.8** / 35.0	**16** / 40.6	**40** / 276	3/4" NPT	**2.2** / 8.3	**1.8** / 6.8	**1.6** / 6.0	**22** / 10
PS19H-S00	**19** / 72	**16** / 40.6	**17.5** / 44.5	**28** / 71.1	**40** / 276	1" NPT	**6.9** / 26.1	**5.8** / 21.9	**5.0** / 18.9	**40** / 18

*Subject to change without notice.
Maximum Liquid Temperature: 120˚F (49˚C)
Maximum Operating Pressure = 100 PSI
Maximum External (Ambient) Temperature: 125˚F (52˚C)

PRO-Source™ is a trademark of Pentair Water.

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

Steel Pressurized Tanks

FEATURES

Heavy Gauge Metal Construction – Sturdy "welded wrapper and head design." Built to last.

Polyester Paint Finish – Electrostatically powder painted, then oven baked for a smooth high-gloss, appliance-quality finish. Resists corrosion.

Elongated, Seamless Water Cell –
- Controlled 2-dimensional cell expansion.
- Rugged, seamless "water cell" prevents the most common cause of pump failure – "waterlogging."
- Water never touches the steel tank material.
- Translucent bag material facilitates manufacturing quality control inspection.

Composite Sealing Flange –
- Corrosion-resistant.
- Integral o-ring groove better traps the water cell's sealing ring.
- Reinforcing ribs strengthen and maintain a flat smooth sealing surface.

Integral Stand Pipe – Keeps the water cell standing erect, promoting complete flushing of the water entering/exiting the tank.

Nitrogen-Rich Precharge – Decreases air permeation three to four times over straight air precharge.

40 PSI Precharge – Ready for use with 40/60 pressure range systems. Enables installer to reduce pressure depending on pressure switch setting.

Sturdy Base – Tested-tough composite construction.

TANK SIZING RULE:

Size tank for one gallon of drawdown for each gallon per minute at pump capacity.

EXAMPLE: *For a 1 HP, 20 GPM unit pumping 20 gallons per minute on a 30-50 pressure switch setting, the properly sized PRO-Source™ tank is a PS85-T52 which has a 26 gallon drawdown.*

CHART A – TANK SELECTION CHART

Pump GPM	System Pressure Switch Setting – PSI					
	20-40		30-50		40-60	
	Run Times					
	1 Minute	2 Minute	1 Minute	2 Minute	1 Minute	2 Minute
5	PS19T	PS32	PS19T	PS35	PS19T	PS35
7-1/2	PS32	PS35	PS32	PS50	PS32	PS62
10	PS32	PS62	PS35	PS62	PS35	PS85
12-1/2	PS35	PS62	PS50	PS85	PS50	PS85
15	PS50	PS85	PS50	PS50 (2)	PS62	PS62 (2)
20	PS62	PS62 (2)	PS62	PS62 (2)	PS85	PS85 (2)
30	PS285	PS85 (2)	PS50 (2)	PS85 (2)	PS62 (2)	PS85 (3)
30	–	–	PS119	PS119 + PS85	PS119	PS119 (2)
50	PS62 + PS85	PS85 (3)	PS85 (2)	PS85 (4)	PS85 (2)	PS85 (5)
50	–	PS119 (2) + PS62	–	PS119 (3)	PS119 (2)	PS119 (4)

NOTE: Drawdown will be affected by operating temperature of the system, accuracy of the pressure switch and gauge, the actual precharge pressure, and rate of fill.

Pumps installed with a PRO-Source™ tank require a 100 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

CHART B – DRAWDOWN VOLUME MULTIPLIER* (APPROX.)

Pump Off Pressure PSI	Pump Start Pressure – PSI							
	10	20	30	40	50	60	70	80
20	0.26							
30	0.41	0.22						
40		0.37	0.18					
50		0.46	0.31	0.15				
60			0.40	0.27	0.13			
70			0.47	0.35	0.24	0.12		
80				0.42	0.32	0.21	0.11	
90				0.48	0.38	0.29	0.19	0.10
100					0.44	0.35	0.26	0.17

*Utilize this chart if proper selection cannot be made using Chart A. Drawdown based on Boyle's Law.

Procedure: 1. Identify drawdown multiplier relating to specific application.
2. Insert multiplier (X) into the following formula:

$$\frac{\text{Pump GPM x Min Run Time}}{\text{Multiplier (X)}} = \text{Minimum Tank Capacity Required}$$

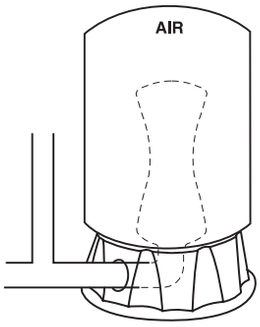
Example: An example of a 20 GPM pump with a minimum run time of 1 minute, installed on a 50 - 70 PSIG system pressure range:

$$\frac{\text{20 GPM x 1 minute}}{\text{.24 (factor) from Chart B}} = \text{83.3 minimum U.S. gal. tank capacity required}$$

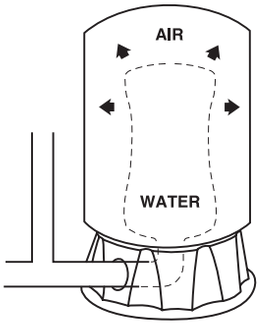
Referring to "Ordering Information" chart, the model PS85-T52 has the closest U.S. gallon capacity that is greater or equal to the minimum volume requirement of 83.3 U.S. gallons.

Steel Pressurized Tanks

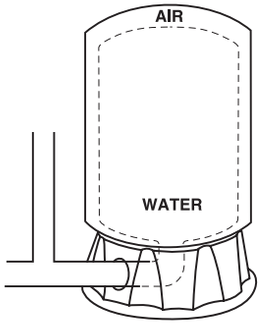
OPERATING CYCLE



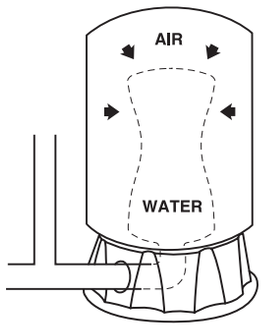
1. Separator is completely empty – A new cycle is ready to begin. Simple, positive action produces maximum drawdown on every cycle.



2. Water begins to enter the tank – Air is compressed around the water separator as it fills with water.

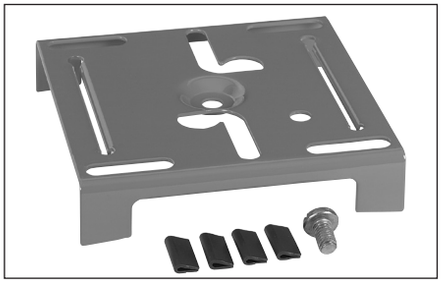


3. Pump up cycle completed – Air is now compressed to the cut-off setting of pressure switch.



4. Water is being drawn from the tank – Compressed air in the tank forces water out of the separator.

ACCESSORIES



PKG 198
Universal Jet
Mounting
Bracket



PKG 111,
PKG 112 or
PKG 207
Jet Pump-to-Tank
Mounting Pkg.

ORDERING INFORMATION

PKG 198 – Jet Pump Mounting Bracket
PKG 111 – Pump to Tank Fitting Package for composite jet pumps
PKG 112 – Pump to Tank Fitting Package for cast iron series jet pumps with composite fittings
PKG 207 – Pump to Tank Fitting Package for cast iron series jet pumps, with galvanized fittings

MULTIPLE TANK INSTALLATIONS

PRO-Source™ tanks can be connected together to increase the supply of usable water (drawdown). Two tanks of the same size will double the supply and three tanks will triple the supply. See Figures No. 1 and 2 for the typical installations of this kind.

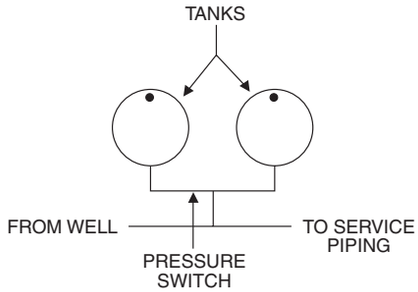


Figure 1

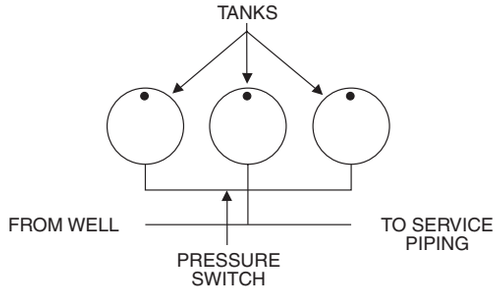
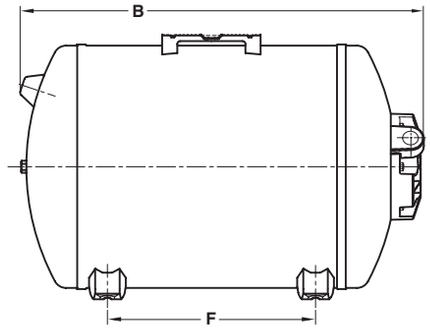
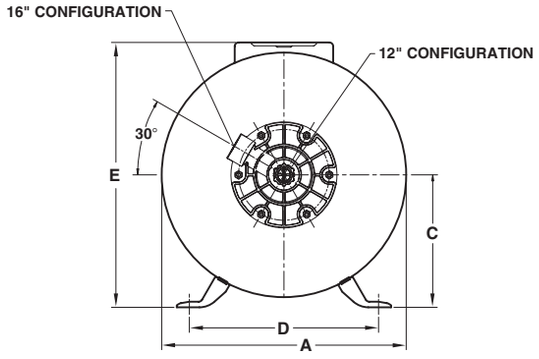


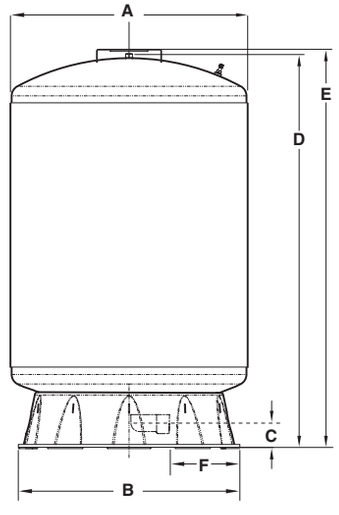
Figure 2

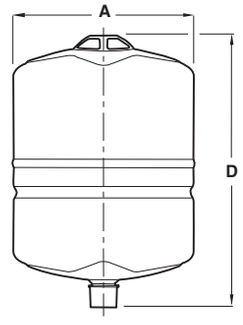
Steel Pressurized Tanks

OUTLINE DIMENSIONS









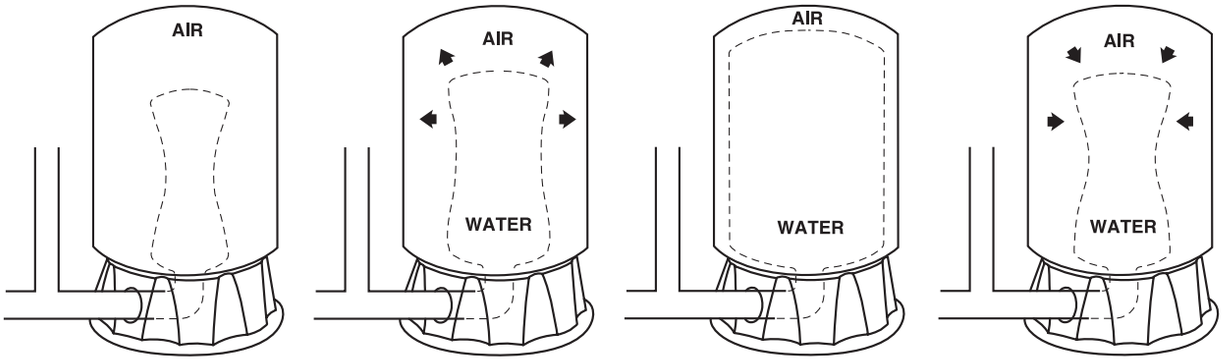
IN-LINE VERTICAL MODELS

Dimensions (in inches) are for estimating purposes only.

Catalog Number	Discharge NPT	A	B	C	D	E	F
VERTICAL MODELS							
PS6-S02	3/4”	12.0	–	–	16.1	–	–
PS19T-T02	1"	16.1	15.5	2.0	27.8	–	3.9
PS32-T03	1"	16.1	15.5	2.0	43.0	–	2.3
PS19S-T02	1"	20.1	15.5	2.0	–	21.5	2.3
PS35-T05	1"	20.1	15.5	2.0	33.0	–	2.3
PS50-T50	1-1/4"	24.1	22.7	2.5	33.2	–	5.5
PS62-T51	1-1/4"	24.1	22.7	2.5	40.1	–	5.5
PS85-T52	1-1/4"	24.1	22.7	2.5	51.5	–	5.5
PS119-TR50	1-1/4"	24.1	22.7	2.5	68.6	–	5.5
IN-LINE VERTICAL MODELS							
PS2-S01	3/4”	18.4	–	–	12.6	–	–
PS5-S02	3/4”	10.6	–	–	16.2	–	–
HORIZONTAL MODELS							
PS6H	3/4”	12.1	16.9	6.9	10.0	13.3	6.1
PS19H	1"	16.2	26.6	8.7	12.5	17.5	13.8

Steel Pressurized Tanks

SEQUENCE OF OPERATION



WATER CELL IS COMPLETELY EMPTY: A new cycle is ready to begin. Simple, positive action produces maximum drawdown on every cycle.

WATER BEGINS TO ENTER THE TANK: Air is compressed around the water cell as it fills with water.

PUMP-UP CYCLE COMPLETED: Air is now compressed to the cut-off setting of pressure switch.

WATER IS BEING DRAWN FROM THE TANK: Compressed air in the tank forces water out of the water cell.

Steel EpoxyLined Air-Over-Water Tanks



The PRO-Source™ EpoxyLined Tank is an excellent corrosion-resistant tank available in a variety of sizes for use in water systems applications, as a retention tank or holding tank. This tank utilizes an electrostatic paint process, resulting in superior rust protection.

APPLICATIONS

- **For use as a standard water tank, retention tank or holding tank.**

SPECIFICATIONS

Shell – Heavy gauge steel
Skirt – Heavy gauge steel
Interior Coating – Epoxy
Fittings – Machined steel
Finish – Baked-on polyester paint

FEATURES

Quality Construction – The precision press fit head and wrapper minimize the possibility of large gaps between components. This manufacturing process reduces the possibility of corrosion and seam leaks.

Heavy Gauge Steel – Sturdy construction is emphasized, with heavier gauge steel than most tanks. This minimizes the possibility of dents from mishandling, and rust-through.

Uniform Epoxy Coating – The insides of the tanks are electrostatically powder-coated and then are oven baked to ensure proper adhesion and consistent coverage. This paint process offers superior corrosion resistance over traditional wet paints.

Appliance-like Exterior Finish – A polyester paint is also electrostatically adhered to the outer surface and then baked on for a high-gloss appearance.

Flush Mount Fittings – Designed to solve one of the toughest corrosion problems, these fittings eliminate flanges and sharp angles that make paint adherence difficult.

Standard Top Mount Fitting – Facilitates use as a retention tank, or for hard-to-fit areas. This fitting can also be used for an optional jet mount package.

Sturdy Base – Bases for horizontal models are constructed of heavy gauge steel, with slots for ventilation to avoid condensation problems.

ORDERING INFORMATION

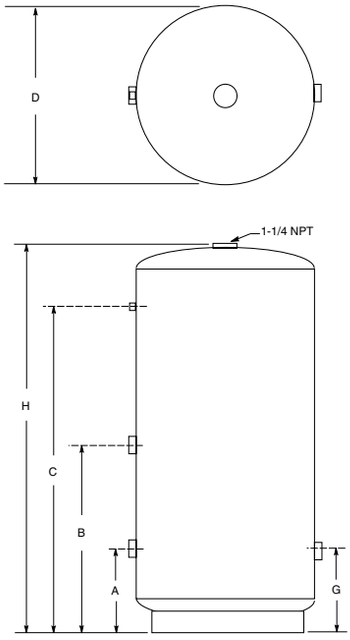
Catalog Number	Capacity U.S. Gal.	Style	Tank Diameter	Tank Height	Tank Length	Approx. Wt. Lbs.	Max. Oper. Press. (PSI)
AW30H	30	Horizontal	16"	17-1/2"	36-1/2"	55	75
AW42	42	Vertical	20"	36-5/8"	N/A	67	75
AW42T	42	Vertical	16"	53-1/2"	N/A	65	75
AW85	85	Vertical	24"	51"	N/A	94	75
AW120	120	Vertical	24"	68"	N/A	120	75

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

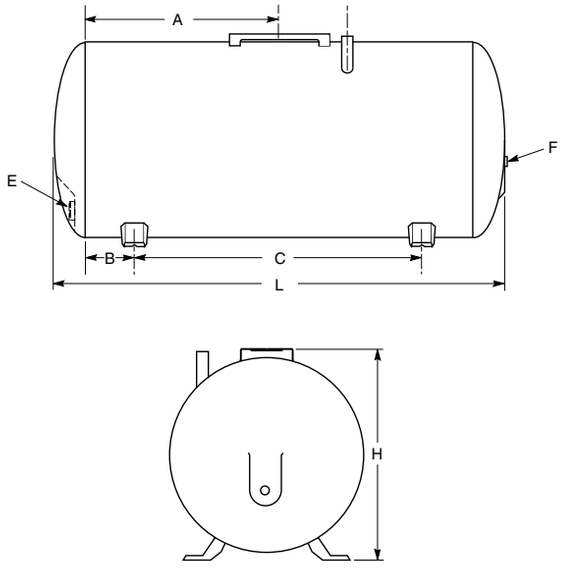
Steel EpoxyLined Air-Over-Water Tanks

VERTICAL OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

HORIZONTAL OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

DIMENSIONAL DATA

VERTICAL EPOXYLINED TANKS

Catalog Number	Gallons	Dimensions in Inches									
		D Dia.	H Ht.	A Dist.	A Size	B Dist.	B Size	C Dist.	C Size	G Dist.	G Size
AW42	42	20	36-5/8	8-1/2	1-1/4	19-1/2	1-1/4	27-3/4	1/4	8-1/2	1-1/4
AW42T	42	16	53-1/2	8	1-1/4	28	1-1/4	45	1/4	8	1-1/4
AW85	85	24	51	12	1-1/4	26-1/8	1-1/4	40-7/8	1/4	9-1/2	1-1/4
AW120	120	24	68	12	1-1/4	35	1-1/4	58-1/8	1/4	9-1/2	1-1/4

HORIZONTAL EPOXYLINED TANKS

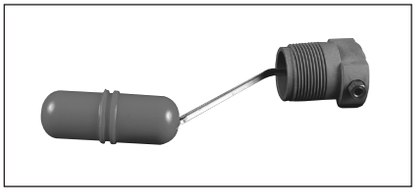
Catalog Number	Gallons	Dimensions in Inches						Outlet Size	
		Dia.	Length	Ht.	A	B	C	E	F
AW30H	30	16	36-1/2	17-1/2	13-3/4	4-3/4	22	3/4	1/4

Horizontal tanks include pump mounting bracket as standard.

NOTE: All pumps installed with a PRO-Source™ tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire pump flow at relief pressure.

TANK PERFORMANCE

Catalog Number	Capacity U.S. Gal.	Drawdown in Gallons		
		20-40	30-50	40-60
AW30H	30	5.2	4.4	3.9
AW42	42	6.7	5.8	5.0
AW42T	42	6.9	5.9	5.2
AW85	85	14.3	12.3	10.7
AW120	120	19.9	17.1	14.9



E238-2 Air Volume Control

SSHM series

Self-Priming Multi-Stage Pump



The SSHM multi-stage series of sprinkler pumps delivers high-performance without priming problems and delays.

The SSHM multi-stage series is designed for minimal electrical consumption and quiet operation from the professional grade motor. The new SSHM multi-stage series offers first-in-class priming capabilities of up to 20 foot lifts!

APPLICATIONS

- **Residential and commercial turf irrigation**
- **Residential water systems**
- **Shower and washing systems**
- **Water transfer**
- **Heating and air conditioning systems**
- **Water features and fountains**

ORDERING INFORMATION

Catalog Number	HP	Pipe Tapping Sizes		Motor Voltage	Approx. Wt. Lbs.
		Suction	Discharge		
B82456	2	1-1/2" NPT	1-1/4" NPT	230	95
B82639	2	1-1/2" NPT	1-1/4" NPT	230/460	95

SPECIFICATIONS

Motor Bracket and Integral Pump Base – Close-grained cast iron, 1-1/2" NPT inlet connection, stable heavy-duty design for rigid pipe and solid base mountings

Discharge – Close-grained cast iron, 1-1/4" NPT discharge connection, with easy-access drain-port for end of season draining and winterization

Impellers and Diffusers – Noryl® precision molded extra-smooth ports to maximize efficiency and performance

Outer Shell – Polished 304 stainless steel

Shaft – 303 stainless steel

Priming Valve – Special brass priming valve, patented for trouble-free operation during the initial pump priming

Mechanical Seal – High-pressure seal, carbon-ceramic seal faces, Buna-N elastomers

Heavy Duty Motor – 2 HP, single-phase, 3450RPM, 230 Volt, high-service factor, capacitor-start/capacitor-run, open-drip proof motor, rated for continuous-duty operation. 230/460 TEFC available

Maximum Inlet Pressure – 20 PSI

Maximum Discharge Pressure – 130 PSI

Maximum Operating Temperature – 120°F (49°C)

Maximum Suction Lift – 20 feet

Number of Stages – 4

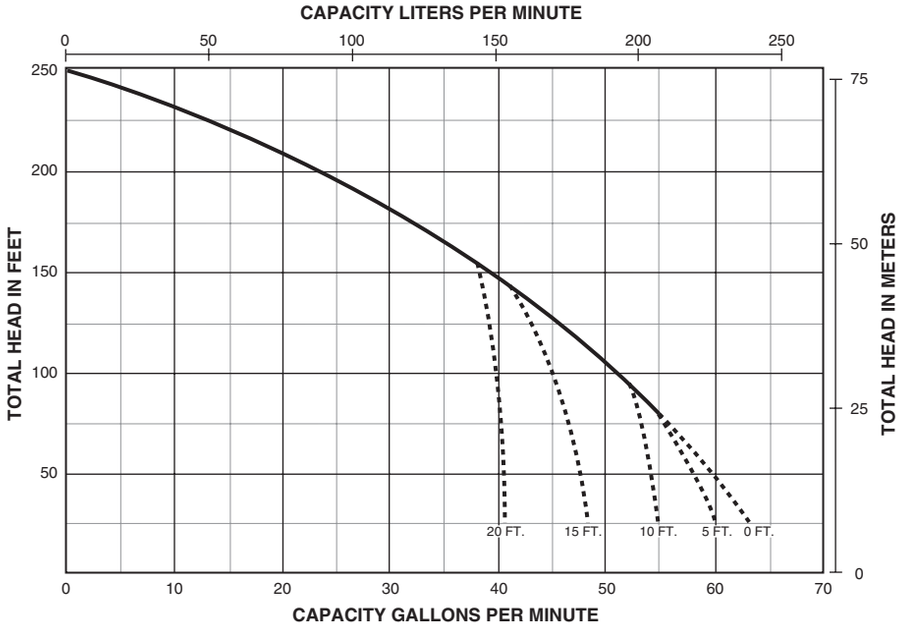
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In order to provide the best products possible, specifications are subject to change.

SSHM series

Self-Priming Multi-Stage Pump

PUMP PERFORMANCE

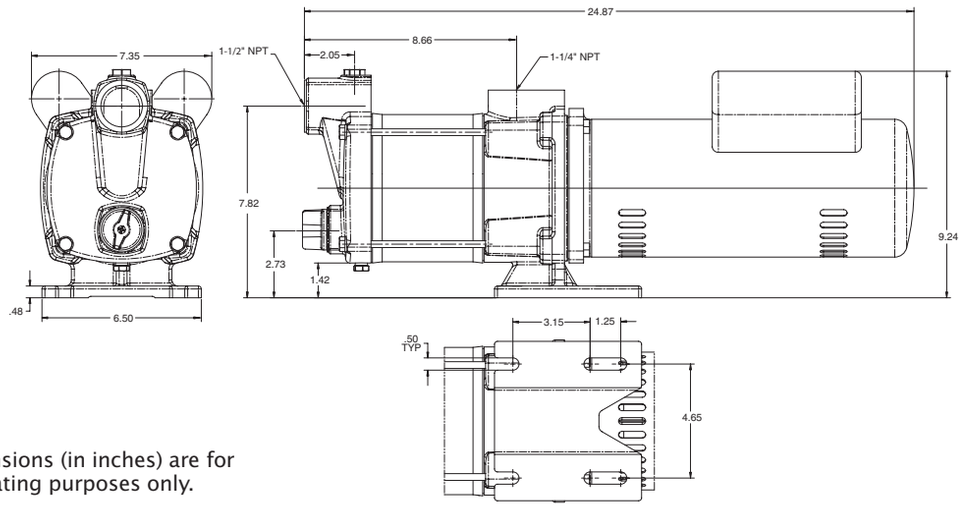


NOTE: Dotted lines indicate performance reduction at high suction lift.

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

Catalog Number	HP	Discharge Pressure		Suction Lift in Feet			
		PSI	Feet Head	5'	10'	15'	20'
B82456 B82639	2	20	46	57	54	47	40
		30	69	56	53	46	39
		40	92	52	50	44	39
		50	115	47	46	43	38
		60	138	43	42	41	37

OUTLINE DIMENSIONS

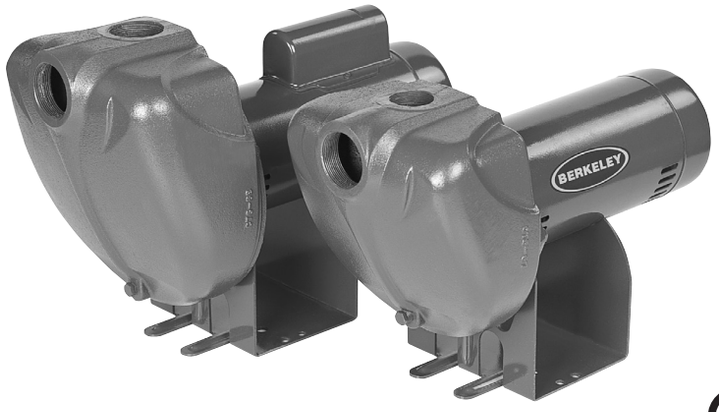


Dimensions (in inches) are for estimating purposes only.

BERKELEY®

LTHH series

Self-Priming Centrifugal Pumps



C SP® US
UL778/CSA108

The LTHH Series* of cast iron sprinklers offer superior unmatched performance, available in 1 HP through 2-1/2 HP models.

The LTHH offers "single-body-fill" priming to 25-foot lifts, in less than 5 minutes!

The LTHH models exceed the strict safety requirements of Underwriters Laboratory UL778, and CSA. Required by many state and local codes.

The LTHH models are completely interchangeable with the original BERKELEY® LTH Series models, saving costly plumbing "change-out" dollars and installation headaches!

****Single and three phase available.***

APPLICATIONS

- **Residential irrigation pump…** can be safely operated by timer or other automatic device
- **Contractors…** for dewatering excavation, water transfer and supply
- **Agriculture seed bed and plot irrigation, stock watering**
- **Industrial sump drainage, marine pumping, liquid transfer and supply operations**

ORDERING INFORMATION

HIGH HEAD

Catalog Number	HP	Voltage	Phase	Pipe Tapping Sizes		Approx. Wt. Lbs.
				Suct.	Disch.	
10LTHH	1	115/230	1	2"	1-1/2"	52
10LTHH3	1	208/230/460	3	2"	1-1/2"	52
10LTHH3-575T	1	575	3	2"	1-1/2"	57
15LTHH	1-1/2	115/230	1	2"	1-1/2"	58
15LTHH3	1-1/2	208/230/460	3	2"	1-1/2"	58
15LTHH3-575T	1-1/2	575	3	2"	1-1/2"	63
20LTHH	2	230	1	2"	2"	83
20LTHH3	2	208/230/460	3	2"	2"	83
20LTHH3-575T	2	575	3	2"	2"	88
25LTHH	2-1/2	230	1	2"	2"	85
25LTHH3	2-1/2	208/230/460	3	2"	2"	85
25LTHH3-575T	2-1/2	575	3	2"	2"	90

NOTE: 575V TEFC motors available in Canada.

SPECIFICATIONS

Body and Seal Plate – Close-grained cast iron
Impeller – Noryl®
Diffuser – Reinforced polypropylene
Shaft – One-piece threaded 416 grade stainless steel
Base – Steel, 10 gauge
Motor – A.O. Smith 2-compartment

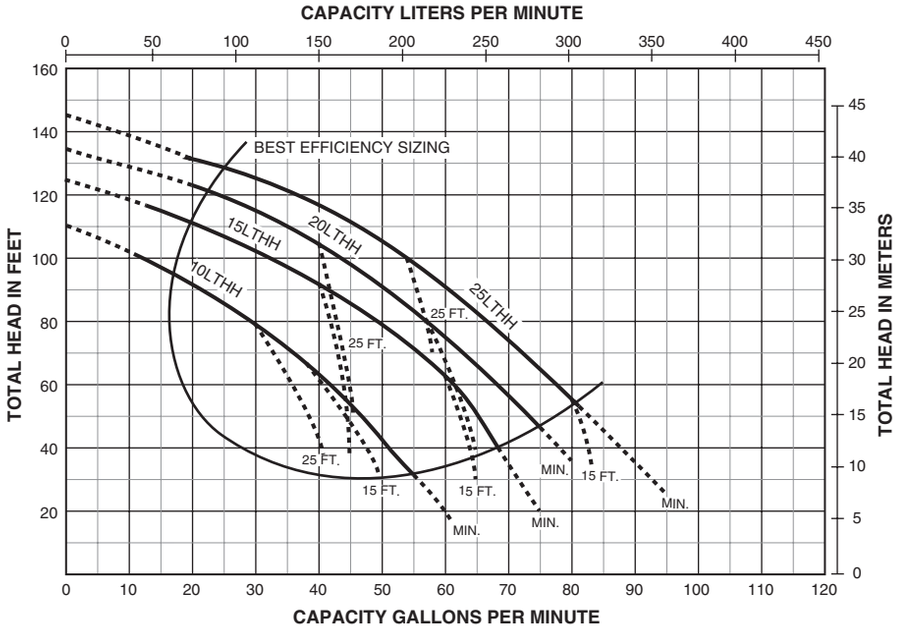
FEATURES

Rugged Construction – Close-grained cast iron body, specially treated for corrosion resistance.
Noryl® Impeller – Precision-molded for perfect balance… ultra-smooth for highest performance and efficiency.
Precision Molded Diffuser – Pump primes faster, handles more air, with multi-port, precision-molded, reinforced polypropylene diffuser.
High Head Models – Deliver up to 145' of head with capacities to 895 GPM.
Easy Serviceability – Normal wearing parts are easily accessible for service and replacement, without disturbing piping or mounting.
Motor Windings – Superior insulation materials protect against excessive moisture and contaminants… ensures prolonged motor life.
Balanced Rotor – Die cast under high pressures for uniform performance and greater efficiency, dynamically balanced.
Drain Port – Provided for easy winterizing.

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Self-Priming Centrifugal Pumps

PUMP PERFORMANCE



NOTE: Dotted lines indicate performance reduction at high suction lift.

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

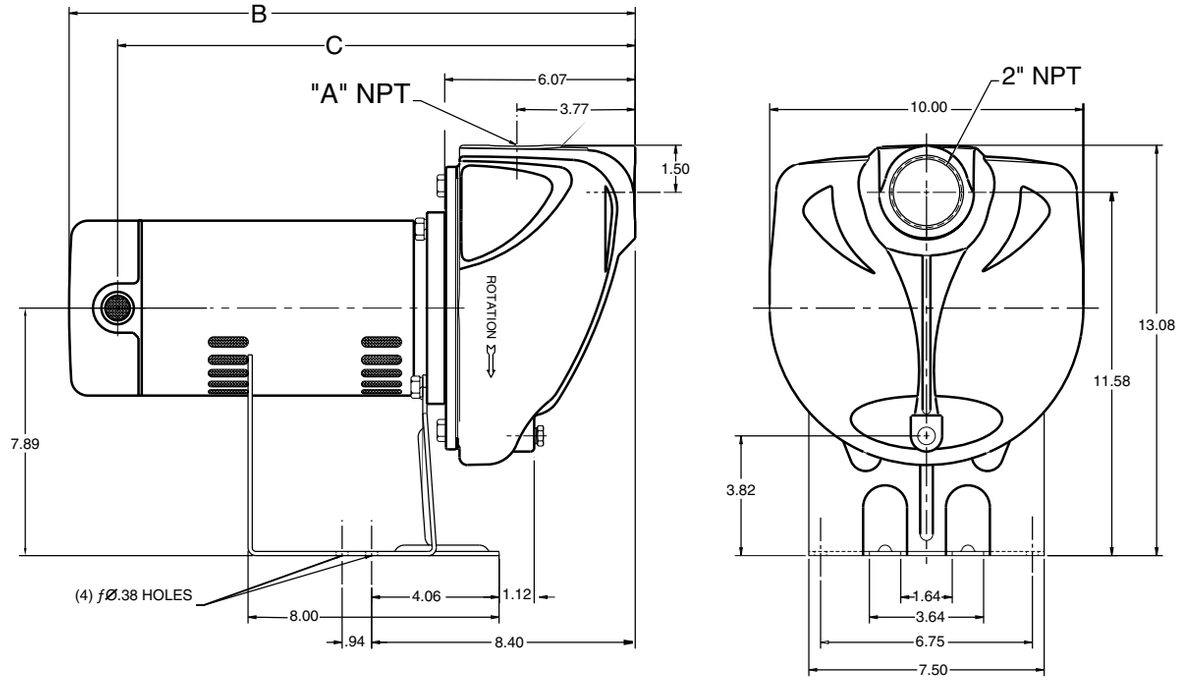
Catalog Number	HP	Discharge Pressure		Suction Lift in Feet				
		PSI	Feet Head	5'	10'	15'	20'	25'
10LTHH	1	20	46.2	48	45	40	37	33
		30	69.3	33	30	26	22	16
		40	92.4	15	10	—	—	—
15LTHH	1-1/2	20	46.2	64	62	60	57	54
		30	69.3	53	50	46	42	37
		40	92.4	35	30	25	19	—
20LTHH	2	20	46.2	72	70	67	65	62
		30	69.3	60	58	54	51	47
		40	92.4	45	42	37	30	27
		50	115.5	23	16	—	—	—
25LTHH	2-1/2	20	46.2	83	80	77	74	71
		30	69.3	70	67	63	60	55
		40	92.4	56	52	48	40	35
		50	115.5	36	28	20	—	—

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.

Self-Priming Centrifugal Pumps

OUTLINE DIMENSIONS



Catalog Number	A NPT	B	C
10LTHH	1-1/2" NPT	18.01	16.57
10LTHH3	1-1/2" NPT	16.42	15.04
10LTHH3-575T	1-1/2" NPT	17.35	13.29
15LTHH	1-1/2" NPT	19.07	17.63
15LTHH3	1-1/2" NPT	16.92	15.45
15LTHH3-575T	1-1/2" NPT	18.60	14.54
20LTHH	2" NPT	19.81	18.38
20LTHH3	2" NPT	18.22	16.75
20LTHH3-575T	2" NPT	18.91	14.85
25LTHH	2" NPT	20.13	18.69
25LTHH3	2" NPT	18.97	17.50
25LTHH3-575T	2" NPT	18.91	14.85

Dimensions (in inches) are for estimating purposes only.

BERKELEY®

BPD series

Self-Priming Sprinkler Pumps



C SP® US
UL778/CSA108

Quick priming BPD Series Pumps feature lightweight construction in a self-priming design. These models offer a stronger pump body with reinforcement ribs and also a new 2" suction that is designed for the professional pump contractor.

APPLICATIONS

- **Lawn and landscape sprinkling; self primer out of tanks or cisterns.**
- **Light chemical transfer for compatible fluids.**

SPECIFICATIONS

Body and Base – Fiberglass-reinforced thermoplastic
Impeller – Engineered polymer
Diffuser – Polypropylene
Shaft – 300 stainless steel

FEATURES

Quality Construction – Fiberglass-reinforced thermoplastic provides total corrosion resistance and high resistance to sandy water.

Lightweight Design – Space-age materials make these pumps more portable than conventional cast iron pumps.

Composite Impeller – Highest performance and efficiency from ultra-smooth materials precision molded for perfect balance.

Easily Serviced – Normal wearing parts are easily accessible for service and replacement, without disturbing piping or mounting.

Dustproof Cover – Electrical components protected from dust and insects.

Heavy-Duty Motor – Heavy-duty 1 through 2-1/2 HP motors. Designed for continuous operation. Stainless steel shaft.

Dual Voltage Capability – 1 and 1-1/2 HP motors have dual voltage motors and are shipped at the 230 Volt setting. 2 and 2-1/2 HP are 230 Volt setting only.

ORDERING INFORMATION

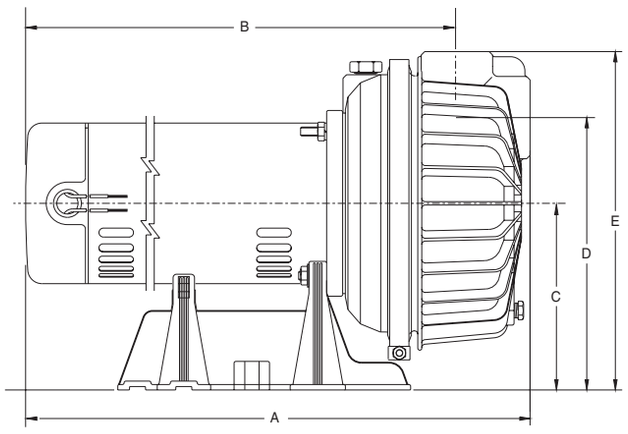
Catalog Number	HP	Pipe Tapping Sizes		Motor Voltage	Approx. Wt. Lbs.
		Suction	Discharge		
BPDH10	1	2"	1-1/2"	115/230	38
BPDH15	1-1/2	2"	1-1/2"	115/230	41
BPDH20	2	2"	2"	230	52
BPDH25	2-1/2	2"	2"	230	54

NOTE: All motors are shipped from the factory set at 230 Volt.
1 and 1-1/2 HP pumps also feature dual voltage motors. Easy to change voltage settings require switching only 2 wires to reset voltage. Just remove the dust cover and change the 2 leads on the terminal board as shown on motor nameplate.

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

Self-Priming Sprinkler Pumps

OUTLINE DIMENSIONS



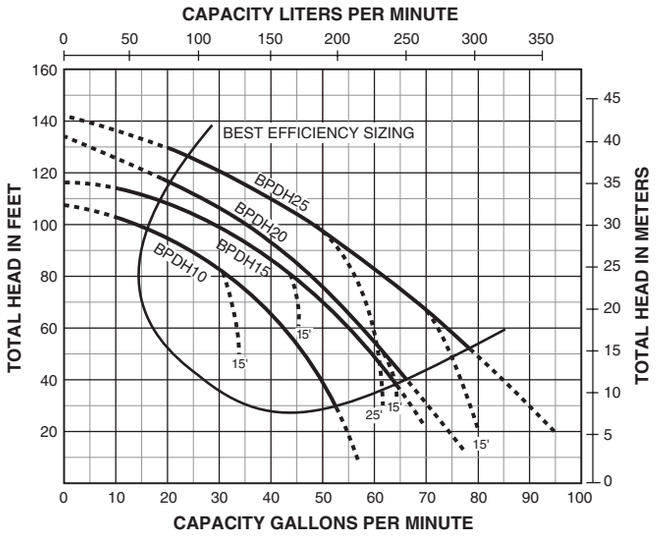
Catalog Number	A	B	C	D	E
BPDH10	18-5/8	16-1/8	6-9/16	9-9/16	11-13/16
BPDH15	19-3/4	17-1/4	6-9/16	9-9/16	11-13/16
BPDH20	21	17-3/16	6-9/16	8-7/8	12-3/8
BPDH25	21	17-3/16	6-9/16	8-7/8	12-3/8

Dimensions (in inches) are for estimating purposes only.

PERFORMANCE *(Capacity in Gallons Per Minute)*

Disch. Press.	BPDH10					BPDH15					BPDH20					BPDH25				
	Distance Above Water																			
PSI	5'	10'	15'	20'	25'	5'	10'	15'	20'	25'	5'	10'	15'	20'	25'	5'	10'	15'	20'	25'
10	53	52	50	48	46	67	66	64	61	59	70	69	67	64	62	90	88	86	82	80
20	45	42	39	37	35	59	56	54	50	47	61	59	56	53	50	79	76	72	70	65
30	35	31	27	24	18	48	44	40	37	32	50	48	44	41	37	66	62	57	55	50
40	17	10				31	26	20	10		36	33	25	23	19	50	45	42	37	32
50											16	9				30	23	20		

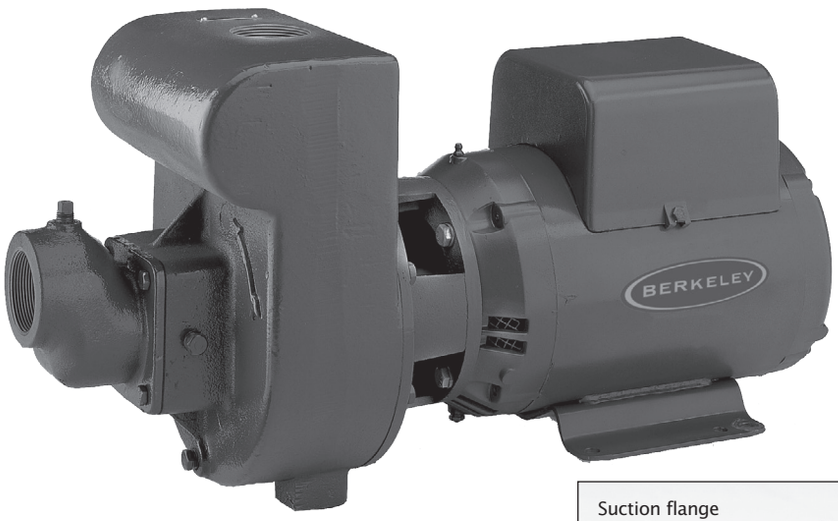
PUMP PERFORMANCE

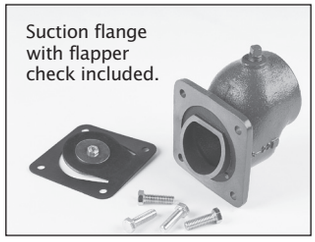


NOTE: Dotted lines indicate performance reduction at high suction lift.

LTH/LTM series

Cast Iron Self-Priming Centrifugal Pumps




Suction flange with flapper check included.

UL778/CSA108

Some of the fastest priming pumps on the market. Available in high head or medium head series. Feature leak-proof mechanical seals, easy service design, heavy-duty motors, rugged construction. Available in 3 and 5 HP.

Optional 6" and 8" Trap Packages are available.

APPLICATIONS

- **Lawn Sprinkling...** operate from 1 to 30 or more heads. Can be safely operated by timer or other automatic device.
- **Contractors...** for dewatering excavation, jetting, water transfer and supply operations.
- **Agriculture...** seed bed and plot irrigation, stock watering, fire protection.
- **Industrial...** sump drainage, fire protection, marine pumping, liquid transfer and supply operations.

SPECIFICATIONS

Body and Base – Close-grained cast iron

Impeller – Silicon bronze

Diffuser – Cast iron

Shaft – Carbon steel inside removable shaft sleeve of stainless steel.

FEATURES

Heavy-duty Motors – Both high head and medium head models offer heavy-duty motors, easy service design, and air volume control tapping.

Drain Port – Provided for easy winterizing.

Medium Head Models – Deliver up to 115' of head with capacities to 159 GPM.

High Head Models – Deliver up to 138' of head with capacities to 162 GPM.

Easy Serviceability – Normal wearing parts are easily accessible for service and replacement, without disturbing piping or mounting.

Heavy-duty Motors – Designed for continuous operation. Capacitor start, will not cause electrical interference with TV or other appliances. Nationally known motors have ball bearing, stainless steel shaft. For single- and three-phase operation, 3450 RPM.

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

Cast Iron Self-Priming Centrifugal Pumps

ORDERING INFORMATION

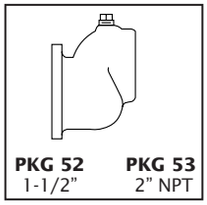
LTH HIGH HEAD

Catalog Number	HP	Pipe Tapping Sizes		Motor Voltage	Phase	Max. Load Amps	Approx. Wt. Lbs.
		Suction Flange	Discharge				
S40094	3	2"	1-1/2"	230	1	13.4	144
S40093	3	2"	1-1/2"	208-230/460	3	8.6/4.3	144
S40097	5	2-1/2"	2"	230	1	22	184
S40096	5	2-1/2"	2"	208-230/460	3	13.2/6.6	184
LTM MEDIUM HEAD							
S40100	3	2-1/2"	2"	230	1	13.4	137
S40099	3	2-1/2"	2"	208-230/460	3	8.6/4.3	137
S40102	5	3"	2-1/2"	230	1	22	184
S40103	5	3"	2-1/2"	230/460	3	13.2/6.6	184

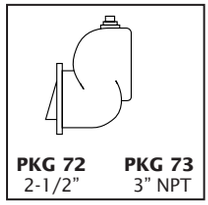
Consult factory for 575V.

LTH/LTM SERIES – FLANGE ADAPTERS (INCLUDED WITH PUMP)

Package 52 –	Package 53 –	Package 72 –	Package 73 –
1-1/2"	2"	2-1/2"	3"



PKG 52 1-1/2" **PKG 53** 2" NPT



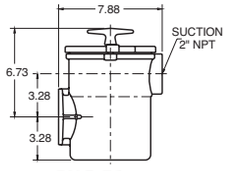
PKG 72 2-1/2" **PKG 73** 3" NPT

LTH/LTM SERIES – SUCTION TRAPS

Catalog Number	Description	Suction Port Size	Approx. Wt. Lbs.
PKG 51	6" Cast Iron Trap with Basket	2" NPT	20
PKG 76	Cast Iron Flange for Remote Installation	3" NPT	4
PKG 98	8" Cast Iron Trap with Basket	3" NPT	40



PKG 51 6"



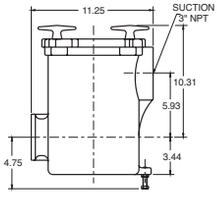
PKG 51 6 INCH TRAP



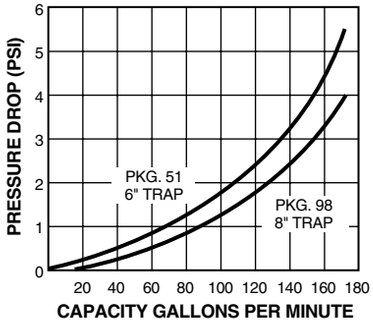
PKG 76



PKG 98 8"



PKG 98 8 INCH TRAP



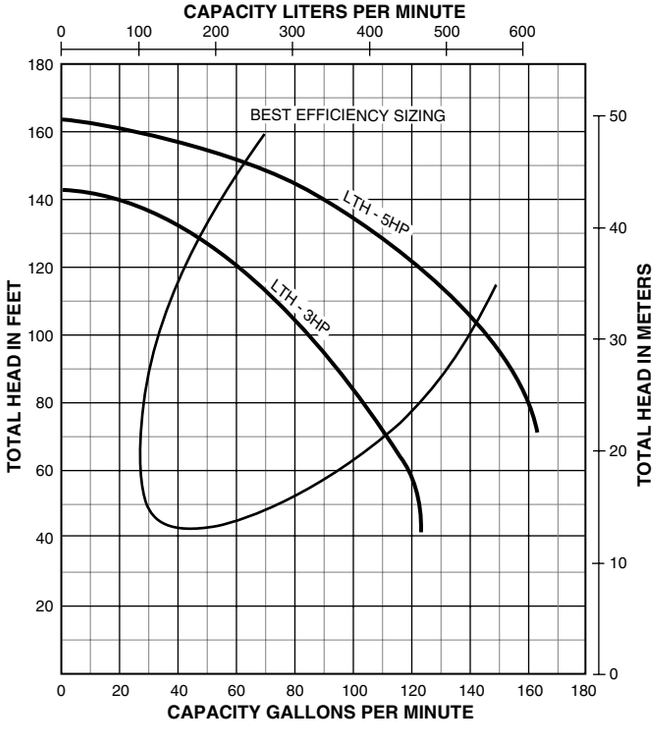
Cast Iron Self-Priming Centrifugal Pumps

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

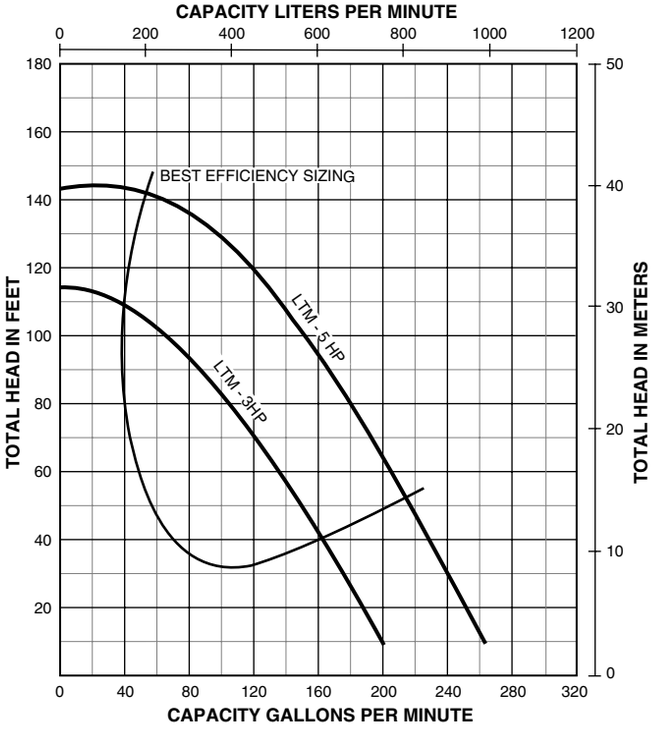
LTH HIGH HEAD

Catalog Number	HP	Discharge		Suction Lift in Feet				
		PSI	Feet Head	5'	10'	15'	20'	25'
S40094/ S40093	3	20	46.2	121	119	105	96	68
		30	69.3	106	103	98	92	66
		40	92.4	85	80	74	69	60
		50	115.5	58	51	42	32	13
S40097/ S40096	5	20	46.2	162	161	152	138	98
		30	69.3	160	158	150	136	98
		40	92.4	146	141	136	130	96
		50	115.5	119	114	105	95	85
		60	138.6	81	70	55	30	–
LTM MEDIUM HEAD								
S40099/ S40100	3	20	46.2	159	154	146	138	99
		30	69.3	126	118	110	101	86
		40	92.4	85	75	51	26	–
S40102/ S40103	5	20	46.2	214	209	202	194	162
		30	69.3	185	179	172	165	158
		40	92.4	153	146	139	130	120
		50	115.5	114	101	85	65	28

PUMP PERFORMANCE – LTH HIGH HEAD

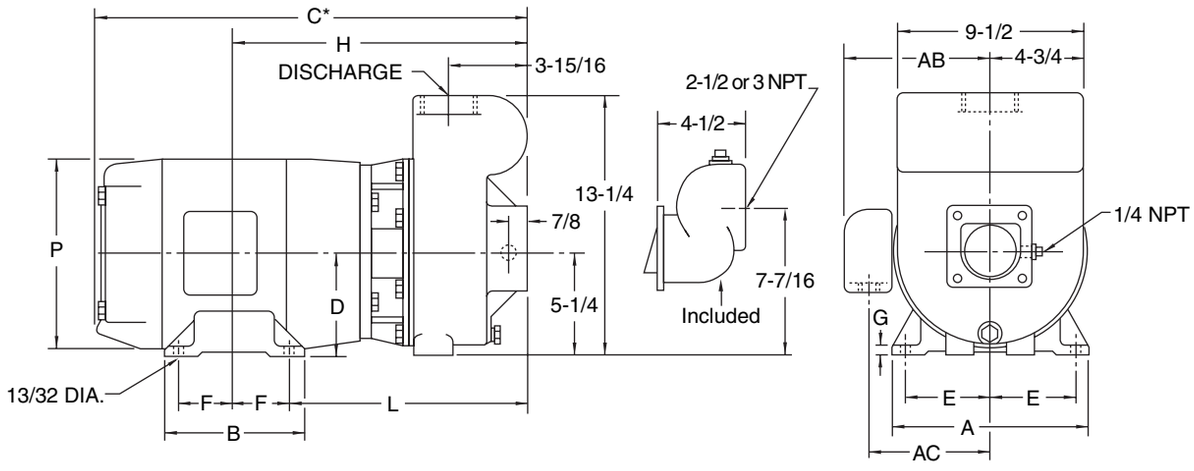


PUMP PERFORMANCE – LTM MEDIUM HEAD



Cast Iron Self-Priming Centrifugal Pumps

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

DIMENSIONS IN INCHES

Catalog Number	HP	A	B	C*	D	E	F	G	H	L	P	AB	AC
LTH	3	9	6	20-3/4	4-1/2	3-3/4	2-1/4	1/2	15	12-3/4	9-3/4	8-1/8	6-1/2
LTH	5	9	7	21-3/4	4-1/2	3-3/4	2-3/4	1/2	15-1/2	12-3/4	9-3/4	9	7
LTM	3	9	6	20-3/4	4-1/2	3-3/4	2-1/4	1/2	15	12-3/4	9-3/4	8-1/8	6-1/2
LTM	5	9	7	21-3/4	4-1/2	3-3/4	2-3/4	1/2	15-1/2	12-3/4	9-3/4	9	7

*Overall length (C) is shown for single-phase motors. Three-phase motors are slightly smaller. Dimensions are for estimating purposes only.

ECC5 series

Self-Priming Centrifugal Pump



C US
UL778/CSA108

The ECC5 Series self-priming centrifugal pump is a rugged cast iron pump capable of priming up to 20' vertically and will handle solids up to 0.225" diameter. The unit is equipped with a 1/2 HP 115 Volt motor and features 1-1/4" suction and discharge.

APPLICATIONS

- **Effluent and Wastewater Removal**
- **Sump Drainage**
- **Dewatering**
- **Circulation**
- **Fountains**

ORDERING INFORMATION

Catalog Number	HP	Max. Load Amps	Volts	Phase/ Cycles	Automatic
ECC55010MB	1/2	9.4	115	1/60	No

SPECIFICATIONS

Volute – Cast iron
Impeller – Polycarbonate
Diffuser – Reinforced polypropylene
Shaft – One-piece threaded stainless steel
Base – Steel 10 gauge
Max. Liquid Temperature Limits – 130°F (55°C)

FEATURES

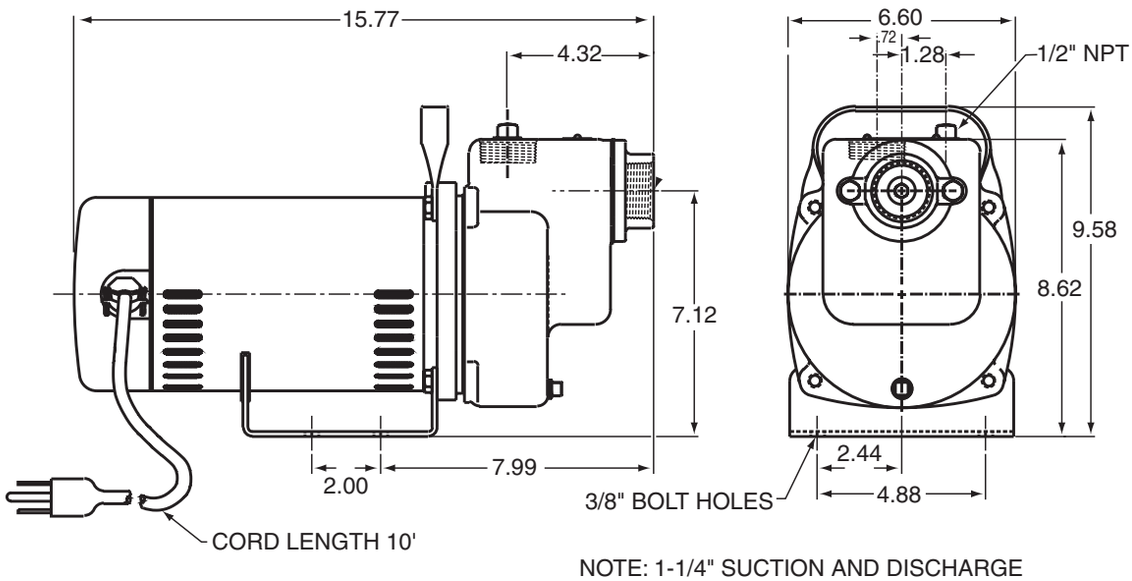
Motor – 1/2 HP, 3450 RPM, 115 Volt split phase, 60 Hz. Built-in thermal overload protection with automatic reset.
Mechanical Seal – Buna-N elastomers, carbon and ceramic sealing faces, stainless steel metal part.
Heavy-duty Ball Bearings – Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.
Built-in Convenience – Comes complete with built-in overload protection with automatic reset and a built-in check valve.
Power Cord – 10', 110V

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ECC5 series

Self-Priming Centrifugal Pump

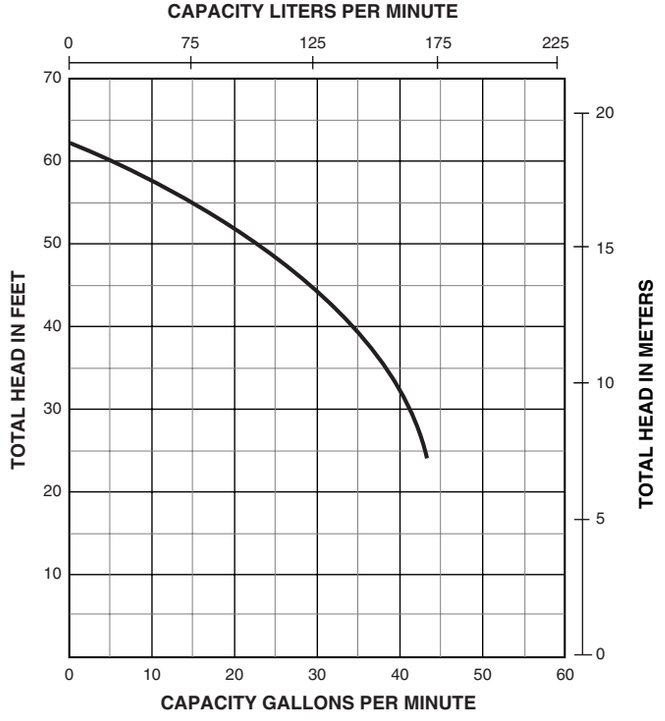
OUTLINE DIMENSIONS



NOTE: 1-1/4" SUCTION AND DISCHARGE
ALL DIMENSIONS ±.06

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE



SSCX series

Stainless Steel Centrifugal Pumps



The SSCX Series Centrifugal Pumps feature high-head performance and quiet operation. These pumps are remarkably versatile and have corrosion-resistant dependability.

APPLICATIONS

- **Ideal choice for a wide range of pump applications and varying temperature conditions**

SPECIFICATIONS

Pump Body – Stainless steel
Impeller – Noryl®
Multiple Seal Options

FEATURES

Stainless Steel Housing and Shaft – Maximum corrosion resistance in chemical as well as water applications; smooth flow path assures quiet operation.

High Temperature Rating – The SSCX Series centrifugal pumps are designed for temperatures up to 185˚F.

Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction with buna elastomers; delivers long-life reliability.

Multiple Seal Options – Choice of three seal options to meet a wide variety of pump applications.

- The standard seal in a SSCX Series is a Buna carbon/ceramic. The volute uses a Buna O-ring to seal the pumping chamber sections.
- Viton with carbon/ceramic faces, includes Viton O-ring change out in pump volute.
- Viton with carbon/silicon carbide faces, includes Viton O-ring change out in pump volute.

Noryl® Composite Impeller – Precision molded for perfect balance and lasting quality; ultra-smooth flow ports maximize performance and efficiency. 304SS impeller insert for increased durability.

Drain/Vent Ports – Priming and draining is easier, faster.

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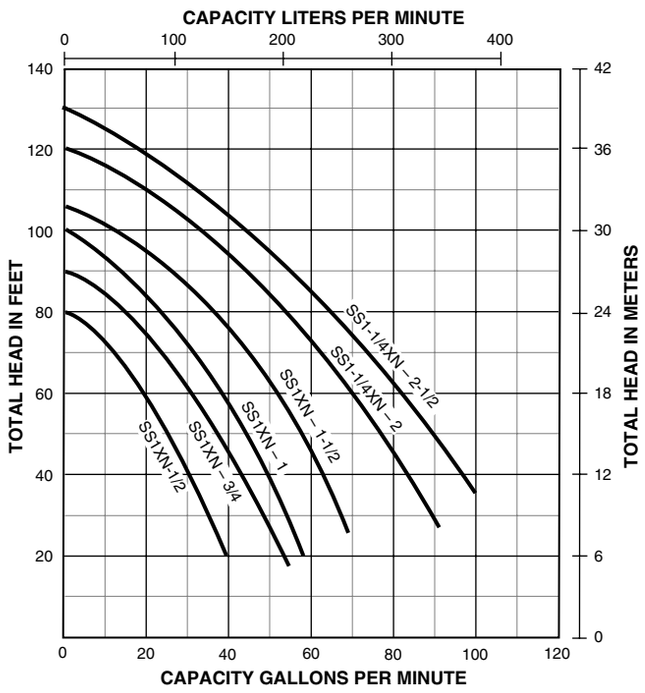
In order to provide the best products possible, specifications are subject to change.

Stainless Steel Centrifugal Pumps

ORDERING INFORMATION

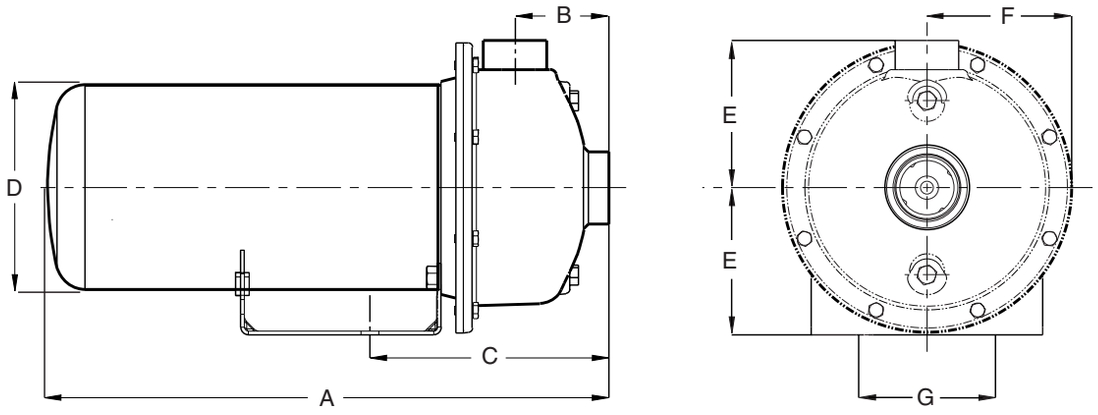
Model Number	Catalog Number	HP	Suction	Discharge	Motor Voltage	Phase	Enclosure	Approx. Wt. Lbs.
SS1XN-1/2	B78635	1/2	1-1/4"	1"	115/230	1	ODP	29
	B78636				230/460	3	ODP	29
	B78647				115/230	1	TEFC	32
	B78648				230/460	3	TEFC	32
SS1XN-3/4	B78637	3/4	1-1/4"	1"	115/230	1	ODP	38
	B78638				230/460	3	ODP	38
	B78649				115/230	1	TEFC	41
	B78650				230/460	3	TEFC	41
SS1XN-1	B78639	1	1-1/4"	1"	115/230	1	ODP	47
	B78640				230/460	3	ODP	47
	B78651				115/230	1	TEFC	50
	B78652				230/460	3	TEFC	50
SS1XN-1-1/2	B78641	1-1/2	1-1/4"	1"	115/230	1	ODP	62
	B78642				230/460	3	ODP	62
	B78653				115/230	1	TEFC	65
	B78654				230/460	3	TEFC	65
SS1-1/4XN-2	B78643	2	1-1/2"	1-1/4"	230	1	ODP	77
	B78644				230/460	3	ODP	77
	B78655				230	1	TEFC	80
	B78656				230/460	3	TEFC	80
SS1-1/4XN-2-1/2	B78645	2-1/2	1-1/2"	1-1/4"	230	1	ODP	90
	B78646				230/460	3	ODP	90
	B78657				230	1	TEFC	93
	B78658				230/460	3	TEFC	93

PUMP PERFORMANCE



Stainless Steel Centrifugal Pumps

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

DIMENSIONS IN INCHES – SSCX ODP										
HP	**NPT Suct.**	**NPT Disch.**	**A (1 phase)**	**A (3 phase)**	**B**	**C**	**D**	**E**	**F**	**G**
1/2	1-1/4	1	13.2	13.5	2.43	6.51	5.63	4.13	4.06	4.875
3/4	1-1/4	1	13.2	13.5	2.43	6.51	5.63	4.13	4.06	4.875
1	1-1/4	1	14.2	14.0	2.43	6.51	5.63	4.13	4.06	4.875
1-1/2	1-1/4	1	14.5	14.5	2.43	6.51	5.63	4.13	4.06	4.875
2	1-1/2	1-1/4	16.0	15.7	2.63	6.71	5.63	4.13	4.06	4.875
2-1/2	1-1/2	1-1/4	16.9	16.4	2.63	6.71	5.63	4.13	4.06	4.875
DIMENSIONS IN INCHES – SSCX TEFC										
1/2	1-1/4	1	14.0	14.2	2.43	6.51	6.44	4.13	4.06	4.875
3/4	1-1/4	1	14.9	14.2	2.43	6.51	6.44	4.13	4.06	4.875
1	1-1/4	1	15.7	15.2	2.43	6.51	6.44	4.13	4.06	4.875
1-1/2	1-1/4	1	16.2	15.2	2.43	6.51	6.44	4.13	4.06	4.875
2	1-1/2	1-1/4	16.4	16.4	2.63	6.71	6.44	4.13	4.06	4.875
2-1/2	1-1/2	1-1/4	16.9	16.4	2.63	6.71	6.44	4.13	4.06	4.875

CP/CB series

General Purpose Centrifugal Pumps



C US
UL778/CSA108

The CP/CB Series Pumps have a heavy-duty cast iron construction and are offered in high and medium head models, with Noryl® or brass impeller.

Options Available:

- ***TEFC motors***
- ***Seal options include***
  - ***Viton with Carbon/Ceramic faces, includes Viton O-ring change out in pump volute.***
  - ***Viton with Carbon/Silicon Carbide faces, includes Viton O-ring change out in pump volute.***

APPLICATIONS

- **Water systems and sprinkling...** for homes, farms and industry.

SPECIFICATIONS

Body and Seal Plate – Close-grained cast iron
Base – Steel 10 gauge
Impeller – CP Series – Noryl®
Impeller – CB Series – Brass
Shaft – 416 stainless steel
Mechanical Seal – Carbon/ceramic, Buna-N

FEATURES

1/3 through 2-1/2 HP – High head and medium head models, with heavy-duty motors, easy service design and four-position discharge.
Drain Port – Provided for easy winterizing.
Medium Head Models – Deliver up to 110' of head with capacities to 140 GPM.
High Head Models – Deliver up to 140' of head with capacities to 90 GPM.
Easy Serviceability – All models include replaceable wear ring and feature back pull-out design.
CP Series with Noryl® Impellers – Abrasion-resistant for normal applications with working temperatures to 140°F.
CB Series with Silicon Bronze Impellers – CB pumps equipped with shaft seals rated for temperatures to 225°F.

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

General Purpose Centrifugal Pumps

ORDERING INFORMATION

HIGH HEAD

Noryl® Impeller		Silicon Bronze Impeller			Pipe Tapping Sizes				Approx.
Model Number	Catalog Number	Model Number	Catalog Number	HP	Suct.	Disch.	Motor Voltage	Phase	Wt. Lbs.
CP1XPHS	S39516	CB1XPHS	S39529		1-1/4"	1"	115/230	1	39
CP1XPHS	S39517	CB1XPHS	S39530	1/2	1-1/4"	1"	208-230/460	3	39
CP1XPHS	S39517-575T	CB1XPHS	S39530-575T		1-1/4"	1"	575	3	40
CP1XPHS	S39518	CB1XPHS	S39531		1-1/4"	1"	115/230	1	42
CP1XPHS	S39519	CB1XPHS	S39532	3/4	1-1/4"	1"	208-230/460	3	42
CP1XPHS	S39519-575T	CB1XPHS	S39532-575T		1-1/4"	1"	575	3	43
CP1XPHS	S39520	CB1XPHS	S39533		1-1/4"	1"	115/230	1	45
CP1XPHS	S39521	CB1XPHS	S39534	1	1-1/4"	1"	208-230/460	3	45
CP1XPHS	S39521-575T	CB1XPHS	S39534-575T		1-1/4"	1"	575	3	46
CP1XPHS	S39522	CB1XPHS	S39535		1-1/4"	1"	115/230	1	49
CP1XPHS	S39523	CB1XPHS	S39536	1-1/2	1-1/4"	1"	208-230/460	3	49
CP1XPHS	S39523-575T	CB1XPHS	S39536-575T		1-1/4"	1"	575	3	50
CP1-1/4TPHS	S39524	CB1-1/4TPHS	S39537		1-1/2"	1-1/4"	230	1	69
CP1-1/4TPHS	S39525	CB1-1/4TPHS	S39538	2	1-1/2"	1-1/4"	208-230/460	3	69
CP1-1/4TPHS	S39525-575T	CB1-1/4TPHS	S39538-575T		1-1/2"	1-1/4"	575	3	70
CP1-1/2TPHS	S39526	CB1-1/2TPHS	S39539		2"	1-1/2"	230	1	74
CP1-1/2TPHS	S39527	CB1-1/2TPHS	S39540	2-1/2	2"	1-1/2"	208-230/460	3	74
CP1-1/2TPHS	S39527-575T	CB1-1/2TPHS	S39540-575T		2"	1-1/2"	575	3	75

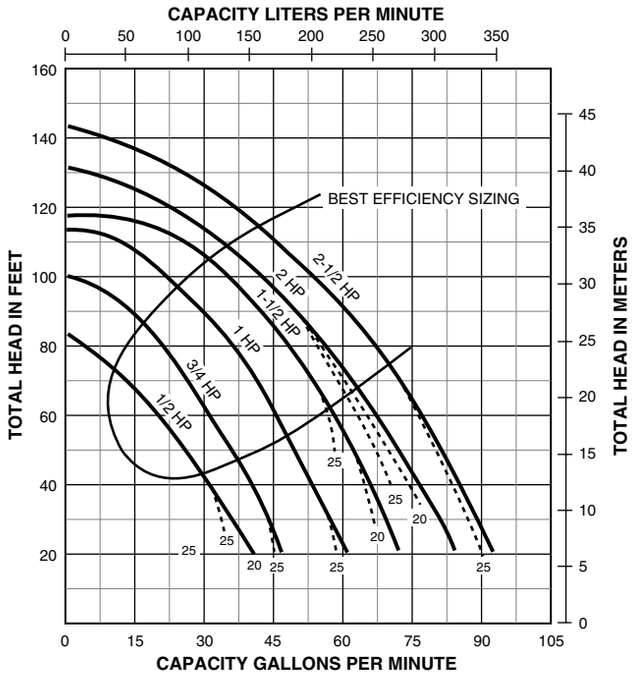
MEDIUM HEAD

Noryl® Impeller		Silicon Bronze Impeller			Pipe Tapping Sizes				Approx.
Model Number	Catalog Number	Model Number	Catalog Number	HP	Suct.	Disch.	Motor Voltage	Phase	Wt. Lbs.
CP1MPS	S39489	–	–	1/3	1-1/4"	1"	115	1	39
CP1MPS	S39490	CB1MPS	S39503		1-1/4"	1"	115/230	1	39
CP1MPS	S39491	CB1MPS	S39504	1/2	1-1/4"	1"	208-230/460	3	39
CP1MPS	S39491-575T	CB1MPS	S39504-575T		1-1/4"	1"	575	3	40
CP1MPS	S39492	CB1MPS	S39505		1-1/4"	1"	115/230	1	42
CP1MPS	S39493	CB1MPS	S39506	3/4	1-1/4"	1"	208-230/460	3	42
CP1MPS	S39493-575T	CB1MPS	S39506-575T		1-1/4"	1"	575	3	43
CP1-1/4XPS	S39494	CB1-1/4XPS	S39507		1-1/2"	1-1/4"	115/230	1	43
CP1-1/4XPS	S39495	CB1-1/4XPS	S39508	1	1-1/2"	1-1/4"	208-230/460	3	43
CP1-1/4XPS	S39495-575T	CB1-1/4XPS	S39508-575T		1-1/2"	1-1/4"	575	3	44
CP1-1/4XPS	S39496	CB1-1/4XPS	S39509		1-1/2"	1-1/4"	115/230	1	54
CP1-1/4XPS	S39497	CB1-1/4XPS	S39510	1-1/2	1-1/2"	1-1/4"	208-230/460	3	54
CP1-1/4XPS	S39497-575T	CB1-1/4XPS	S39510-575T		1-1/2"	1-1/4"	575	3	55
CP1-1/4XPS	S39498	CB1-1/4XPS	S39511		1-1/2"	1-1/4"	230	1	66
CP1-1/4XPS	S39499	CB1-1/4XPS	S39512	2	1-1/2"	1-1/4"	208-230/460	3	66
CP1-1/4XPS	S39499-575T	CB1-1/4XPS	S39512-575T		1-1/2"	1-1/4"	575	3	67
		CB1-1/2XPS	S39513		2"	1-1/2"	230	1	74
		CB1-1/2XPS	S39514	2-1/2	2"	1-1/2"	208-230/460	3	74
		CB1-1/2XPS	S39514-575T		2"	1-1/2"	575	3	75

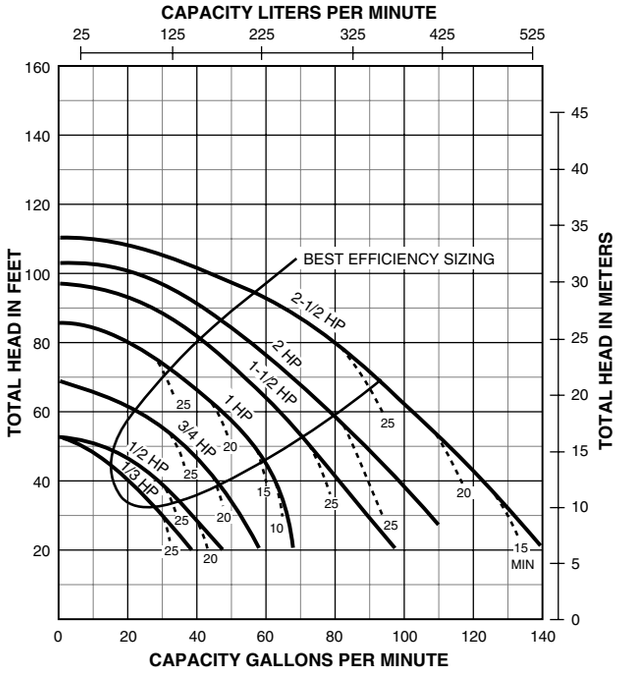
General Purpose Centrifugal Pumps

PUMP PERFORMANCE

High Head



Medium Head



NOTE: Dotted lines indicate performance reduction at high suction lift.

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

HIGH HEAD

	Discharge Pressure		Dynamic Suction Lift				
HP	PSI	Feet Head	5'	10'	15'	20'	25'
1/2	10	23.1	—	34	32	29	26
	20	46.2	25	21	18	15	11
	30	69.3	10	—	—	—	—
3/4	10	23.1	—	—	42	39	37
	20	46.2	35	32	30	28	26
	30	69.3	24	22	19	15	10
1	20	46.2	48	46	45	43	40
	30	69.3	38	35	31	28	25
	40	92.4	23	20	15	—	—
1-1/2	20	46.2	62	60	58	55	52
	30	69.3	50	48	44	40	37
	40	92.4	37	32	29	22	—
2	20	46.2	71	68	66	62	60
	30	69.3	60	57	52	59	45
	40	92.4	45	40	36	31	24
	50	115.5	22	15	—	—	—
2-1/2	20	46.2	81	79	76	74	71
	30	69.3	69	67	63	60	56
	40	92.4	56	51	47	44	38
	50	115.5	33	30	22	15	—

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 with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

General Purpose Centrifugal Pumps

PUMP PERFORMANCE *(Capacity in Gallons Per Minute)*

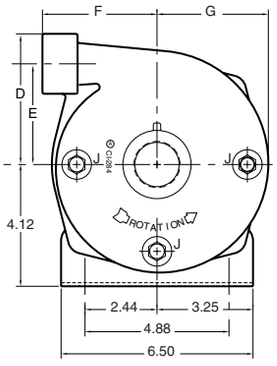
MEDIUM HEAD

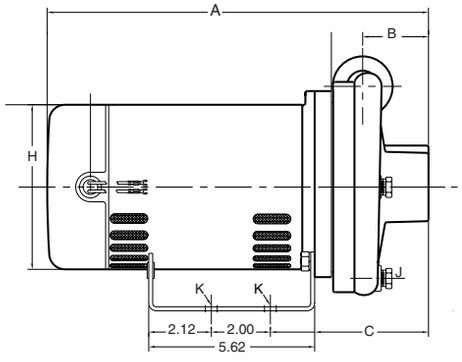
HP	Discharge Pressure		Dynamic Suction Lift				
	PSI	Feet Head	5'	10'	15'	20'	25'
1/3	10	23.1	32	27	18	—	—
	20	46.2	—	—	—	—	—
1/2	10	23.1	40	37	32	27	17
	20	46.2	—	—	—	—	—
3/4	10	23.1	—	50	46	42	32
	20	46.2	37	29	21	—	—
1	20	46.2	54	51	44	40	33
	30	69.3	33	28	18	—	—
1-1/2	20	46.2	71	69	62	57	51
	30	69.3	52	47	34	30	20
2	20	46.2	88	84	78	70	66
	30	69.3	67	60	50	45	40
	40	92.4	25	13	—	—	—
2-1/2	20	46.2	111	106	101	95	90
	30	69.3	90	83	77	70	60
	40	92.4	46	38	20	—	—

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 with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

OUTLINE DIMENSIONS





Dimensions (in inches) are for estimating purposes only.

DIMENSIONS *(In Inches)*

HIGH HEAD

HP	NPT Suct.	NPT Disch.	A (1 Phase)	A (3 Phase)	B	C	D	E	F	G	H	NPT J	K
1/2	1-1/4	1	11-21/32	13-3/8	2-1/16	5-9/16	4-1/2	3-7/16	3-7/8	3-15/16	5-5/8	1/4	3/8 Dia.
3/4	1-1/4	1	11-25/32	13-3/8	2-1/16	5-9/16	4-1/2	3-7/16	3-7/8	3-15/16	5-5/8	1/4	3/8 Dia.
1	1-1/4	1	12-25/32	13-7/8	2-1/16	5-9/16	4-1/2	3-7/16	3-7/8	3-15/16	5-5/8	1/4	3/8 Dia.
1-1/2	1-1/4	1	13-39/64	14-3/8	2-1/16	5-9/16	4-1/2	3-7/16	3-7/8	3-15/16	5-5/8	1/4	3/8 Dia.
2	1-1/2	1-1/4	16-3/4	16-15/16	2-13/16	6-5/16	4-27/32	3-13/32	4-5/8	4	6-7/16	1/4	3/8 Dia.
2-1/2	2	1-1/2	17-3/4	17-1/4	2-13/16	6-5/16	4-27/32	3-13/32	4-5/8	4	6-7/16	1/4	3/8 Dia.

MEDIUM HEAD

HP	NPT Suct.	NPT Disch.	A (1 Phase)	A (3 Phase)	B	C	D	E	F	G	H	NPT J	K
1/3	1-1/4	1	12-9/16	12-15/16	1-7/16	5-1/8	4-7/16	3-1/4	2-1/4	3-1/4	5-5/8	1/4	3/8 Dia.
1/2	1-1/4	1	11-7/32	12-15/16	1-7/16	5-1/8	4-7/16	3-1/4	2-1/4	3-1/4	5-5/8	1/4	3/8 Dia.
3/4	1-1/4	1	11-31/32	12-15/16	1-7/16	5-1/8	4-7/16	3-1/4	2-1/4	3-1/4	5-5/8	1/4	3/8 Dia.
1	1-1/2	1-1/4	12-11/32	13-7/16	1-7/16	5-1/8	4-7/16	3-1/4	2-1/4	3-1/4	5-5/8	1/4	3/8 Dia.
1-1/2	1-1/2	1-1/4	13-25/32	14-9/16	2	5-3/4	4-13/16	3-1/2	4-1/4	3-15/16	5-5/8	1/4	3/8 Dia.
2	1-1/2	1-1/4	16-3/16	16-3/8	2	5-3/4	4-13/16	3-1/2	4-1/4	3-15/16	6-7/16	1/4	3/8 Dia.
2-1/2	2	1-1/2	17-3/16	16-11/16	2	5-3/4	4-13/16	3-1/2	4-1/4	3-15/16	6-7/16	1/4	3/8 Dia.

BERKELEY®

Type C

Straight Centrifugal Pumps



The Type C Pump is a compact, horizontal, single stage, centrifugal pump close-coupled to an electric motor.

The removal of readily accessible bolts (back pull-out construction), permits the removal of the pumping element, exposing the impeller and seal for inspection, without disturbing the piping.

APPLICATIONS

- General farm or home irrigation, air conditioning and refrigeration

SPECIFICATIONS

Body and Base – Gray cast iron
Bracket – Cast iron
Impeller – Silicon bronze
Shaft – Threaded stainless steel

ORDERING INFORMATION

Model Number	HP	Catalog Number	Phase	Volts	Suct.	Disch.	Approx. Wt. Lbs.
C1-1/4TPMS	3	B53602S	1	230	1-1/2"	1-1/4"	55
		B53603S	3	208/230/460			
		B53603SMS2	3	575			
C1-1/2TPHS	3	B59212S	1	230	2"	1-1/2"	56
		B59213S	3	208/230/460			
		B59213SMS2	3	575			
C2MPS	3	B53616S	1	230	2-1/2"	2"	58
		B53617S	3	208/230/460			
		B53617SMS2	3	575			

FEATURES

Flow Rates – To 160 U.S. gallons per minute.

Discharge sizes – 1-1/4" through 2".

Temperature – Applications up to 200°F.

Manufacture – Carefully manufactured with materials best suited for water pump applications assures a unit with long life and dependability.

Bracket – Sturdy cast iron bracket houses seal and maintains positive alignment between motor and volute case.

Volute Case – Precision machined gray cast iron, with NPT tapped openings for suction and discharge. Standard discharge position is horizontal, as pictured. Volute may be rotated for vertical-up discharge.

Impeller – Enclosed multi-vane silicon bronze impeller is balanced to eliminate vibration and provide smooth, quiet operation. Impeller is threaded on motor shaft for positive alignment.

Shaft Seal – Self-adjusting, water-cooled, mechanical shaft seal prevents leakage and eliminates need for drain piping. Run-in and periodic adjustment is not required.

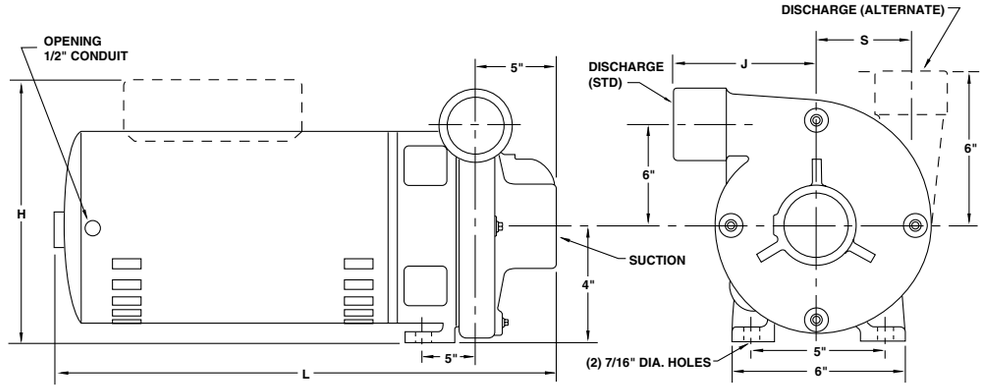
Motor Shaft – Stainless steel shaft is threaded for direct mounting of impeller. Shaft extension to impeller is short to increase shaft rigidity and to extend bearing life.

Motor – Heavy-duty, 3 HP, flange-mounted, motor designed for continuous 3600 RPM operation. Two ball bearings are permanently lubricated, eliminating the need for re-lubrication service. Open, drip-proof enclosures are standard. All models can be furnished with either single-phase (230V) or three-phase (230/460) motors. Totally enclosed fan-cooled motor is available for three-phase power.

BERKELEY® is a registered trademark of Pentair Water.
In order to provide the best products possible, specifications are subject to change.

Straight Centrifugal Pumps

OUTLINE DIMENSIONS



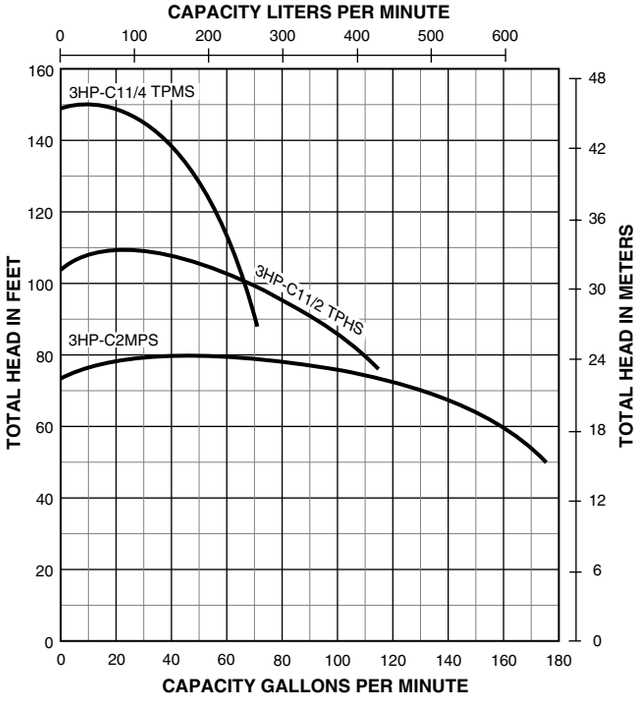
Dimensions (in inches) are for estimating purposes only.

DIMENSIONAL DATA

Model Number	HP	Suction (NPT)	Disch. Phase	H*	J	K	L*	S	M
C1-1/4TPMS	3	1-1/2	1-1/4	9-1/4	5	2-1/2	16-15/16	3-5/16	1-7/8
C1-1/2TPHS	3	2	1-1/2	8-1/4	5	2-11/16	17-1/4	3-1/2	2
C2MPS	3	2-1/2	2	9-1/4	4-7/8	2-5/16	17-1/4	3-1/16	2-7/16

*Overall height (H) and length (L) are shown for single phase motors. Three phase motors are slightly smaller. Dimensions are for estimating purposes only.

PUMP PERFORMANCE



MGP/MGPS series

High-Pressure Booster Pumps



(Single-phase ODP models only)

The MGP/MGPS Booster Pumps are the most durable booster pump available. The proven SignaSeal™ floating impeller design minimizes thrust loads allowing for continuous operation without damage to motor bearings, mechanical seal or pump hydraulic components.

APPLICATIONS

- **Residential, commercial or agricultural pressure washing**
- **Booster and spray systems**
- **Filtration and reverse osmosis**
- **HVAC**
- **General purpose pumping**

SPECIFICATIONS

Max. Inlet Pressure – 80 PSI
Max. Working Pressure – 315 PSI
Max. Suction Lift – 15 feet
Max. Liquid Temperature Limits – Prolonged use with liquids above 140˚ F is not recommended.
Discharge –
MGP Series: cast iron
MGPS Series: stainless steel
Motor Adapter and Base –
MGP Series: cast iron
MGPS Series: stainless steel
Shell – Stainless steel 304 grade
Impeller – Acetal
Diffuser – Polycarbonate
Shaft – Stainless steel 304 grade
O-Rings – Buna-N
Mechanical Seal – Carbon/ceramic, Buna-N

FEATURES

SignaSeal Staging System – The proven SignaSeal staging system utilizes a ceramic wear surface that when incorporated with Berekely's "true" indepentent floating impellers, dominates with 1st-class perforance, superieor sand handling and thrust management staging system.

Acetal Impellers – Precision-molded for perfect balance... ultra-smooth for highest performance and efficiency.

Precision Molded Diffusers – Superior performance with high resistance to corrosion and abrasion

Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication.

Motor Windings – Superior insulation materials protect against excessive moisture and contaminants... assure prolonged motor life

Balanced Rotor – Die cast under high pressures for uniform performance and greater efficiency; dynamically balanced

Heavy-duty Ball Bearings – Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.

Pump and Motor Shaft – Stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive

Dustproof Cover – All electrical components are protected from dirt, dust and insects by a dustproof canopy; ventilating air cannot contaminate.

BERKELEY® is a registered trademark of Pentair Water.
In order to provide the best products possible, specifications are subject to change.

High-Pressure Booster Pumps

ORDERING INFORMATION

Catalog Number						Pipe Tapping Sizes		Motor	Shipping
Cast Iron	Stainless Steel	GPM	HP	Phase	Stages	Inlet	Outlet	Voltage	Wt. (lbs.)
MGP7C	MGPS7C	7	1/2	1	9	3/4"	3/4"	115/230	42
MGP7C3	MGPS7C3		1/2	3	9	3/4"	3/4"	208-230/460	42
MGP7D	MGPS7D		3/4	1	12	3/4"	3/4"	115/230	48
MGP7D3	MGPS7D3		3/4	3	12	3/4"	3/4"	208-230/460	48
MGP7E	MGPS7E		1	1	16	3/4"	3/4"	115/230	59
MGP7E3	MGPS7E3		1	3	16	3/4"	3/4"	208-230/460	59
MGP10C	MGPS10C	10	1/2	1	6	3/4"	3/4"	115/230	40
MGP10C3	MGPS10C3		1/2	3	6	3/4"	3/4"	208-230/460	40
MGP10D	MGPS10D		3/4	1	8	3/4"	3/4"	115/230	46
MGP10D3	MGPS10D3		3/4	3	8	3/4"	3/4"	208-230/460	46
MGP10E	MGPS10E		1	1	10	3/4"	3/4"	115/230	57
MGP10E3	MGPS10E3		1	3	10	3/4"	3/4"	208-230/460	57
MGP10F	MGPS10F		1-1/2	1	14	3/4"	3/4"	230	71
MGP10F3	MGPS10F3		1-1/2	3	14	3/4"	3/4"	208-230/460	71
MGP10G	MGPS10G		2	1	16	3/4"	3/4"	230	79
MGP10G3	MGPS10G3		2	3	16	3/4"	3/4"	208-230/460	79
MGP20E	MGPS20E	20	1	1	7	1"	1"	115/230	55
MGP20E3	MGPS20E3		1	3	7	1"	1"	208-230/460	55
MGP20F	MGPS20F		1-1/2	1	9	1"	1"	230	68
MGP20F3	MGPS20F3		1-1/2	3	9	1"	1"	208-230/460	68
MGP20G	MGPS20G		2	1	11	1"	1"	230	74
MGP20G3	MGPS20G3		2	3	11	1"	1"	208-230/460	74

NOTE: ODP motor is standard, for TEFC motors, contact Customer Service.

ORDERING INFORMATION

ACCESSORIES

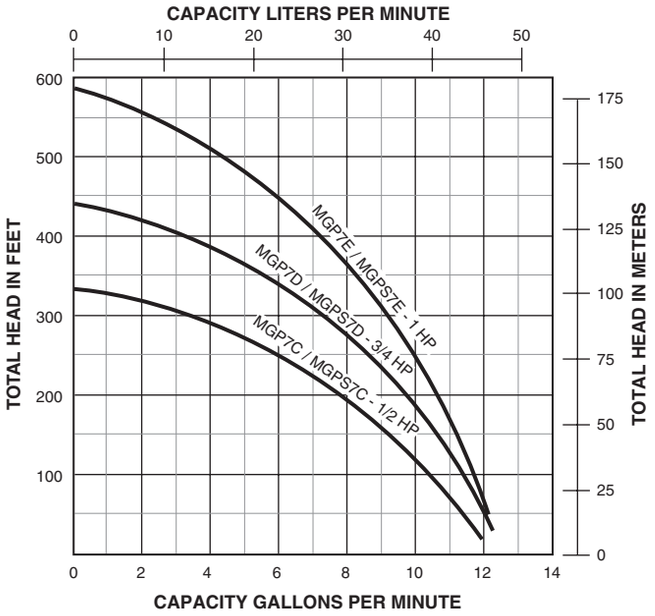
Pkg. No.	Description	Approx. Wt. Lbs.
SUCTION		
83	Suction hose – 3/4" 150 PSI hose, 6 ft. section with two (2) female hose fittings	3
85	Two (2) garden hose/NPT adapters – 3/4" NPT male to 3/4" garden hose male	3
96	Vacuum relief valve – 1/2" NPT	2
150 PSI RATED* DISCHARGE		
84	Discharge hose – 3/4" 150 PSI hose, 25 ft. section with male and female garden hose fittings	10
86	High pressure pistol grip nozzle with three (3) nozzles (No. 56, 50 and 49)	2
315 PSI RATED* DISCHARGE		
162	25' of 1" ID hose with 3/4" male and female hose fittings 315 PSI rating	15
194	High pressure pistol grip nozzle with three (3) nozzles (No. 56, 50 and 49) rated for 500 PSI	2

*To select proper discharge accessories for your pump, add incoming pressure to pump output pressure, to determine total discharge pressure.

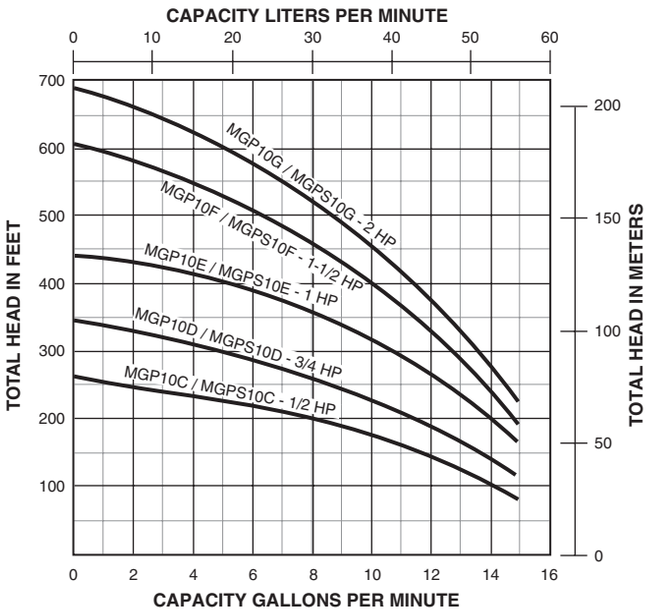
Example: Incoming pressure 20 PSI + pump output pressure (MGP7C at 0 GPM, 300')
87 PSI = Total 150 PSI at discharge = 150 PSI rated discharge accessories

High-Pressure Booster Pumps

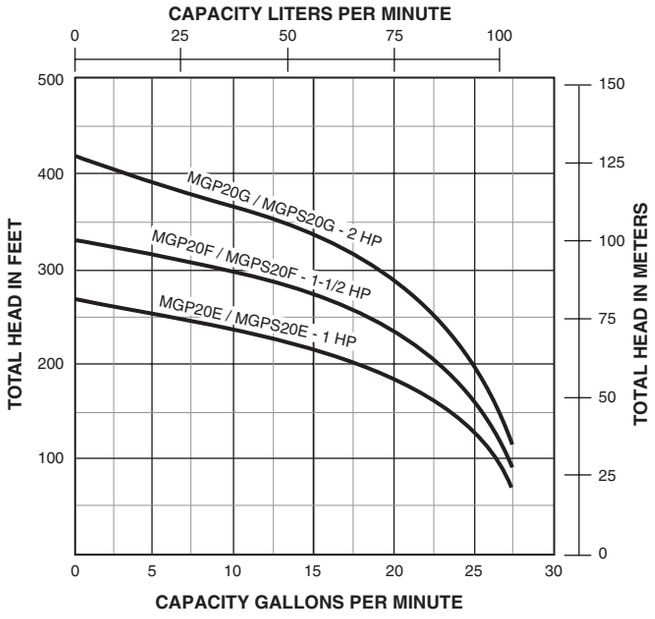
PUMP PERFORMANCE – 7 GPM



PUMP PERFORMANCE – 10 GPM

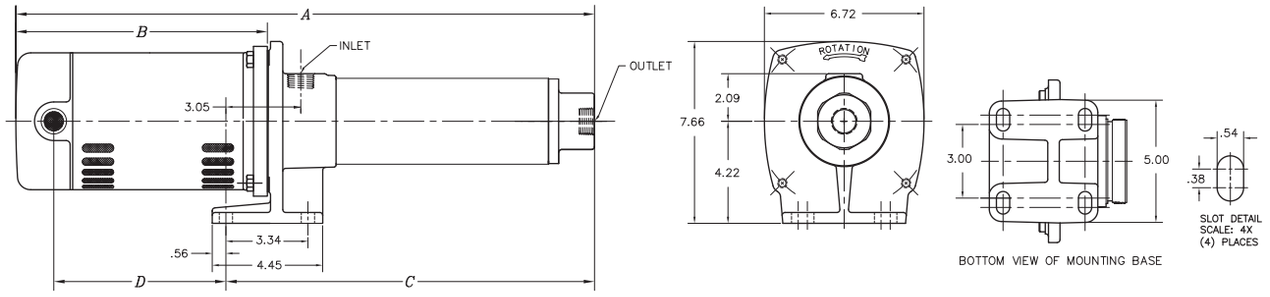


PUMP PERFORMANCE – 20 GPM



High-Pressure Booster Pumps

OUTLINE DIMENSIONS



DIMENSIONS IN INCHES

CAST IRON

Catalog Number	HP	A	B	C	D
MGP7C	1/2	24.28	10.38	15.76	6.68
MGP7C3	1/2	26.41	9.88	18.39	6.68
MGP7D	3/4	27.41	10.88	18.39	7.69
MGP7D3	3/4	30.41	10.38	21.89	7.28
MGP7E	1	31.91	11.88	21.89	8.69
MGP7E3	1	22.15	10.88	13.13	7.68
MGP10C	1/2	22.87	11.60	13.13	8.44
MGP10C3	1/2	21.15	9.88	13.13	6.68
MGP10D	3/4	24.99	11.97	14.88	8.81
MGP10D3	3/4	25.15	10.38	16.63	7.28
MGP10E	1	27.80	13.03	16.63	9.87
MGP10E3	1	24.78	10.88	15.76	7.68
MGP10F	1-1/2	31.18	13.78	19.26	10.31
MGP10FG	1-1/2	31.91	11.88	21.89	8.69
MGP10G	2	36.44	13.78	24.52	10.62
MGP10G3	2	32.66	12.63	21.89	9.44
MGP20E	1	26.85	13.03	15.68	9.87
MGP20E3	1	26.93	10.88	17.91	7.68
MGP20F	1-1/2	29.83	13.78	17.91	10.31
MGP20F3	1-1/2	30.16	11.88	20.14	8.69
MGP20G	2	32.06	13.78	20.14	10.62
MGP20G3	2	26.53	12.63	15.76	9.44

STAINLESS STEEL

Catalog Number	HP	A	B	C	D
MGPS7C	1/2	25.39	11.60	15.65	8.44
MGPS7C3	1/2	26.27	9.88	18.25	6.68
MGPS7D	3/4	28.36	11.97	18.25	8.81
MGPS7D3	3/4	26.77	10.38	18.25	7.28
MGPS7E	1	31.89	11.97	21.78	8.81
MGPS7E3	1	30.80	10.88	21.78	11.94
MGPS10C	1/2	22.76	11.60	13.02	8.44
MGPS10C3	1/2	22.79	9.88	14.77	6.68
MGPS10D	3/4	24.88	11.97	14.77	8.81
MGPS10D3	3/4	25.04	10.38	16.52	7.28
MGPS10E	1	27.69	13.03	16.52	9.87
MGPS10E3	1	29.05	10.88	20.03	7.68
MGPS10F	1-1/2	31.95	13.78	20.03	10.31
MGPS10F3	1-1/2	31.80	11.88	21.78	8.69
MGPS10G	2	33.70	13.78	21.78	10.62
MGPS10G3	2	27.22	12.63	16.45	9.44
MGPS20E	1	26.74	13.03	15.57	9.87
MGPS20E3	1	26.82	10.88	17.80	7.68
MGPS20F	1-1/2	29.72	13.78	17.80	10.31
MGPS20F3	1-1/2	30.05	11.88	20.03	8.69
MGPS20G	2	31.95	13.78	20.03	10.62
MGPS20G3	2	26.42	12.63	15.65	9.44

BERKELEY®

PRO-SOURCE™

PUMPER series

Composite Engine-Driven Self-Priming Pump



Lightweight, corrosion resistant, engineered composite pump construction make this engine-driven pump extremely versatile for applications where electrical power is not available.

Powered by a powerful 5-1/2 HP, PowerPro 4-cycle gasoline engine, rated for continuous-duty, equipped with professional-grade features like an automatic low-oil safety cut off, manual throttle, choke and shut-off controls.

Securely mounted within a rugged steel framed rollcage, reinforced with steel cross-members, coated for corrosion resistance, equipped with noise dampening, non-slip rubber feet.

Suction lift capability of 25 feet.

APPLICATIONS

- **Water Transfer and Supply**
- **Sprinkler Turf Irrigation**
- **Dewatering**
- **Fire Protection**
- **Agriculture, Light Commercial and Marine**

ORDERING INFORMATION

Catalog Number	HP	Description	Pipe Tapping Sizes		Approx. Wt. Lbs./Kg.
			Suction	Discharge	
EDP55RV	5-1/2	Engine-driven pump w/roll cage	2" NPT	2" NPT	46/20.9

ACCESSORIES

Catalog Number	Description	Approx. Wt. Lbs./Kg.
FP2735	2" x 15' Suction Hose Kit	15/6.8
FP2731	2" x 25' Discharge Hose Kit	6/2.7



FP2735 Suction Hose Kit



FP2731 Discharge Hose Kit

SPECIFICATIONS

Body – Reinforced corrosion resistant Thermoplastic
Impeller – Polymer
Diffuser – Reinforced corrosion resistant Thermoplastic
Seals – Viton mechanical
O-rings – Viton
Check Valve – Viton
Roll Cage – Coated steel frame with cross member and stay-in-place (no-slip) rubber feet
Engine – 5-1/2 HP PowerPro
Dimensions – 21"H x 17"D x 21"L
Fasteners – 300 Grade stainless steel

FEATURES

Rugged Light-Weight Design

Corrosion Resistant Composite Pump Construction

Chemical Resistant Viton Seals, O-rings with Stainless Steel Fasteners

Built-in Check Valve

ACCESSORIES

Suction Hose Kit – Built-in 2" NPTF swivel fitting and 2" NPTM fitting for easy hookup; coil-reinforced wall prevents collapse; includes aluminum suction screen to prevent debris from reaching pump

Discharge Hose Kit – Built-in 2" NPTF swivel fitting and 2" NPTM fitting for easy hookup; collapsible for easy roll-up and storage; reinforced wall adds durability

PRO-Source™ is a trademark of Pentair Water.

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

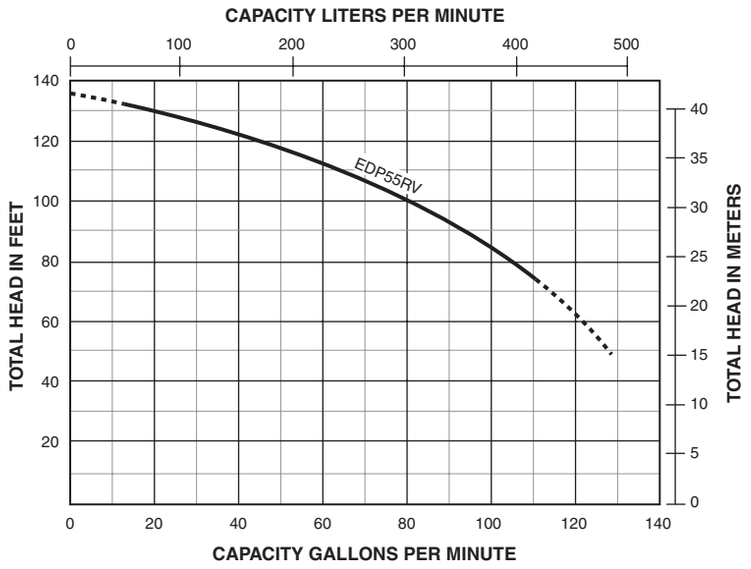
BERKELEY®

PRO-SOURCE™

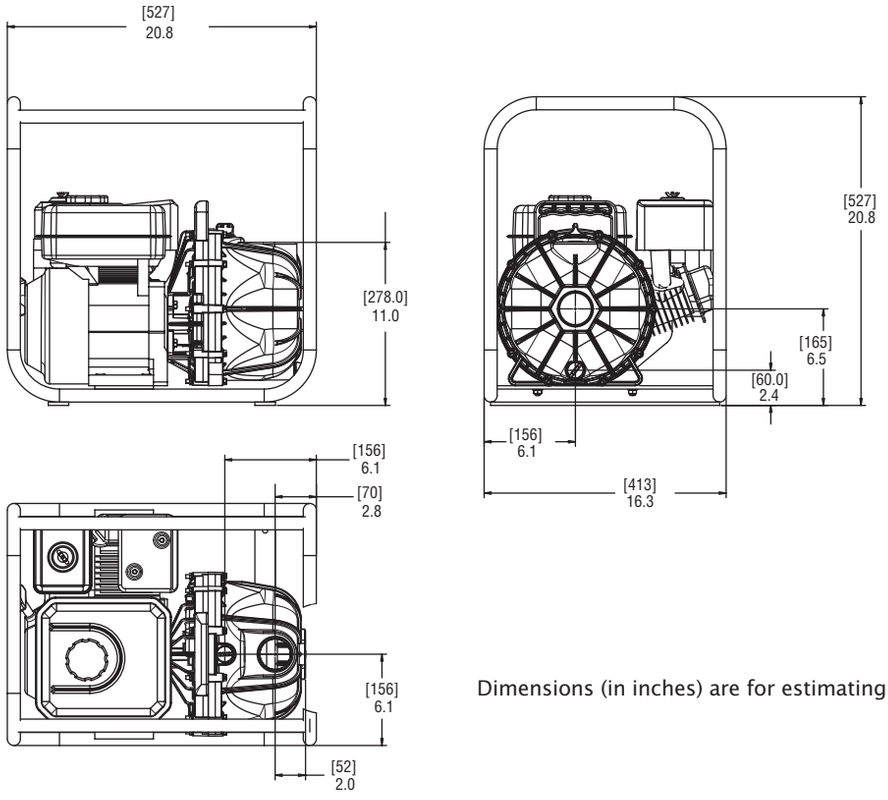
PUMPER series

Composite Engine-Driven Self-Priming Pump

PUMP PERFORMANCE

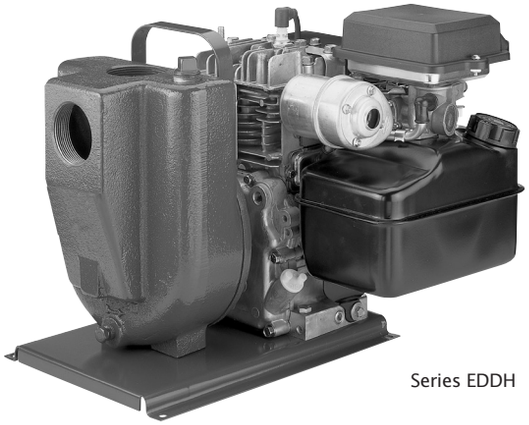


OUTLINE DIMENSIONS

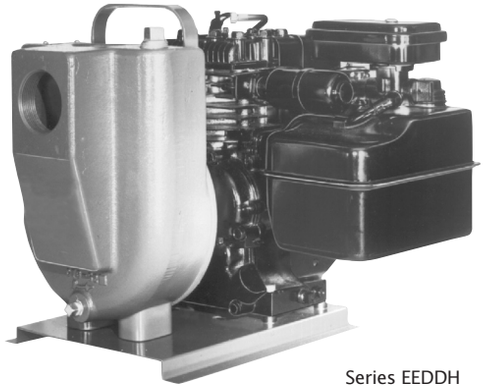


Dimensions (in inches) are for estimating purposes only.

Engine-Driven Self-Priming Pumps



Series EDDH



Series EEDDH

These engine-driven centrifugal pumps can be used where electrical power is not available. Powerful 4-cycle gasoline engines get the job done faster and more efficiently.

Close-coupled EDDH has pump and engine close-coupled on all-steel base... 16" long, 14" wide and 13-1/8" high. EDDH features 5/8" diameter, ductile iron threaded shaft extension.

Frame-mounted EEDDH features pump and engine frame-mounted on all-steel base... 18-11/16" long, 14" wide and 13-1/8" high. Stub shaft allows easy replacement with other gasoline-powered engines. EEDDH has 3/4" diameter keyed ductile iron shaft extension.

Order Catalog No. EEDD for pump end only, supplied without engine, to be used with 5/8" or 3/4" shaft in gasoline-engine-driven applications. Pump is identical in design to stub-shaft EEDDH.

ORDERING INFORMATION

Catalog Number	HP	Description	Fuel Tank Size	Pipe Tapping Sizes		Approx. Wt. Lbs.
				Suction	Discharge	
EDDH	3	Gasoline powered pump	3 Quarts	2"	2"	65
EEDDH	3	Gasoline powered pump	3 Quarts	2"	2"	70
EEDD	–	Gasoline powered pump	–	2"	2"	38

Design Series EDDH – Engine-driven without stub shaft
Design Series EEDDH – Engine-driven with stub shaft
Design Series EEDD – Stub shaft pump only

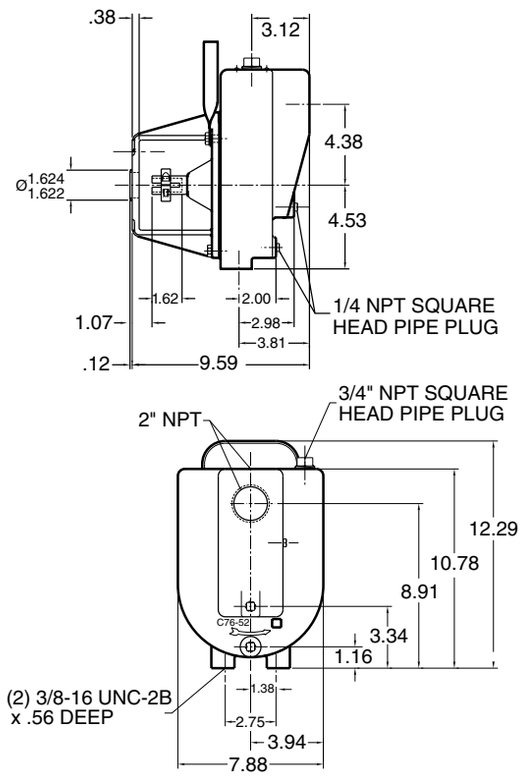
SPECIFICATIONS

Body – Close-grained cast iron
Impeller – Cast iron
Diffuser – Cast iron
Diffuser Ring – Buna-N
Stub Shaft (EEDD only) – 416 stainless steel

BERKELEY® is a registered trademark of Pentair Water.
In order to provide the best products possible, specifications are subject to change.

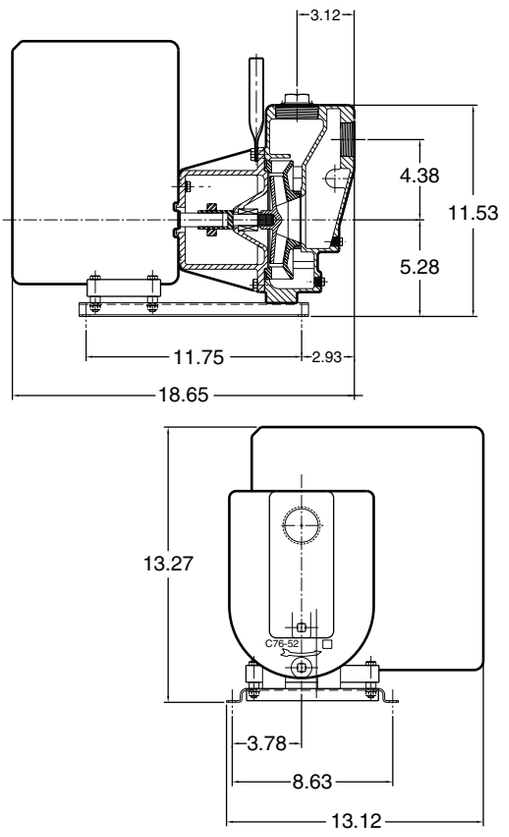
Engine-Driven Self-Priming Pumps

OUTLINE DIMENSIONS – EEDD



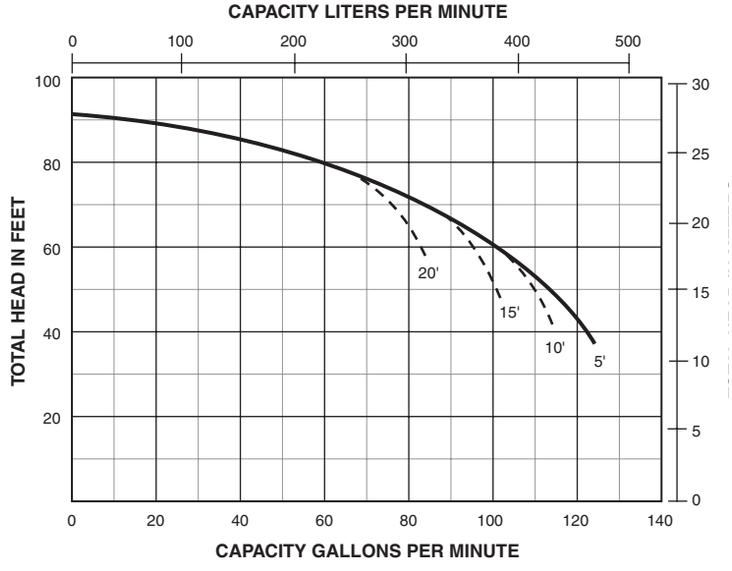
Dimensions (in inches) are for estimating purposes only.

OUTLINE DIMENSIONS – EEDDH



Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE



NOTE: Dotted lines indicate performance reduction at high suction lift.

Water Systems Product Nomenclature

BERKELEY Catalog Numbers define products for you. The following paragraphs describe number assignments and their meanings for 4" submersibles, jets and small centrifugal pumps.

4" SUBMERSIBLE PUMP CATALOG NUMBERS

Submersible pump catalog numbers are patterned like this:

B10P4MS05221

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Brand	***GPM***	***Motor Type Motor Size***	***Pump Series***	***HP***	***Volts***	***No. of Wires***	***Phase***
example:	**B**	**10**	**P4**	**MS**	**05**	**2**	**2**	**1**

Brand –
B - BERKELEY

GPM – **Gallons Per Minute**
Current sizes: 5, 7, 10, 15, 20, 30 for the 4" Series.

Type –
P4 – PENTEK® four inch

Pump Series –
MS+ – "M+" Series Stn. Stl.

MS – "M" Series Stn. Stl.
JP – "J" Series Plastic

HP – **Horsepower**
Horsepower designation for all BERKELEY pumps:
05 = .5 HP
07 = .75 HP
10 = 1 HP
15 = 1.5 HP

Volts –
1 = 115V
2 = 230V

No. of Wires –
2 = "2 Wire"
3 = "3 Wire"

Phase –
1 = Single

PENTEK® is a registered trademark of Pentair Water.

Water Systems Product Nomenclature

JET PUMP CATALOG NUMBERS

Jet pump catalog numbers are patterned like this:

5SN-L	(1) *HP*	(2) *type*	(3) *dash#*
example:	5	SN	-L

(1) *HP* – HORSEPOWER

Horsepower designation for all BERKELEY Pumps:

5 = 1/2 HP
7 = 3/4 HP
10 = 1 HP
15 = 1-1/2 HP
20 = 2 HP
25 = 2-1/2 HP

(2) *type* – First Letter is DESIGN SERIES
Second Letter (N) - Shallow Well
(L) - Deep Well

(3) *dash#* – ENGINEERING SERIES NUMBER (dash number)

Indicates product improvements.

SMALL CENTRIFUGAL PUMP CATALOG NUMB

Centrifugal pump catalog numbers are patterned like this:

10LTHH	(1) *HP*	(2) *type*	(3) *head*	(4) *PH*	(5) *dash#*
example:	10	LT	HH	3	-01

(1) *HP* – HORSEPOWER

Horsepower designation for all BERKELEY pumps:

5 = 1/2 HP
7 = 3/4 HP
10 = 1 HP
15 = 1-1/2 HP
20 = 2 HP
25 = 2-1/2 HP

(2) *type* – PUMP DESIGN SERIES

(3) *head* – HEAD DESIGN

H = high head
M = medium head

(4) *PH* – PHASE

3 = 3 phase

(5) *dash#* – ENGINEERING SERIES NUMBER (dash number)

Indicates product improvements.

STEEL TANK CATALOG NUMBERS

Steel tank catalog numbers are patterned like this:

PS19T	(1) *type*	(2) *size*	(3) *dash#*
example:	PS	19T	-T02

(1) *type* – TANK DESIGN SERIES

(2) *size* – Tank size equivalent to traditional galvanized air-over-water tank

T = "tall" stand-up type
H = "horizontal" pump mount type

(3) *dash#* – ENGINEERING SERIES NUMBER (dash number)

Indicates product improvements.

PRO-Source PLUS™ FIBREWOUND TANKS

PRO-Source PLUS™ Fibrewound Tank catalog numbers are patterned like this:

SR35-10	(1) *type*	(2) *size*	(3) *drawdown*	(4) *dash#*
example:	SR	35	-10	-01

(1) *type* – TANK DESIGN SERIES

(2) *size* – Tank vessel capacity in U.S. gallons

(3) *drawdown* – U.S. gallons drawdown with a 30-50 system pressure

(4) *dash#* – ENGINEERING SERIES NUMBER (dash number)

Indicates product improvements.

PRO-Source PLUS™ is a trademark of Pentair Water.

Sizing Home Water Systems

We have developed the following "Rule of Thumb" formula for sizing home water systems that will be applicable in many instances:

Simply count the fixtures and water outlets in the home. This method bases the approximate pumping capacity on use at the rate of a gallon per minute per fixture, and avoids the possibility of undersizing.

For instance, let us assume you count the following list of fixtures and water outlets in your home:

Kitchen:	Sink/Dishwasher	1
	(count as 1 fixture)	1
Bath:	Lavatory	1
	Tub	1
	Toilet	1
Powder Room:	Lavatory	1
	Toilet	1
Laundry and Utility Room:		
	Automatic washing machine (count as one fixture	1
	Laundry tubs	1
	Shower	1
	Outdoor faucets	2
Total fixtures and outlets		**12**

Be sure that your pump installer provides a water system that will deliver 12 gallons per minute at the desired pressure.

Average Water Requirements For General Service Around The Home And Farm

Each person per day, for all purposes	50 gal.
Each horse, dry cow or beef animal per day	12 gal.
Each milking cow per day	35 gal.
Each hog per day	4 gal.
Each sheep per day	2 gal.
Each 100 chickens per day	4 gal.

Average Amount Of Water Required By Various Home And Yard Fixtures

Drinking fountain, continuously flowing	50 to 100 gal. per day
Each shower bath	Up to 60 gal.
To fill bathtub	30 gal.
To flush toilet	6 gal.
To fill lavatory	2 gal.
To sprinkle 1/4" of water on each 1000 sq. feet of lawn	160 gal.
Dishwasher – per load	3 gal.
Automatic washer – per load	Up to 50 gal.
Regeneration of domestic water softener	50-100 gal.

Average Flow Rate Requirements By Various Fixtures

(gpm equals gal. per minute, gph equals gal. per hour)

Fixture	New (at 60 PSI)	Older Style
Shower	2.5 gpm	4 to 6 gpm
Bathtub	3 gpm	4 to 8 gpm
Toilet	1.6 gpm	4 to 5 gpm
Lavatory	2.5 gpm	1 to 3 gpm
Kitchen sink	2.2 gpm	2 to 3 gpm
1/2" hose and nozzle	. . . . .	200 gph
3/4" hose and nozzle	. . . . .	300 gph
Lawn sprinkler	. . . . .	120 gph

Pounds Pressure – Feet Of Head

Each pound of pressure developed by a pumping system is equal to 2.31 feet of head (feet of lift). Therefore, 10 pounds of pressure (PSI) will lift water vertically 23.1 feet. The following chart converts pressure to feet of head at various settings from 1 to 100 PSI.

This can be calculated for any setting using the following formula:

$$\textit{Pounds per Sq. Inch} = \frac{\textit{Head In Feet}}{2.31}$$

$$\textit{Head in Feet} = \textit{Pounds Per Sq. In.} \times 2.31$$

CONVERSION TABLE

Pounds Pressure/Feet Of Head

Pounds Pressure	Feet of Head
1	2.31
5	11.6
10	23.1
15	34.7
20	46.2
25	57.7
30	69.3
35	80.8
40	92.4
45	103.9
50	115.5
60	138.6
65	150.1
70	161.7
75	173.2
80	184.8
85	196.3
90	207.9
95	219.4
100	231.0

Pipe Friction Loss Charts

LOSS OF HEAD IN FEET DUE TO FRICTION PER 100 FEET OF PIPE

1/2"					3/4"					1"					1-1/4"				
Flow U.S. Gal. Min.	Velocity Plastic ft / sec	Plastic C = 140 ID .622"	Steel C = 100 ID .622"	Copper C = 130 ID .625"	Flow U.S. Gal. Min.	Velocity Plastic ft / sec	Plastic C = 140 ID .824"	Steel C = 100 ID .824"	Copper C = 130 ID .822"	Flow U.S. Gal. Min.	Velocity Plastic ft / sec	Plastic C = 140 ID 1.049"	Steel C = 100 ID 1.049"	Copper C = 130 ID 1.062"	Flow U.S. Gal. Min.	Velocity Plastic ft / sec	Plastic C = 140 ID 1.380"	Steel C = 100 ID 1.380"	Copper C = 130 ID 1.368"
0.5	0.5	0.314	0.582	0.35	1.5	0.9	0.61	1.13	0.7	2	0.74	0.322	0.595	0.345	4	0.9	0 .304	0.564	0.364
1	1.1	1.14	2.1	1.26	2	1.20	1.04	1.93	1.21	3	1.1	0.68	1.26	0.732	5	1.1	0.46	0.853	0.545
1.5	1.6	2.38	4.44	2.67	2.5	1.5	1.57	2.91	1.82	4	1.5	1.15	2.14	1.24	6	1.3	0.649	1.2	0.765
2	2.1	4.1	7.57	4.56	3	1.8	2.21	4.08	2.56	5	1.9	1.75	3.42	1.88	7	1.5	0.86	1.59	1.02
2.5	2.6	6.15	11.4	6.88	3.5	2.1	2.93	5.42	3.4	6	2.2	2.45	4.54	2.63	8	1.7	1.1	2.04	1.31
3	3.2	8.65	16	9.66	4	2.4	3.74	6.94	4.36	8	3.0	4.16	7.73	4.5	10	2.1	1.67	3.08	1.98
3.5	3.7	11.5	21.3	12.9	4.5	2.7	4.66	8.63	5.4	10	3.7	6.31	11.7	6.77	12	2.6	2.33	4.31	2.75
4	4.2	14.8	27.3	16.4	5	3.0	5.66	10.5	6.57	12	4.5	8.85	16.4	9.47	14	3.0	3.1	5.73	3.64
4.5	4.8	18.3	33.9	20.4	6	3.6	7.95	14.7	9.22	14	5.2	11.8	21.8	12.6	16	3.4	3.96	7.34	4.68
5	5.3	22.2	41.2	24.8	7	4.2	10.6	19.6	12.2	16	5.9	15.1	27.9	16.2	18	3.9	4.93	9.13	5.81
5.5	5.8	26.6	49.2	29.5	8	4.8	13.5	25	15.7	18	6.7	18.7	34.7	20.1	20	4.3	6	11.1	7.1
6	6.3	31.2	57.8	34.8	9	5.4	16.8	31.1	19.5	20	7.4	22.8	42.1	24.4	25	5.4	9.06	16.8	10.7
6.5	6.9	36.2	67	40.2	10	6.0	20.4	37.8	23.7	22	8.2	27.1	50.2	28.8	30	6.4	12.7	23.5	15
7	7.4	41.5	76.8	46.1	11	6.6	24.4	45.1	28.2	24	8.9	31.9	59	34	35	7.5	16.9	31.2	20
7.5	7.9	47.2	87.3	52.5	12	7.2	28.6	53	33.2	26	9.7	36.9	68.4	39.7	40	8.6	21.6	40	25.6
8	8.4	53	98.3	59.4	13	7.8	33.2	61.5	38.5	28	10.4	42.5	78.5	45.5	50	10.7	32.6	60.4	38.7
8.5	9.0	59.5	110	66	14	8.4	38	70.5	44.2	30	11.1	48.1	89.2	51.6	60	12.9	45.6	84.7	54.1
9	9.5	66	122	73.5	16	9.6	48.6	90.2	56.6	35	13.0	64.3	119	68.7	70	15.0	61.5	114	72.2
9.5	10.0	73	135	81	18	10.8	60.5	112	70.4	40	14.8	82	152	88	80	17.2	77.9	144	92.4
10	10.6	80.5	149	89.4	20	12.0	73.5	136	83.5	45	16.7	102	189	109	90	19.3	96.6	179	115

1-1/2"					2"					2-1/2"				
Flow U.S. Gal. Min.	Velocity Plastic ft / sec	Plastic C = 140 ID 1.61"	Steel C = 100 ID 1.61"	Copper C = 130 ID 1.60"	Flow U.S. Gal. Min.	Velocity Plastic ft / sec	Plastic C = 140 ID 2.067"	Steel C = 100 ID 2.067"	Copper C = 130 ID 2.062"	Flow U.S. Gal. Min.	Velocity Plastic ft / sec	Plastic C = 140 ID 2.469"	Steel C = 100 ID 2.469"	Copper C = 130 ID 2.500"
4	0.6	0.144	0.267	0.165	10	1.0	0.233	0.431	0.268	20	1.3	0.353	0.654	0.375
6	0.9	0.305	0.565	0.358	15	1.4	0.495	0.916	0.569	30	2.0	0.75	1.39	0.792
8	1.3	0.52	0.962	0.611	20	1.9	0.839	1.55	0.962	40	2.7	1.27	2.36	1.35
10	1.6	0.785	1.45	0.923	25	2.4	1.27	2.35	1.45	50	3.4	1.92	3.56	2.04
12	1.9	1.1	2.04	1.29	30	2.9	1.78	3.29	2.03	60	4.0	2.69	4.99	2.86
14	2.2	1.46	2.71	1.71	35	3.3	2.36	4.37	2.71	70	4.7	3.58	6.64	3.82
16	2.5	1.87	3.47	2.2	40	3.8	3.03	5.6	3.47	80	5.4	4.59	8.5	4.88
18	2.8	2.33	4.31	2.75	45	4.3	3.76	6.96	4.31	90	6.0	5.72	10.6	6.06
20	3.2	2.83	5.24	3.31	50	4.8	4.57	8.46	5.24	100	6.7	6.9	12.8	7.37
25	3.9	4.26	7.9	5	55	5.3	5.46	10.1	6.22	110	7.4	8.25	15.3	8.8
30	4.7	6	11.1	7	60	5.7	6.44	11.9	7.34	120	8.0	9.71	18	10.3
35	5.5	7.94	14.7	9.35	70	6.7	8.53	15.8	9.78	130	8.7	11.3	20.9	12
40	6.3	10.2	18.9	12	80	7.6	10.9	20.2	12.5	140	9.4	12.9	23.9	13.7
45	7.1	12.63	23.4	14.9	90	8.6	13.6	25.1	15.6	150	10.1	14.7	27.3	15.6
50	7.9	15.4	28.5	18.1	100	9.6	16.5	30.5	18.9	160	10.7	16.6	30.7	17.6
55	8.7	18.35	34	21.5	110	10.5	19.7	36.4	22.5	170	11.4	18.5	34.3	19.7
60	9.5	21.6	40	25.3	120	11.5	23.1	42.7	26.6	180	12.1	20.6	38.1	21.9
65	10.2	25.1	46.4	29	130	12.4	26.8	49.6	30.7	190	12.7	22.7	42.1	24.2
70	11.0	28.7	53.2	33.8	140	13.4	30.6	56.9	35.2	200	13.4	25	46.3	26.6
75	11.8	32.6	60.4	38	150	14.3	35	64.7	40.1	220	14.7	29.8	55.3	31.8
80	12.6	36.8	68.1	43.1	160	15.3	39.3	72.8	45.1	240	16.1	35.8	66.4	37.4
85	13.4	41.2	76.2	47.6	170	16.3	44	81.4	50.5	260	17.4	41.6	75.3	43.3
90	14.2	45.7	84.7	53.6	180	17.2	48.9	90.5	56.1	280	18.8	46.6	86.3	49.4
95	15.0	50.5	93.6	58.8	190	18.2	54	100	62	300	20.1	52.9	98.1	56.8
100	15.8	56.6	103	65.1	200	19.1	59.4	110	68					

NOTE: Recommended velocity is 5 FPS (feet per second) with a maximum of 7 FPS.

FRICTION LOSSES THROUGH FITTINGS IN TERMS OF EQUIVALENT LENGTHS OF PIPE

Type Fitting and Application	Pipe and Fitting Material (Note 1)	Equivalent Length of Pipe Nominal Size Fitting and Pipe						
		1/2	3/4	1	1-1/4	1-1/2	2	2-1/2
Threaded Adapter Plastic or Copper to Thread	Copper	1	1	1	1	1	1	1
	Plastic	3	3	3	3	3	3	3
90° Standard Elbow	Steel	2	3	3	4	4	5	6
	Copper	2	3	3	4	4	5	6
	Plastic	4	5	6	7	8	9	10
Insert Coupling	Plastic	3	3	3	3	3	3	3
Standard Tee	Steel	4	5	6	8	9	11	14
	Copper	4	5	6	8	9	11	14
	Plastic	7	8	9	12	13	17	20
Gate Valve	Note (2)	2	3	4	5	6	7	8

Note (1) Loss Figures are based on equivalent lengths of indicated pipe material. **Note (2)** Loss Figures for screwed valves and based on equivalent lengths of steel pipe.

Notes