

PROFESSIONAL WATER SYSTEMS

PUMPS, TANKS, MOTORS, AND CONTROLS

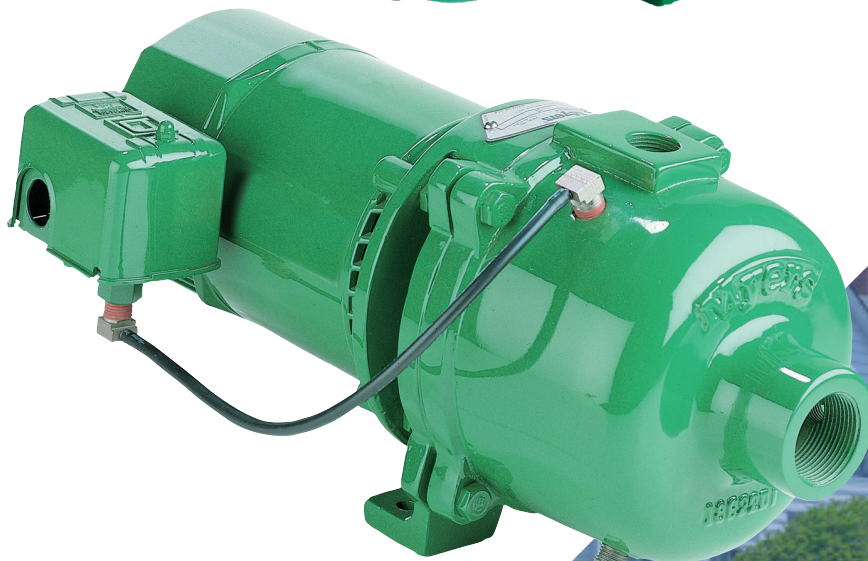


TABLE OF CONTENTS

4" SUBMERSIBLE PUMPS

PREDATOR PLUS.....	3
THE RUSTLER.....	17
THE RANGER.....	30
KS SERIES.....	45

SUBMERSIBLE MOTORS AND MOTOR CONTROLS

PENTEK® XE SERIES 4" SUBMERSIBLE MOTORS.....	51
CABLE SELECTION.....	55
SUBMERSIBLE MOTOR CONTROLS.....	57
VIP PRO SERIES CONTROLS	59
SINGLE-PHASE PUMP PROTECTION.....	61
SPP-111P AND SPP-231P SINGLE-PHASE PUMP PROTECTION.....	62
SPP-111-3RLP, SPP-233P AND SPP-235P PUMP PROTECTION.....	63
THE INFORMER PUMP PROTECTION.....	64
PENTEK INTELLIDRIVE™	65
PENTEK INTELLIKIT.....	68
PENTEK PUMP CONTROLLERS PPC3 AND PPC5 (REPLACE WITH P11995WS)	71
6" AND 8" SUBMERSIBLE MOTORS XE-6/XE-8.....	74
6" HITACHI® SUBMERSIBLE MOTOR	77

JET PUMPS

MPN SERIES SHALLOW WELL.....	80
MFN SERIES SHALLOW WELL.....	83
QUICK DRAW SHALLOW WELL	85
HR SERIES CONVERTIBLE	88
HJ SERIES CONVERTIBLE	90
HC AND HCM SERIES.....	94
MVPH SERIES -VERTICAL MULTI-STAGE DEEP WELL JET PUMPS.....	98

TANKS

PRO-SOURCE® FIBREWOUND PRESSURE.....	103
PRO-SOURCE FIBREWOUND PRESSURE.....	107

CENTRIFUGAL PUMPS

QUICK PRIME SELF-PRIMING	109
QP SERIES FIELD ASSEMBLY KITS.....	113
PQP SERIES.....	114
CTJ SERIES-CRUSADER.....	117
CENTRI-THRIFT.....	119

BOOSTER PUMPS

MPB SERIES SERVICEABLE HIGH PRESSURE BOOSTER.....	123
MDPC SERIES SELF-PRIMING CENTRIFUGAL PUMP.....	127

UTILITY PUMPS

PRO-SOURCE COMPOSITE ENGINE-DRIVEN SELF-PRIMING PUMP.....	129
UTILITY TRANSFER PUMP.....	132

ACCESSORIES

PRESSURE SWITCHES.....	133
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GENERAL INFORMATION.....	137
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WARRANTY.....	145
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4" SUBMERSIBLE PUMPS

PREDATOR PLUS SERIES



Precision-engineered, rugged 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.

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 octagon wrench area 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.

4" SUBMERSIBLE PUMPS PREDATOR PLUS SERIES

ORDERING INFORMATION

GPM	MOTOR TYPE	HP	STGS.	PH†	VOLT	ASSEMBLED PUMP			PUMP END			MOTOR		CONTROL BOX	
						CATALOG NUMBER	LENGTH IN.*	WEIGHT LBS.*	CATALOG NUMBER	LENGTH IN.*	WEIGHT LBS.*	CATALOG NUMBER	WEIGHT LBS.*	CATALOG NUMBER	WEIGHT LBS.*
5	2 WIRE	1/2	14	1	115	2ST51-5PLUS-P4	28	28	ST5-5PLUS	18	12	P42B0005A1	19		
		1/2	14	1	230	2ST52-5PLUS-P4	28	28	ST5-5PLUS	18	12	P42B0005A2	19		
		3/4	19	1	230	2ST72-5PLUS-P4	33	34	ST7-5PLUS	22	15	P42B0007A2	23		
		1	22	1	230	2ST102-5PLUS-P4	37	39	ST10-5PLUS	26	17	P42B0010A2	25		
		1-1/2	30	1	230	2ST152-5PLUS-P4	47	51	ST15-5PLUS	32	21	P42B0015A2	29		
	3 WIRE	1/2	13	1	115	3ST51-5PLUS-P4	27-1/2	28	ST5-5PLUS	18	12	P43B0005A1	19	SMC-IR0511	4
		1/2	14	1	230	3ST52-5PLUS-P4	28	28	ST5-5PLUS	18	12	P43B0005A2	18	SMC-CR0521	4
		3/4	19	1	230	3ST72-5PLUS-P4	33	34	ST7-5PLUS	22	15	P43B0007A2	21	SMC-CR0721	4
		1	22	1	230	3ST102-5PLUS-P4	38	39	ST10-5PLUS	26	17	P43B0010A2	23	SMC-CR1021	4
		1-1/2	30	1	230	3ST152-5PLUS-P4	46	48	ST15-5PLUS	32	21	P43B0015A2	27	SMC-CR1521	7
		1-1/2	30	3	230				ST15-5PLUS	32	21	P43B0015A3	23		
		1-1/2	30	3	460				ST15-5PLUS	32	21	P43B0015A4	23		
		2	38	1	230				ST20-5PLUS	37-3/4	25	P43B0020A2	31	SMC-CR2021	7
		2	38	3	230				ST20-5PLUS	37-3/4	25	P43B0020A3	23		
		2	38	3	460				ST20-5PLUS	37-3/4	25	P43B0020A4	23		
7/8	2 WIRE	1/2	11	1	115	2ST51-8PLUS-P4	26	27	ST5-8PLUS	16	11	P42B0005A1	19		
		1/2	11	1	230	2ST52-8PLUS-P4	26	27	ST5-8PLUS	16	11	P42B0005A2	19		
		3/4	15	1	230	2ST72-8PLUS-P4	30	32	ST7-8PLUS	19	13	P42B0007A2	23		
		1	18	1	230	2ST102-8PLUS-P4	34	37	ST10-8PLUS	22	15	P42B0010A2	25		
		1-1/2	22	1	230	2ST152-8PLUS-P4	43	47	ST15-8PLUS	28	17	P42B0015A2	29		
	3 WIRE	1/2	10	1	115	3ST51-8PLUS-P4	25-1/2	27	ST5-8PLUS	16	11	P43B0005A1	19	SMC-IR0511	4
		1/2	11	1	230	3ST52-8PLUS-P4	26	27	ST5-8PLUS	16	11	P43B0005A2	18	SMC-CR0521	4
		3/4	15	1	230	3ST72-8PLUS-P4	30	32	ST7-8PLUS	19	13	P43B0007A2	21	SMC-CR0721	4
		1	18	1	230	3ST102-8PLUS-P4	34	37	ST10-8PLUS	22	15	P43B0010A2	23	SMC-CR1021	4
		1-1/2	22	1	230	3ST152-8PLUS-P4	42	44	ST15-8PLUS	28	17	P43B0015A2	27	SMC-CR1521	7
		1-1/2	22	3	230				ST15-8PLUS	27-1/4	17	P43B0015A3	23		
		1-1/2	22	3	460				ST15-8PLUS	27-1/4	17	P43B0015A4	23		
		2	28	1	230				ST20-8PLUS	32-1/2	20	P43B0020A2	31	SMC-CR2021	7
		2	28	3	230				ST20-8PLUS	32-1/2	20	P43B0020A3	27		
		2	28	3	460				ST20-8PLUS	32-1/2	20	P43B0020A4	27		
		3	36	1	230				ST30-8PLUS	39-1/2	24	P43B0030A2	37	SMC-CR3021	8
		3	36	3	230				ST30-8PLUS	39-1/2	24	P43B0030A3	37		
		3	36	3	460				ST30-8PLUS	39-1/2	24	P43B0030A4	37		

†Please refer to the Pentek XE Series data for all three-phase motor options.

*Length and Weight are approximate.

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

4" SUBMERSIBLE PUMPS PREDATOR PLUS SERIES

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*
10/12**	2 WIRE	1/2	8	1	115	2ST51-12PLUS-P4	23	28	ST5-12PLUS	13	9	P42B0005A1	19		
		1/2	8	1	230	2ST52-12PLUS-P4	23	28	ST5-12PLUS	13	9	P42B0005A2	19		
		3/4	11	1	230	2ST72-12PLUS-P4	26	31	ST7-12PLUS	15	10	P42B0007A2	23		
		1	13	1	230	2ST102-12PLUS-P4	29	35	ST10-12PLUS	17	11	P42B0010A2	25		
		1-1/2	17	1	230	2ST152-12PLUS-P4	35	42	ST15-12PLUS	20	12	P42B0015A2	29		
	3 WIRE	1/2	7	1	115	3ST51-12PLUS-P4	22-3/4	27-1/2	ST5-12PLUS	12-3/4	9	P43B0005A1	19	SMC-IR0511	4
		1/2	8	1	230	3ST52-12PLUS-P4	23	28	ST5-12PLUS	13	9	P43B0005A2	19	SMC-CR0521	4
		3/4	11	1	230	3ST72-12PLUS-P4	26	31	ST7-12PLUS	15	10	P43B0007A2	21	SMC-CR0721	4
		1	13	1	230	3ST102-12PLUS-P4	29	35	ST10-12PLUS	17	11	P43B0010A2	23	SMC-CR1021	4
		1-1/2	17	1	230	3ST152-12PLUS-P4	34	42	ST15-12PLUS	20	12	P43B0015A2	27	SMC-CR1521	7
		1-1/2	17	3	230				ST15-12PLUS	19-3/4	12-1/2	P43B0015A3	23		
		1-1/2	17	3	460				ST15-12PLUS	19-3/4	12-1/2	P43B0015A4	23		
		2	22	1	230				ST20-12PLUS	22	13-3/4	P43B0020A2	31	SMC-CR2021	7
		2	22	3	230				ST20-12PLUS	22	13-3/4	P43B0020A3	23		
		2	22	3	460				ST20-12PLUS	22	13-3/4	P43B0020A4	23		
		3	30	1	230				ST30-12PLUS	22	16-3/4	P43B0030A2	40	SMC-CR3021	8
		3	30	3	230				ST30-12PLUS	28	16-3/4	P43B0030A3	32		
		3	30	3	460				ST30-12PLUS	28	16-3/4	P43B0030A4	32		
		5	50	1	230				ST50-12PLUS	43-1/2	25-1/2	P43B0050A2	70	SMC-CR5021	12
		5	50	3	230				ST50-12PLUS	43-1/2	25-1/2	P43B0050A3	55		
		5	50	3	460				ST50-12PLUS	43-1/2	25-1/2	P43B0050A4	55		
15**	2 WIRE	1/2	6	1	115	2ST51-15PLUS-P4	23	27	ST5-15PLUS	13	9	P42B0005A1	19		
		1/2	6	1	230	2ST52-15PLUS-P4	23	27	ST5-15PLUS	13	9	P42B0005A2	19		
		3/4	8	1	230	2ST72-15PLUS-P4	26	31	ST7-15PLUS	15	10	P42B0007A2	23		
		1	10	1	230	2ST102-15PLUS-P4	30	35	ST10-15PLUS	17	11	P42B0010A2	25		
		1-1/2	12	1	230	2ST152-15PLUS-P4	36	43	ST15-15PLUS	21	13	P42B0015A2	29		
	3 WIRE	1/2	5	1	115	3ST51-15PLUS-P4	22-1/4	27	ST5-15PLUS	12-1/4	9	P43B0005A1	19	SMC-IR0511	4
		1/2	6	1	230	3ST52-15PLUS-P4	23	27	ST5-15PLUS	13	9	P43B0005A2	19	SMC-CR0521	4
		3/4	8	1	230	3ST72-15PLUS-P4	26	31	ST7-15PLUS	15	10	P43B0007A2	23	SMC-CR0721	4
		1	10	1	230	3ST102-15PLUS-P4	30	35	ST10-15PLUS	17	11	P43B0010A2	25	SMC-CR1021	4
		1-1/2	12	1	230	3ST152-15PLUS-P4	34	41	ST15-15PLUS	21	13	P43B0015A2	29	SMC-CR1521	7
		1-1/2	12	3	230				ST15-15PLUS	20-1/4	13	P43B0015A3	23		
		1-1/2	12	3	460				ST15-15PLUS	20-1/4	13	P43B0015A4	23		
		2	15	1	230				ST20-15PLUS	23-1/2	15	P43B0020A2	31	SMC-CR2021	7
		2	15	3	230				ST20-15PLUS	23-1/2	15	P43B0020A3	23		
		2	15	3	460				ST20-15PLUS	23-1/2	15	P43B0020A4	23		
		3	22	1	230				ST30-15PLUS	31-1/4	18	P43B0030A2	40	SMC-CR3021	7
		3	22	3	230				ST30-15PLUS	31-1/4	18	P43B0030A3	32		
		3	22	3	460				ST30-15PLUS	31-1/4	18	P43B0030A4	32		

†Please refer to the Pentek XE Series data for all three-phase motor options.

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

4" SUBMERSIBLE PUMPS PREDATOR PLUS SERIES

ORDERING INFORMATION

GPM	MOTOR TYPE	HP	STGS.	PH†	VOLT	ASSEMBLED PUMP			PUMP END			MOTOR		CONTROL BOX	
						CATALOG NUMBER	LENGTH INCHES*	WEIGHT POUNDS*	CATALOG NUMBER	LENGTH INCHES*	WEIGHT POUNDS*	CATALOG NUMBER	WEIGHT POUNDS*	CATALOG NUMBER	WEIGHT POUNDS*
20**	2 WIRE	3/4	6	1	230	2ST72-20PLUS-P4	24	30	ST7-20PLUS	13	9	P42B0007A2	23		
		1	7	1	230	2ST102-20PLUS-P4	28	34	ST10-20PLUS	15	10	P42B0010A2	25		
		1-1/2	10	1	230	2ST152-20PLUS-P4	32	39	ST15-20PLUS	17	11	P42B0015A2	29		
	3 WIRE	3/4	6	1	230	3ST72-20PLUS-P4	24	30	ST7-20PLUS	13	9	P43B0007A2	23	SMC-CR0721	5
		1	7	1	230	3ST102-20PLUS-P4	28	34	ST10-20PLUS	15	10	P43B0010A2	25	SMC-CR1021	5
		1-1/2	10	1	230	3ST152-20PLUS-P4	31	39	ST15-20PLUS	17	11	P43B0015A2	29	SMC-CR1521	7
		1-1/2	9	3	230				ST15-20PLUS	16-3/4	10-3/4	P43B0015A3	23		
		1-1/2	9	3	460				ST15-20PLUS	16-3/4	10-3/4	P43B0015A4	23		
		2	12	1	230				ST20-20PLUS	20-1/4	12-1/2	P43B0020A2	31	SMC-CR2021	7
		2	12	3	230				ST20-20PLUS	20-1/4	12-1/2	P43B0020A3	32		
		2	12	3	460				ST20-20PLUS	20-1/4	12-1/2	P43B0020A4	32		
		3	17	1	230				ST30-20PLUS	25-3/4	15	P43B0030A2	40	SMC-CR3021	7
		3	17	3	230				ST30-20PLUS	25-3/4	15	P43B0030A3	32		
		3	17	3	460				ST30-20PLUS	25-3/4	15	P43B0030A4	32		
		5	28	1	230				ST50-20PLUS	38	21	P43B0050A2	70	SMC-CR5021	8
		5	28	3	230				ST50-20PLUS	38	21	P43B0050A3	55		
		5	28	3	460				ST50-20PLUS	38	21	P43B0050A4	55		
		7-1/2	40	3	230				ST75-20PLUS	53-3/4	30	P43B0075A3	70		
		7-1/2	40	3	460				ST75-20PLUS	53-3/4	30	P43B0075A4	70		
		10	54	3	460				ST100-20PLUS	71	41	P43B0100A4	78		
30***	2 WIRE	1	5	1	230	2ST102-30PLUS-P4	26-1/2	35	ST10-30PLUS	14	9-3/4	P42B0010A2	25		
		1-1/2	6	1	230	2ST152-30PLUS-P4	30-1/2	39	ST15-30PLUS	15-1/4	10-3/4	P42B0015A2	29		
	3 WIRE	1	5	1	230	3ST102-30PLUS-P4	26-1/2	35	ST10-30PLUS	14	10	P43B0010A2	25	SMC-CR1021	5
		1-1/2	6	1	230	3ST152-30PLUS-P4	29	39	ST15-30PLUS	15-1/4	11	P43B0015A2	29	SMC-CR-1521	7
		1-1/2	6	3	230				ST15-30PLUS	15-1/4	11	P43B0015A3	23		
		1-1/2	6	3	460				ST15-30PLUS	15-1/4	11	P43B0015A4	23		
		2	8	1	230				ST20-30PLUS	18-1/4	12	P43B0020A2	31	SMC-CR2021	7
		2	8	3	230				ST20-30PLUS	18-1/4	12	P43B0020A3	23		
		2	8	3	460				ST20-30PLUS	18-1/4	12	P43B0020A4	23		
		3	12	1	230				ST30-30PLUS	24	15	P43B0030A2	40	SMC-CR3021	7
		3	12	3	230				ST30-30PLUS	24	15	P43B0030A3	32		
		3	12	3	460				ST30-30PLUS	24	15	P43B0030A4	32		
		5	20	1	230				ST50-30PLUS	35-3/4	20	P43B0050A2	70	SMC-CR5021	8
		5	20	3	230				ST50-30PLUS	35-3/4	20	P43B0050A3	55		
		5	20	3	460				ST50-30PLUS	35-3/4	20	P43B0050A4	55		
		7-1/2	28	3	230				ST75-30PLUS	50	27	P43B0075A3	70		
		7-1/2	28	3	460				ST75-30PLUS	50	27	P43B0075A4	70		
		10	38	3	460				ST100-30PLUS	65-1/2	35	P43B0100A4	70		

†Please refer to the Pentek XE Series data for all three-phase motor options.

*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.

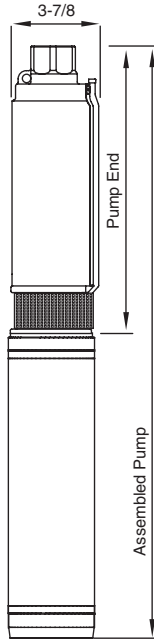
NOTE: On 2 HP and larger – Pump, Motor, Control Box or Magnetic Starter must be ordered separately.

‡Check Valve not included on 5 HP, 7-1/2 HP and 10 HP models.

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

4" SUBMERSIBLE PUMPS PREDATOR PLUS SERIES

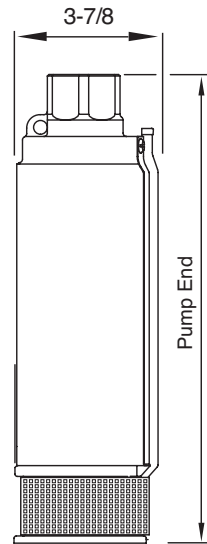
OUTLINE DIMENSIONS: 5, 7/8, 10/12, 15 AND 20 GPM



DISCHARGE	
5 GPM	1-1/4" NPT
7/8 GPM	1-1/4" NPT
10/12 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.
 NOTE: 5 and 7/8 GPM models are the smaller 3-3/4" diameter TrimLine

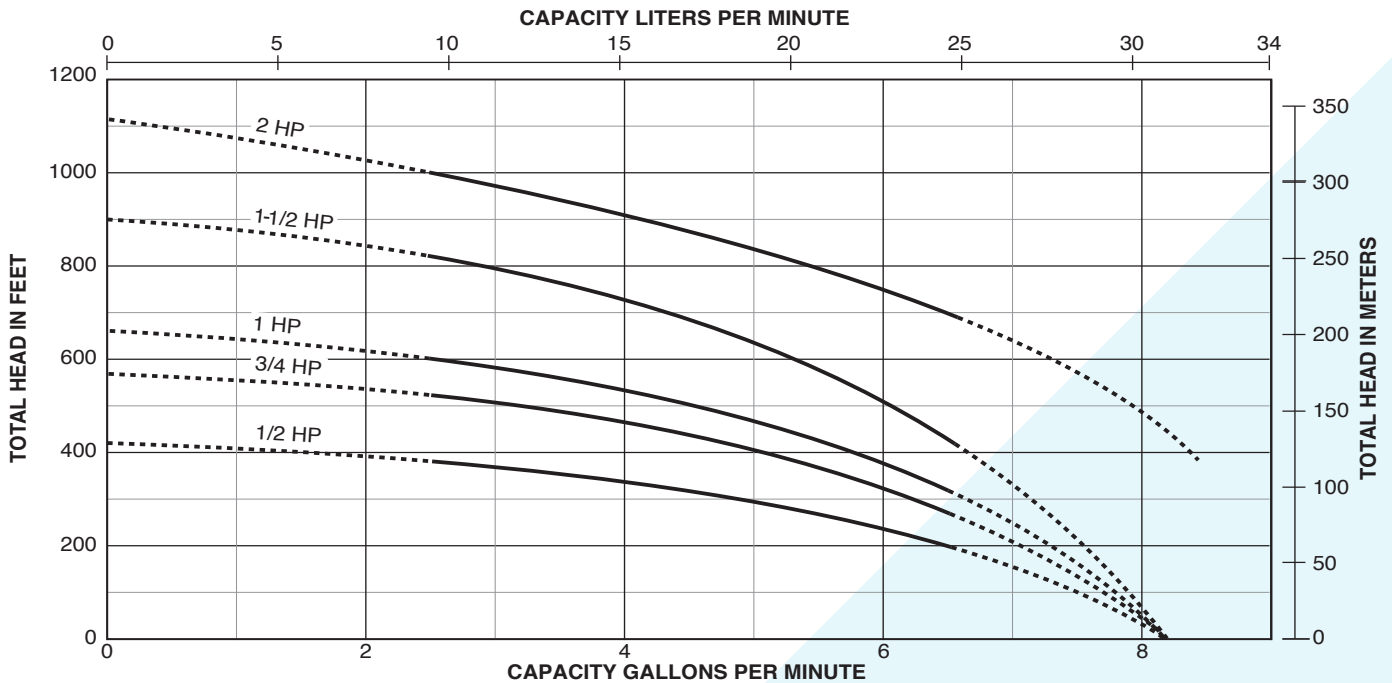
OUTLINE DIMENSIONS: 30



DISCHARGE	
30 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

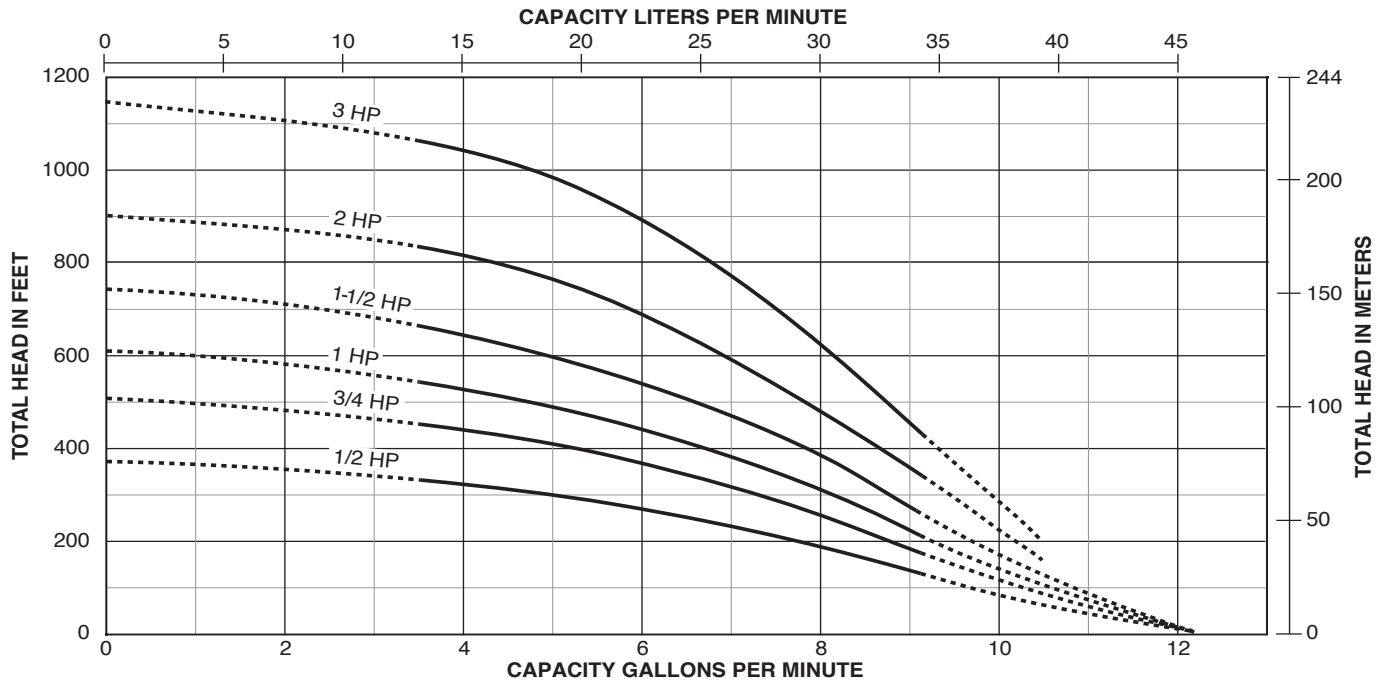


Tested and rated in accordance with Water Systems Council Standards.

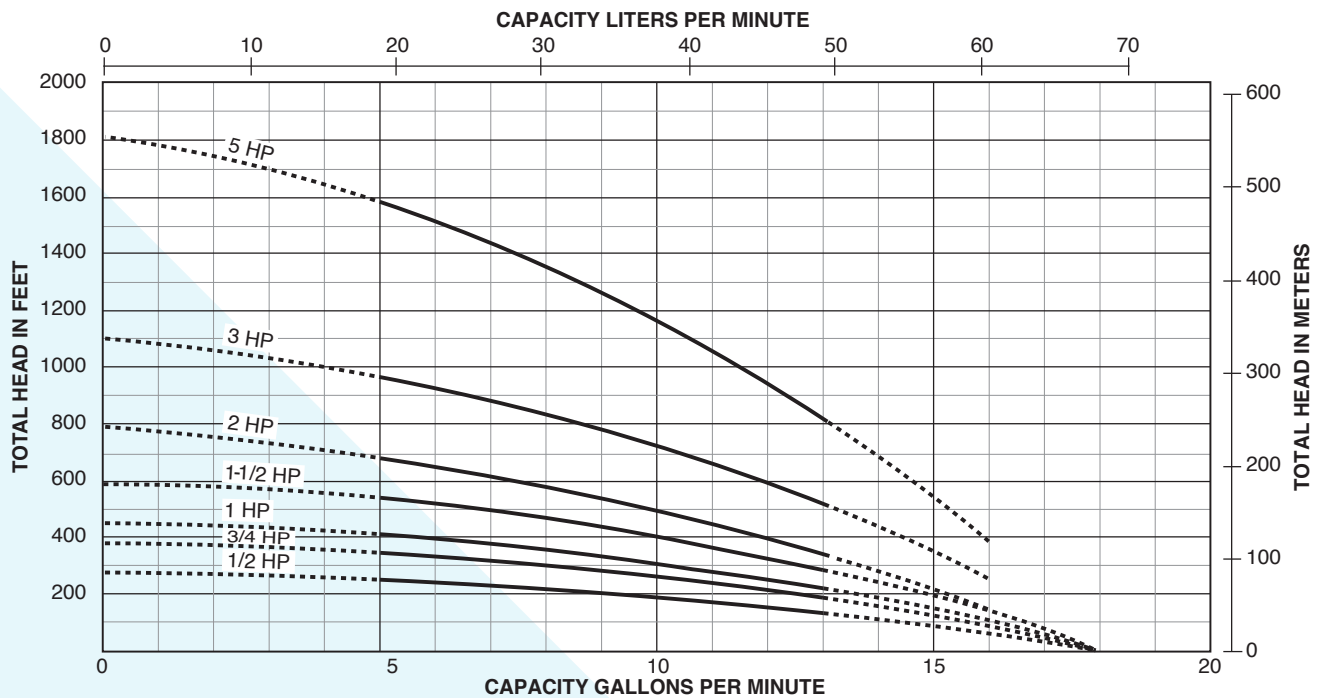
NOTE: Pumps installed with a Pro-Source® tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve.
 Relief valve must be capable of relieving entire flow of pump at relief pressure.

4" SUBMERSIBLE PUMPS PREDATOR PLUS SERIES

PUMP PERFORMANCE: 7/8 GPM



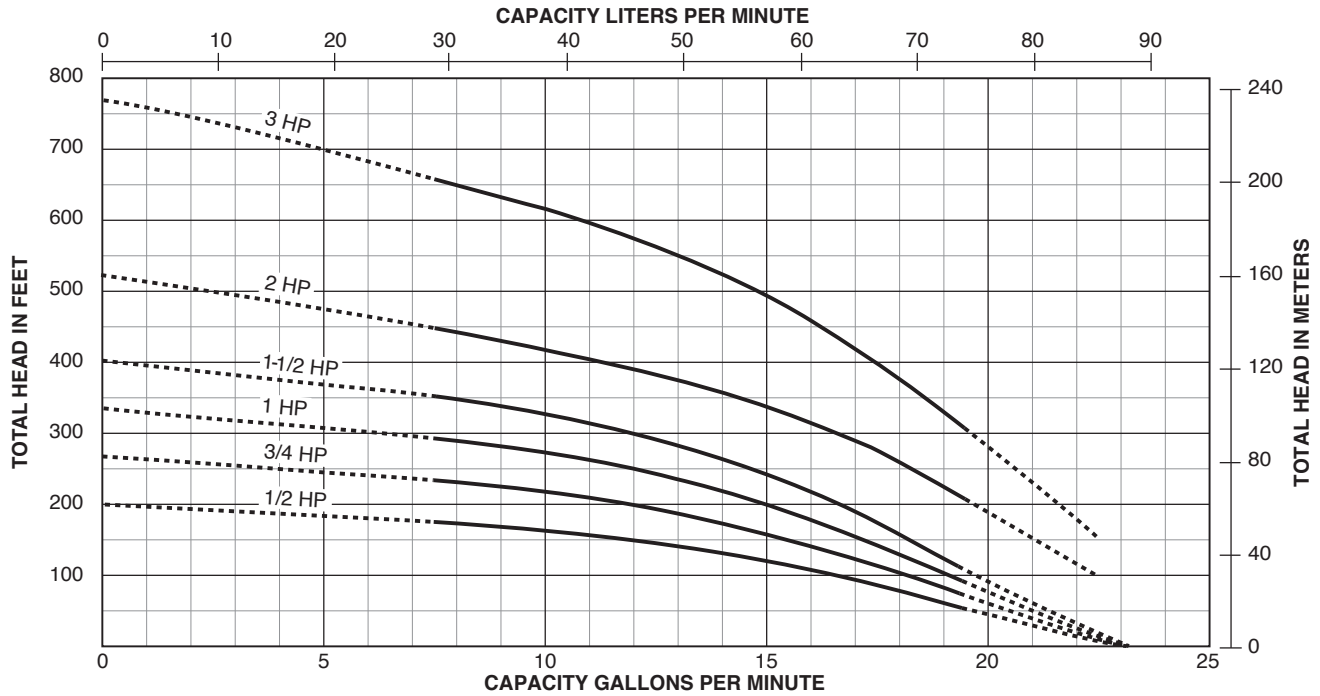
PUMP PERFORMANCE: 10/12 GPM



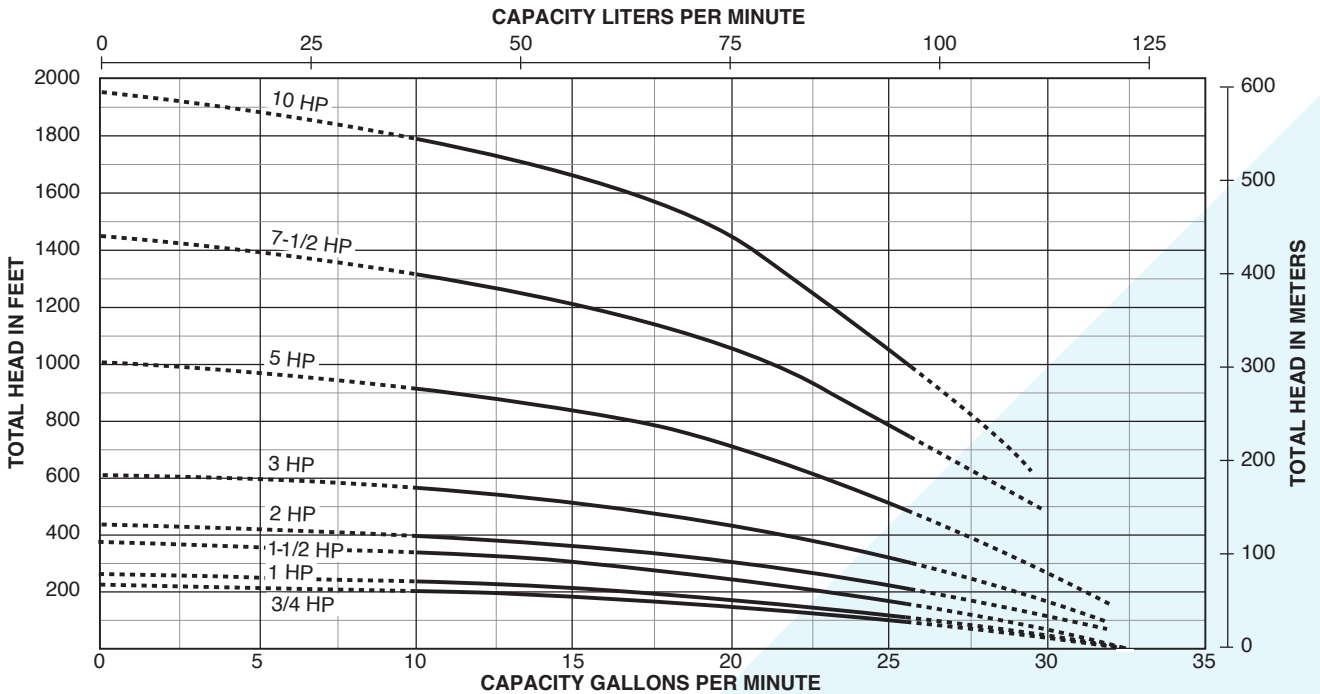
Tested and rated in accordance with Water Systems Council Standards.

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.

PUMP PERFORMANCE: 15 GPM



PUMP PERFORMANCE: 20 GPM

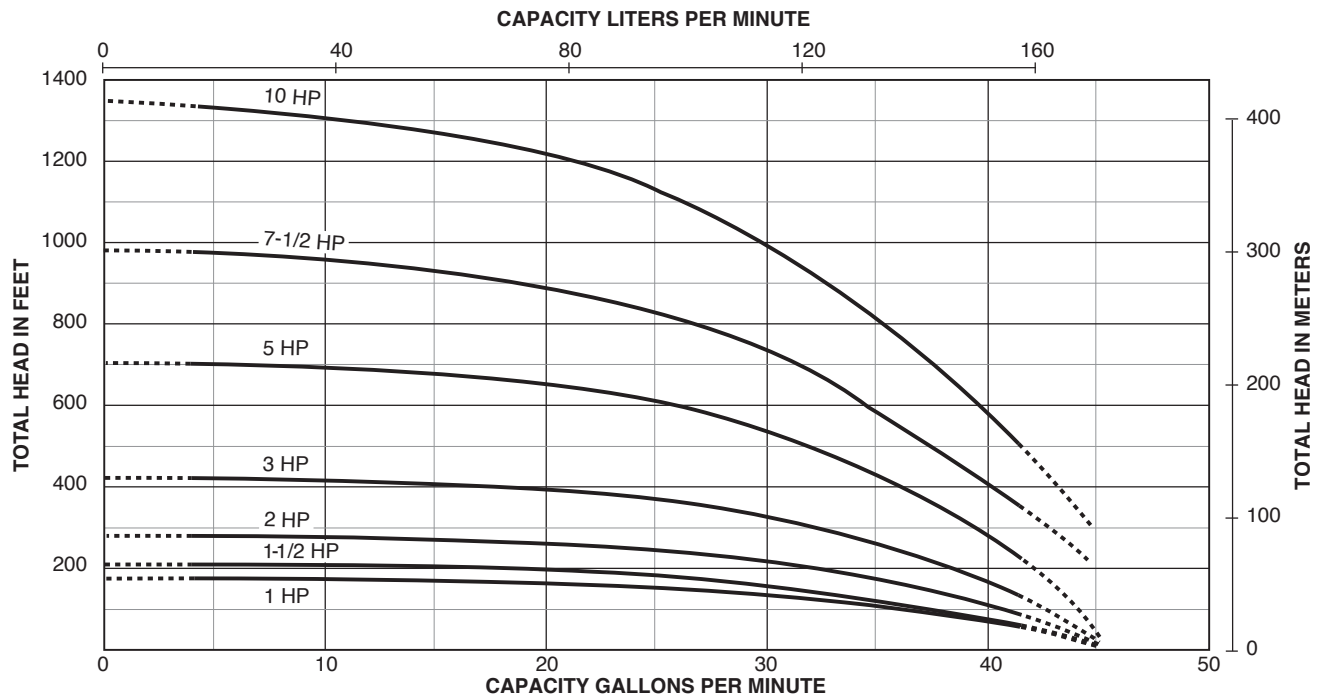


Tested and rated in accordance with Water Systems Council Standards.

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 PREDATOR PLUS SERIES

PUMP PERFORMANCE: 30 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 PREDATOR PLUS SERIES

5 GALLONS PER MINUTE

PUMP PERFORMANCE (Capacity in gallons per minute)

HP	PSI	PUMPING DEPTH IN FEET																												SHUT-OFF HEAD					
		0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	450	500	550	600	650	700	750	800	850	FEET	PSI		
1/2	0	—	—	—	—	—	—	—	7.3	7.0	6.8	6.5	6.2	5.9	5.6	5.2	4.9	4.4	4.0	3.5	2.9	2.1											421	182	
	20	—	—	—	—	7.5	7.2	7.0	6.7	6.4	6.1	5.8	5.5	5.1	4.7	4.3	3.9	3.3	2.7	1.7															
	30	—	—	—	7.4	7.2	6.9	6.6	6.4	6.1	5.7	5.4	5.1	4.7	4.2	3.8	3.2	2.5	1.5																
	40	—	—	7.4	7.1	6.9	6.6	6.3	6.0	5.7	5.4	5.0	4.6	4.2	3.7	3.1	2.4	1.3																	
	50	—	7.4	7.1	6.8	6.6	6.3	6.0	5.6	5.3	4.9	4.5	4.1	3.6	3.0	2.3	1.0																		
	60	7.3	7.1	6.8	6.5	6.2	5.9	5.6	5.3	4.9	4.5	4.0	3.5	2.9	2.1																				
	70	7.0	6.8	6.5	6.2	5.9	5.5	5.2	4.8	4.4	4.0	3.4	2.8	2.0																					
	80	6.7	6.4	6.1	5.8	5.5	5.1	4.8	4.3	3.9	3.4	2.7	1.8																						
3/4	0	—	—	—	—	—	—	—	—	—	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.7	5.5	5.2	5.0	4.2	3.2	1.8										
	20	—	—	—	—	—	—	—	7.3	7.1	7.0	6.8	6.6	6.3	6.1	5.9	5.7	5.4	5.1	4.9	4.6	4.3	3.3	2.0											
	30	—	—	—	—	—	7.5	7.3	7.1	6.9	6.7	6.5	6.3	6.1	5.9	5.6	5.4	5.1	4.8	4.5	4.2	3.9	2.8												
	40	—	—	—	—	7.5	7.3	7.1	6.9	6.7	6.5	6.3	6.1	5.8	5.6	5.3	5.1	4.8	4.5	4.2	3.8	3.4	2.1												
	50	—	—	—	7.4	7.3	7.1	6.9	6.7	6.5	6.2	6.0	5.8	5.5	5.3	5.0	4.7	4.4	4.1	3.7	3.3	2.9													
	60	—	—	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.7	5.5	5.2	5.0	4.7	4.4	4.1	3.7	3.3	2.8	2.2													
	70	—	7.4	7.2	7.0	6.8	6.6	6.4	6.2	5.9	5.7	5.5	5.2	4.9	4.6	4.3	4.0	3.6	3.2	2.7	2.1	1.2													
	80	7.4	7.2	7.0	6.8	6.6	6.4	6.1	5.9	5.7	5.4	5.2	4.9	4.6	4.3	3.9	3.6	3.1	2.6	2.0															
1	0	—	—	—	—	—	—	—	—	—	7.5	7.3	7.1	7.0	6.8	6.6	6.4	6.3	6.1	5.9	5.7	5.1	4.5	3.8	2.8	1.2									
	20	—	—	—	—	—	—	—	—	7.4	7.3	7.1	6.9	6.7	6.6	6.4	6.2	6.0	5.8	5.6	5.4	5.2	4.5	3.8	2.9	1.4									
	30	—	—	—	—	—	—	7.5	7.4	7.2	7.1	6.9	6.7	6.5	6.4	6.2	6.0	5.8	5.6	5.3	5.1	4.9	4.2	3.4	2.3										
	40	—	—	—	—	—	7.5	7.4	7.2	7.0	6.9	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.3	5.1	4.8	4.6	3.9	3.0	1.6										
	50	—	—	—	—	7.5	7.3	7.2	7.0	6.8	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.3	5.0	4.8	4.5	4.3	3.5	2.4											
	60	—	—	—	7.5	7.3	7.2	7.0	6.8	6.6	6.5	6.3	6.1	5.9	5.7	5.5	5.2	5.0	4.8	4.5	4.2	3.9	3.1	1.7											
	70	—	—	7.4	7.3	7.1	7.0	6.8	6.6	6.4	6.2	6.1	5.9	5.6	5.4	5.2	5.0	4.7	4.5	4.2	3.9	3.6	2.5												
	80	—	7.4	7.3	7.1	6.9	6.8	6.6	6.4	6.2	6.0	5.8	5.6	5.4	5.2	4.9	4.7	4.4	4.1	3.8	3.5	3.1	1.9												
1-1/2	0	—	—	—	—	—	—	—	—	—	—	—	—	—	7.5	7.4	7.3	7.2	7.1	6.9	6.8	6.7	6.4	6.0	5.6	5.2	4.8	4.3	3.8	3.1	2.2				
	20	—	—	—	—	—	—	—	—	—	—	—	7.5	7.4	7.3	7.1	7.0	6.9	6.8	6.6	6.5	6.4	6.0	5.7	5.3	4.8	4.3	3.8	3.2	2.3					
	30	—	—	—	—	—	—	—	—	—	—	7.5	7.4	7.2	7.1	7.0	6.9	6.8	6.6	6.5	6.4	6.2	5.9	5.5	5.1	4.6	4.1	3.5	2.8	1.8					
	40	—	—	—	—	—	—	—	—	—	7.5	7.3	7.2	7.1	7.0	6.9	6.7	6.6	6.5	6.3	6.2	6.1	5.7	5.3	4.9	4.4	3.8	3.2	2.4						
	50	—	—	—	—	—	—	7.7	7.6	7.4	7.3	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.2	6.0	5.9	5.5	5.1	4.6	4.1	3.6	2.9	1.9						
	60	—	—	—	—	—	—	7.5	7.4	7.3	7.2	7.1	6.9	6.8	6.7	6.6	6.4	6.3	6.2	6.0	5.9	5.7	5.3	4.9	4.4	3.9	3.3	2.5							
	70	—	—	—	—	—	7.5	7.4	7.3	7.2	7.1	6.9	6.8	6.7	6.5	6.4	6.3	6.1	6.0	5.8	5.7	5.5	5.1	4.7	4.2	3.6	2.9	2.0							
	80	—	—	—	—	7.5	7.4	7.3	7.2	7.0	6.9	6.8	6.7	6.5	6.4	6.3	6.1	6.0	5.8	5.7	5.5	5.4	4.9	4.5	3.9	3.3	2.5	1.3							
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						
2	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.0	6.8	6.5	6.2	5.9	5.5	5.0	4.5	4.0	3.3	2.4	1.5					1120	485		
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.0	6.8	6.5	6.2	5.9	5.5	5.0	4.5	4.0	3.3	2.4	1.5								
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	7.2	6.9	6.6	6.3	6.0	5.7	5.2	4.8	4.3	3.7	2.9	2.1	1.1								
	40	—	—	—	—	—	—	—	—	—	—	—	—	7.3	7.0	6.8	6.5	6.2	5.9	5.5	5.0	4.5	4.0	3.3	2.4	1.5									
	50	—	—	—	—	—	—	—	—	—	—	7.4	7.2	6.9	6.6	6.4	6.1	5.8	5.4	4.9	4.4	3.9	3.1	2.2	1.2										
	60	—	—	—	—	—	—	—	—	—	—	7.3	7.1	6.8	6.5	6.2	6.0	5.6	5.1	4.6	4.1	3.2	2.5	1.6											

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 PREDATOR PLUS SERIES

7/8 GALLONS PER MINUTE

PUMP PERFORMANCE (Capacity in gallons per minute)

HP	PSI	PUMPING DEPTH IN FEET																												SHUT-OFF HEAD	
		0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	450	500	550	600	650	700	FEET	PSI	
1/2	0	—	11.0	10.7	10.4	10.0	9.7	9.3	8.9	8.6	8.1	7.7	7.2	6.7	6.2	5.6	5.0	4.2	3.3											372	161
	20	10.6	10.3	9.9	9.6	9.2	8.8	8.4	8.0	7.6	7.1	6.6	6.0	5.4	4.7	3.9	2.9														
	30	10.2	9.9	9.5	9.2	8.8	8.4	7.9	7.5	7.0	6.5	5.9	5.3	4.6	3.8	2.7															
	40	9.8	9.5	9.1	8.7	8.3	7.9	7.4	6.9	6.4	5.9	5.2	4.5	3.7	2.5																
	50	9.4	9.0	8.6	8.2	7.8	7.3	6.9	6.3	5.8	5.1	4.4	3.5	2.3																	
	60	9.0	8.6	8.2	7.7	7.3	6.8	6.2	5.7	5.0	4.3	3.3	2.0																		
	70	8.5	8.1	7.7	7.2	6.7	6.2	5.6	4.9	4.1	3.2																				
	80	8.0	7.6	7.1	6.6	6.1	5.5	4.8	4.0	3.0																					
3/4	0	—	—	10.9	10.6	10.4	10.2	9.9	9.6	9.4	9.1	8.8	8.5	8.2	7.9	7.6	7.2	6.9	6.5	6.1	5.7	5.2	3.8							507	220
	20	10.8	10.6	10.3	10.1	9.8	9.6	9.3	9.0	8.7	8.4	8.1	7.8	7.5	7.1	6.8	6.4	6.0	5.5	5.0	4.5	3.9									
	30	10.5	10.3	10.0	9.8	9.5	9.2	9.0	8.7	8.4	8.1	7.8	7.4	7.1	6.7	6.3	5.9	5.5	5.0	4.4	3.8	3.0									
	40	10.2	10.0	9.7	9.5	9.2	8.9	8.6	8.3	8.0	7.7	7.4	7.0	6.6	6.3	5.8	5.4	4.9	4.3	3.7	2.9										
	50	10.0	9.7	9.4	9.2	8.9	8.6	8.3	8.0	7.7	7.3	7.0	6.6	6.2	5.8	5.3	4.8	4.2	3.6	2.8											
	60	9.7	9.4	9.1	8.8	8.5	8.2	7.9	7.6	7.3	6.9	6.5	6.1	5.7	5.2	4.7	4.1	3.5	2.6												
	70	9.4	9.1	8.8	8.5	8.2	7.9	7.6	7.2	6.8	6.5	6.1	5.6	5.2	4.6	4.0	3.3	2.5													
	80	9.0	8.8	8.5	8.2	7.8	7.5	7.2	6.8	6.4	6.0	5.6	5.1	4.5	3.9	3.2	2.3														
1	0	—	—	11.0	10.8	10.6	10.4	10.2	9.9	9.7	9.5	9.3	9.1	8.8	8.6	8.3	8.1	7.8	7.5	7.2	6.9	6.6	5.8	4.8	3.5					608	263
	20	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.4	9.2	9.0	8.7	8.5	8.2	8.0	7.7	7.4	7.1	6.8	6.5	6.2	5.8	4.9	3.6							
	30	10.7	10.5	10.3	10.1	9.8	9.6	9.4	9.2	8.9	8.7	8.5	8.2	7.9	7.7	7.4	7.1	6.8	6.5	6.1	5.8	5.4	4.3	2.8							
	40	10.4	10.2	10.0	9.8	9.6	9.4	9.1	8.9	8.7	8.4	8.2	7.9	7.6	7.4	7.1	6.8	6.4	6.1	5.7	5.3	4.9	3.7								
	50	10.2	10.0	9.8	9.6	9.3	9.1	8.9	8.6	8.4	8.1	7.9	7.6	7.3	7.0	6.7	6.4	6.0	5.7	5.3	4.9	4.4	3.0								
	60	10.0	9.7	9.5	9.3	9.1	8.8	8.6	8.3	8.1	7.8	7.5	7.3	7.0	6.7	6.3	6.0	5.6	5.2	4.8	4.3	3.8									
	70	9.7	9.5	9.3	9.0	8.8	8.6	8.3	8.0	7.8	7.5	7.2	6.9	6.6	6.3	5.9	5.6	5.2	4.7	4.3	3.7	3.1									
	80	9.5	9.2	9.0	8.8	8.5	8.3	8.0	7.7	7.5	7.2	6.9	6.6	6.2	5.9	5.5	5.1	4.7	4.2	3.6	3.0	2.1									
1-1/2	0	—	—	11.0	10.9	10.7	10.5	10.4	10.2	10.0	9.9	9.7	9.5	9.3	9.1	8.9	8.8	8.6	8.3	8.1	7.9	7.7	7.1	6.5	5.8	5.0	4.0	2.7		744	322
	20	11.0	10.8	10.7	10.5	10.3	10.2	10.0	9.8	9.6	9.5	9.3	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.6	7.4	7.2	6.5	5.8	5.0	4.1	2.8				
	30	10.8	10.6	10.5	10.3	10.1	10.0	9.8	9.6	9.4	9.2	9.1	8.9	8.7	8.5	8.3	8.0	7.8	7.6	7.4	7.1	6.9	6.2	5.5	4.6	3.5					
	40	10.6	10.4	10.3	10.1	9.9	9.8	9.6	9.4	9.2	9.0	8.8	8.6	8.4	8.2	8.0	7.8	7.6	7.3	7.1	6.8	6.6	5.9	5.1	4.2	2.9					
	50	10.4	10.2	10.1	9.9	9.7	9.6	9.4	9.2	9.0	8.8	8.6	8.4	8.2	8.0	7.8	7.5	7.3	7.1	6.8	6.5	6.3	5.5	4.7	3.6	2.1					
	60	10.2	10.1	9.9	9.7	9.5	9.3	9.2	9.0	8.8	8.6	8.4	8.2	7.9	7.7	7.5	7.3	7.0	6.8	6.5	6.2	5.9	5.2	4.2	3.0						
	70	10.0	9.9	9.7	9.5	9.3	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.7	7.5	7.2	7.0	6.7	6.5	6.2	5.9	5.6	4.8	3.7	2.3						
	80	9.8	9.6	9.5	9.3	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.6	7.4	7.2	6.9	6.7	6.4	6.1	5.9	5.5	5.2	4.3	3.1							
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	
2	0	—	—	—	—	—	10.9	10.6	10.3	10.1	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	—	—	—	10.8	10.6	10.4	10.1	10.0	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	—	11.0	10.7	10.6	10.4	10.1	10.0	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	10.9	10.7	10.5	10.4	10.2	10.0	9.8	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	10.7	10.5	10.3	10.1	10.0	9.8	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	10.4	10.3	10.1	10.0	9.8	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	—	—	—	—	—	—	10.8	10.5	10.1	9.9	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	—	—	—	—	—	10.9	10.6	10.4	10.2	9.9	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	—	—	—	—	10.9	10.6	10.4	10.2	10.0	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	—	—	—	10.9	10.7	10.4	10.3	10.0	10.0	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	—	11.0	10.8	10.6	10.4	10.3	10.0	10.0	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	11.0	10.7	10.6	10.4	10.3	10.0	10.0	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 PREDATOR PLUS SERIES

10/12 GALLONS PER MINUTE

PUMP PERFORMANCE (Capacity in gallons per minute)

HP	PSI	PUMPING DEPTH IN FEET																									SHUT-OFF HEAD	
		0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	450	500	550	FEET	PSI	
1/2	0	—	—	—	—	—	14.7	13.8	12.9	11.8	10.7	9.4	8.0	6.3	4.1											278	120	
	20	—	—	—	14.4	13.5	12.5	11.5	10.3	9.0	7.5	5.7	3.2															
	30	—	—	14.3	13.4	12.4	11.3	10.1	8.8	7.3	5.4	2.7																
	40	—	14.2	13.2	12.2	11.1	9.9	8.6	7.0	5.1	2.0																	
	50	14.0	13.1	12.1	11.0	9.7	8.4	6.8	4.7																			
	60	12.9	11.9	10.8	9.5	8.1	6.5	4.3																				
	70	11.7	10.6	9.3	7.9	6.2	3.9																					
	80	10.4	9.1	7.7	5.9	3.4																						
3/4	0	—	—	—	—	—	—	14.6	14.0	13.3	12.6	11.8	11.0	10.1	9.2	8.2	7.0	5.6	3.9						382	165		
	20	—	—	—	—	—	14.4	13.8	13.1	12.3	11.6	10.7	9.9	8.9	7.8	6.6	5.1	3.2										
	30	—	—	—	15.0	14.3	13.7	13.0	12.2	11.5	10.6	9.7	8.7	7.6	6.4	4.9	2.8											
	40	—	—	14.9	14.2	13.6	12.9	12.1	11.3	10.5	9.6	8.6	7.5	6.2	4.6	2.4												
	50	15.4	14.8	14.1	13.5	12.7	12.0	11.2	10.3	9.4	8.4	7.3	6.0	4.3														
	60	14.7	14.0	13.3	12.6	11.9	11.1	10.2	9.3	8.2	7.1	5.7	4.0															
	70	13.9	13.2	12.5	11.8	10.9	10.1	9.1	8.1	6.9	5.5	3.7																
	80	13.1	12.4	11.6	10.8	9.9	9.0	7.9	6.7	5.3	3.4																	
1	0	—	—	—	—	—	—	—	14.8	14.2	13.7	13.1	12.5	11.8	11.1	10.4	9.6	8.8	7.9	6.9	5.7				452	195		
	20	—	—	—	—	—	—	14.6	14.1	13.5	12.9	12.3	11.6	10.9	10.2	9.4	8.5	7.6	6.6	5.3	3.8							
	30	—	—	—	—	—	14.5	14.0	13.4	12.8	12.2	11.5	10.8	10.1	9.3	8.4	7.5	6.4	5.1	3.5								
	40	—	—	—	15.0	14.5	13.9	13.3	12.7	12.1	11.4	10.7	9.9	9.1	8.3	7.3	6.2	4.9	3.2									
	50	—	14.9	14.4	13.8	13.2	12.6	12.0	11.3	10.6	9.8	9.0	8.1	7.1	6.0	4.7	2.9											
	60	—	14.8	14.3	13.7	13.1	12.5	11.9	11.2	10.5	9.7	8.9	8.0	7.0	5.8	4.4	2.6											
	70	14.7	14.2	13.6	13.0	12.4	11.8	11.1	10.4	9.6	8.7	7.8	6.8	5.6	4.2	2.2												
	80	14.1	13.5	12.9	12.3	11.7	11.0	10.2	9.5	8.6	7.7	6.6	5.4	3.9														
1-1/2	0	—	—	—	—	—	—	—	—	15.0	14.6	14.1	13.7	13.3	12.8	12.3	11.8	11.3	10.8	10.2	8.6	6.8	4.3		590	256		
	20	—	—	—	—	—	—	14.9	14.4	14.0	13.6	13.1	12.6	12.2	11.7	11.1	10.6	10.0	9.4	8.8	6.9	4.5						
	30	—	—	—	—	—	—	14.8	14.4	13.9	13.5	13.0	12.6	12.1	11.6	11.1	10.5	9.9	9.3	8.7	8.0	5.9	2.9					
	40	—	—	—	—	—	14.7	14.3	13.9	13.4	13.0	12.5	12.0	11.5	11.0	10.4	9.8	9.2	8.6	7.9	7.1	4.7						
	50	—	—	—	—	14.7	14.2	13.8	13.4	12.9	12.4	11.9	11.4	10.9	10.3	9.7	9.1	8.5	7.7	7.0	6.1	3.2						
	60	—	—	15.0	14.6	14.2	13.7	13.3	12.8	12.4	11.9	11.3	10.8	10.2	9.6	9.0	8.3	7.6	6.8	6.0	4.9							
	70	—	14.9	14.5	14.1	13.7	13.2	12.8	12.3	11.8	11.3	10.7	10.1	9.5	8.9	8.2	7.5	6.7	5.8	4.8	3.5							
	80	—	14.9	14.5	14.0	13.6	13.2	12.7	12.2	11.7	11.2	10.6	10.1	9.5	8.8	8.1	7.4	6.6	5.7	4.6	3.3							
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
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	—	—	—	—	—	15.2	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	—	—	—	—	15.2	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	—	—	—	15.3	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	—	—	—	15.3	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	—	—	15.3	14.6	14.2	13.5	12.9	12.3	11.6	10.8	9.9	8.9	7.7	6.3	4.9	2.9	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	2.9												
	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	2.7												
	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 PREDATOR PLUS SERIES

15 GALLONS PER MINUTE

PUMP PERFORMANCE (Capacity in gallons per minute)

HP	PSI	PUMPING DEPTH IN FEET																				SHUT-OFF HEAD		
		0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	FEET	PSI
1/2	0	—	—	20.5	19.2	17.8	16.3	14.7	12.8	10.5	7.5												201	87
	20	20.1	18.8	17.4	15.8	14.1	12.1	9.7	6.2															
	30	18.6	17.1	15.6	13.8	11.8	9.2	5.5																
	40	16.9	15.3	13.5	11.4	8.8	4.6																	
	50	15.1	13.2	11.0	8.3	3.4																		
	60	12.9	10.7	7.8																				
	70	10.3	7.2																					
	80	6.6																						
3/4	0	—	—	—	20.2	19.2	18.2	17.1	15.9	14.7	13.3	11.7	9.8	7.5	3.6							269	116	
	20	20.8	19.9	18.9	17.9	16.7	15.5	14.2	12.8	11.2	9.2	6.6												
	30	19.7	18.7	17.7	16.6	15.4	14.0	12.6	10.9	8.8	6.1													
	40	18.6	17.5	16.4	15.2	13.8	12.3	10.6	8.5	5.5														
	50	17.3	16.2	15.0	13.6	12.1	10.3	8.1	4.8															
	60	16.0	14.8	13.4	11.8	10.0	7.7	4.0																
	70	14.5	13.1	11.5	9.7	7.3	3.0																	
	80	12.9	11.3	9.3	6.8																			
1	0	—	—	—	—	20.4	19.6	18.7	17.8	16.9	15.9	14.8	13.6	12.3	10.9	9.3	7.3	4.5				336	145	
	20	—	21.0	20.2	19.3	18.5	17.5	16.6	15.5	14.4	13.2	11.9	10.4	8.7	6.6	3.2								
	30	20.9	20.1	19.2	18.3	17.4	16.4	15.4	14.3	13.0	11.7	10.2	8.4	6.2	2.4									
	40	19.9	19.1	18.2	17.3	16.3	15.2	14.1	12.8	11.5	9.9	8.1	5.7											
	50	18.9	18.0	17.1	16.1	15.0	13.9	12.6	11.3	9.7	7.8	5.3												
	60	17.9	17.0	15.9	14.9	13.7	12.4	11.0	9.4	7.5	4.8													
	70	16.8	15.8	14.7	13.5	12.2	10.8	9.1	7.1	4.2														
	80	15.6	14.5	13.3	12.0	10.6	8.8	6.7	3.6															
1-1/2	0	—	—	—	—	20.5	19.9	19.2	18.5	17.8	17.1	16.3	15.5	14.7	13.7	12.8	11.7	10.5	9.1	7.5	5.3	403	174	
	20	—	20.9	20.3	19.7	19.0	18.3	17.6	16.9	16.1	15.3	14.4	13.4	12.4	11.3	10.1	8.7	6.9	4.3					
	30	20.8	20.2	19.6	18.9	18.2	17.5	16.7	16.0	15.1	14.2	13.3	12.3	11.2	9.9	8.4	6.6	3.8						
	40	20.1	19.5	18.8	18.1	17.4	16.6	15.8	15.0	14.1	13.1	12.1	11.0	9.7	8.2	6.2	3.0							
	50	19.4	18.7	18.0	17.3	16.5	15.7	14.9	14.0	13.0	11.9	10.8	9.5	7.9	5.9	1.8								
	60	18.6	17.9	17.1	16.4	15.6	14.7	13.8	12.8	11.8	10.6	9.2	7.6	5.5										
	70	17.8	17.0	16.3	15.4	14.6	13.7	12.7	11.6	10.4	9.0	7.3	5.1											
	80	16.9	16.1	15.3	14.4	13.5	12.5	11.4	10.2	8.8	7.0	4.6												
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	FEET	PSI
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 PREDATOR PLUS SERIES

20 GALLONS PER MINUTE

PUMP PERFORMANCE (Capacity in gallons per minute)

HP	PSI	PUMPING DEPTH IN FEET																				SHUT-OFF HEAD					
		0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	FEET	PSI			
3/4	0	—	—	—	—	26.9	25.0	23.0	20.7	18.1	15.1	11.3	4.9										225	97			
	20	—	—	26.3	24.4	22.3	19.9	17.3	14.1	9.8																	
	30	27.9	26.1	24.1	21.9	19.6	16.8	13.5	9.0																		
	40	25.8	23.8	21.6	19.2	16.4	12.9	8.0																			
	50	23.4	21.2	18.8	15.9	12.3	7.0																				
	60	20.9	18.3	15.4	11.6	5.7																					
	70	17.9	14.9	10.9	3.8																						
	80	14.3	10.2																								
1	0	—	—	—	—	27.9	26.4	24.7	23.0	21.0	18.9	16.5	13.6	10.0	2.8							262	114				
	20	—	—	27.5	25.9	24.2	22.4	20.4	18.2	15.7	12.6	8.5															
	30	—	27.2	25.6	23.9	22.1	20.1	17.8	15.2	12.1	7.6																
	40	27.0	25.4	23.7	21.8	19.7	17.5	14.8	11.5	6.6																	
	50	25.1	23.4	21.5	19.4	17.1	14.3	10.9	5.5																		
	60	23.1	21.2	19.1	16.7	13.9	10.3	3.9																			
	70	20.9	18.7	16.3	13.4	9.6																					
	80	18.4	15.9	12.9	8.8																						
1-1/2	0	—	—	—	—	—	—	27.9	26.8	25.6	24.4	23.1	21.7	20.2	18.6	16.9	15.0	12.7	10.0	6.1		375	162				
	20	—	—	—	—	27.5	26.4	25.2	24.0	22.6	21.3	19.8	18.1	16.3	14.3	12.0	9.0	4.1									
	30	—	—	—	27.4	26.2	25.0	23.8	22.4	21.0	19.5	17.9	16.0	14.0	11.6	8.4	2.6										
	40	—	—	27.2	26.0	24.8	23.6	22.2	20.8	19.3	17.6	15.7	13.6	11.1	7.8												
	50	—	27.0	25.8	24.6	23.4	22.0	20.6	19.0	17.3	15.4	13.3	10.7	7.2													
	60	26.8	25.7	24.4	23.2	21.8	20.3	18.8	17.0	15.1	12.9	10.2	6.5														
	70	25.5	24.2	23.0	21.6	20.1	18.5	16.8	14.8	12.5	9.7	5.6															
	80	24.1	22.7	21.4	19.9	18.2	16.5	14.5	12.2	9.2	4.7																
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
2	0	—	—	—	—	—	—	—	27.3	26.0	23.2	20.2	16.2	8.5												450	194
	20	—	—	—	—	—	—	26.1	24.9	23.4	20.6	16.7	9.5														
	30	—	—	—	—	27.6	26.2	25.0	23.5	22.1	19.1	13.8	4.8														
	40	—	—	—	27.5	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																
3	0	—	—	—	—	—	—	—	27.2	25.3	23.5	21.3	19.1	16.0	11.3	3.6									605	349	
	20	—	—	—	—	—	—	—	27.3	25.4	23.6	21.6	19.3	16.1	12.0	5.0											
	30	—	—	—	—	—	—	27.4	26.6	24.8	22.7	20.6	18.1	14.5	9.0												
	40	—	—	—	—	—	—	27.5	26.7	25.5	23.8	21.7	19.6	16.8	12.5	5.3											
	50	—	—	—	—	—	27.6	26.7	25.6	24.9	22.8	20.8	18.5	15.0	9.5												
	60	—	—	—	—	27.7	26.8	25.7	24.9	23.9	21.8	19.8	16.9	12.7	5.6												
5	0	—	—	—	—	—	—	—	—	—	—	—	27.5	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	—	—	—	—	—	—	—	—	—	—	—	27.6	26.6	25.3	24.1	22.9	21.6	20.3	19.0	17.3	14.0	11.2	7.3			
	30	—	—	—	—	—	—	—	—	—	—	—	27.1	26.0	24.9	23.5	22.2	21.0	19.9	18.2	16.2	13.3	9.5	5.2			
	40	—	—	—	—	—	—	—	—	—	—	27.7	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	—	—	—	—	—	—	—	—	—	—	27.2	26.0	25.0	23.6	22.3	21.1	20.0	18.4	16.3	13.5	9.9	5.7				
	60	—	—	—	—	—	—	—	—	27.8	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	—	—	—	—	—	27.3	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	—	—	—	—	27.5	26.3	24.7	23.3	21.7	20.2	17.3	12.1	5.3													
	50	—	—	—	—	27.3	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	—	—	—	—	—	—	27.5	26.4	25.3	24.4	23.3	22.1	21.3	20.1	18.5	16.0										
	30	—	—	—	—	—	—	27.3	26.2	25.0	24.1	23.0	21.9	21.0	19.9	18.0	15.0										
	40	—	—	—	—	—	—	27.0	25.7	24.9	24.0	22.8	21.7	20.8	19.7	17.6	14.7										
	50	—	—	—	—	—	27.8	26.7	25.5	24.7	23.6	22.5	21.5	20.6	19.4	17.0	14.0										
	60	—	—	—	—	—	27.5	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 PREDATOR PLUS SERIES

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	—	42.5	40.9	39.1	36.8	32.5	26.0	8.0												175	76	
	20	40.4	38.8	36.0	32.4	27.7	13.3																
	30	38.0	35.3	31.7	26.3	14.3																	
	40	35.0	31.4	25.9	12.1																		
	50	30.2	24.0	3.0																			
	60	21.9																					
1-1/2	0	—	—	41.9	39.9	37.5	34.1	30.9	26.9	17.0											210	91	
	20	41.2	39.1	36.5	34.0	31.5	27.8	21.5															
	30	38.9	36.1	33.8	31.0	27.9	21.8																
	40	36.0	33.5	30.8	27.7	20.2																	
	50	32.9	30.1	26.8	21.5																		
	60	29.5	25.9	18.1																			
2	0	—	—	—	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																
3	0	—	—	—	—	42.7	41.6	40.1	39.6	38.2	35.5	32.0	27.3								420	182	
	20	—	—	42.4	41.5	41.0	39.8	38.5	37.1	35.7	32.1	28.0	18.5										
	30	42.9	42.2	41.3	40.6	39.9	38.7	37.2	35.8	34.2	30.3	24.9	6.0										
	40	42.1	41.2	40.4	39.7	38.8	37.3	35.9	34.5	32.6	28.3	19.9											
	50	41.1	40.3	39.5	38.5	37.4	36.0	34.6	32.7	31.0	25.2	9.5											
	60	40.2	39.3	38.3	37.2	36.1	34.7	32.8	31.0	28.5	20.5												
5	0	—	—	—	—	—	—	—	42.6	42.0	40.7	39.2	38.0	36.0	34.2	31.9	29.2	26.0	20.0		705	305	
	20	—	—	—	—	—	42.7	42.0	41.3	40.8	39.3	38.2	36.2	34.4	32.4	30.0	26.1	21.5					
	30	—	—	—	—	42.8	42.1	41.4	40.8	40.1	38.7	37.0	35.1	33.1	31.1	26.0	24.1	16.0					
	40	—	—	—	—	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	—	—	42.6	42.0	41.5	41.2	40.2	39.5	38.8	37.1	35.4	33.2	31.2	28.8	24.5	16.0						
	60	—	42.5	42.0	41.4	41.1	40.3	39.8	38.9	38.1	36.2	34.2	32.1	30.0	26.7	22.0							
HP	PSI	PUMPING DEPTH IN FEET													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	42.7	40.1	37.3	34.6	31.7	27.4	19.3															
	60	42.0	39.4	36.5	33.7	30.7	25.1	13.9															
10	0	—	—	—	41.3	39.5	37.3	35.1	33.1	30.4	27.1	22.5	11.9		1345	582							
	20	—	—	42.3	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	—	42.7	41.0	39.3	37.1	34.9	32.8	30.2	26.7	21.7	7.7											
	60	—	42.3	40.6	38.7	36.5	34.5	32.3	29.5	25.7	20.1	5.0											

CAUTION: DO NOT use pump at flow rates indicated by the symbol '—'. To do so can cause premature failure of unit. Pump warranty void when failure occurs under these conditions. Tested and rated in accordance with Water Systems Council Standards.

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

4" SUBMERSIBLE PUMPS

THE RUSTLER SERIES



Precision-engineered, corrosion-resistant pumps in 5, 7/8, 10/12, 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: Spring-loaded check valve.

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 octagon wrench area for ease of installation.

Discharge Bearing: Exclusive self-lubricating Nylatron bearing resists wear from sand.

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

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

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

Shell: Crimped shell.

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

Check Valve: Spring-loaded check valve.

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

Intake Screen: Molded-in screen.

Pentek® XE Series™ Motor: 2 and 3-wire NEMA standard all stainless construction water-filled motors.

POWERED BY
PENTEK®



4" SUBMERSIBLE PUMPS THE RUSTLER SERIES

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	14	1	115	2NFL51-5-P4	28	28	N55R	18	12	P42B0005A1	19		
		1/2	14	1	230	2NFL52-5-P4	28	28	N55R	18	12	P42B0005A2	19		
		3/4	19	1	230	2NFL72-5-P4	33	34	N75R	22	15	P42B0007A2	23		
		1	22	1	230	2NFL102-5-P4	37	39	N105R	26	17	P42B0010A2	25		
	3 WIRE	1/2	13	1	115	3NFL51-5-P4	27-1/2	29	N55R	18	12	P43B0005A1	19	SMC-IR0511	4
		1/2	14	1	230	3NFL52-5-P4	28	28	N55R	18	12	P43B0005A2	18	SMC-CR0521	4
		3/4	19	1	230	3NFL72-5-P4	33	34	N75R	22	15	P43B0007A2	21	SMC-CR0721	4
		1	22	1	230	3NFL102-5-P4	37	39	N105R	26	17	P43B0010A2	23	SMC-CR1021	4
		1	22	3	230				N105R	25-1/4	17	P43B0010A3	23		
		1	22	3	460				N105R	25-1/4	17	P43B0010A4	23		
7/8	2 WIRE	1/2	11	1	115	2NFL51-8-P4	26	27	L7P4CJL	16	11	P42B0005A1	19		
		1/2	11	1	230	2NFL52-8-P4	26	27	L7P4CJL	16	11	P42B0005A2	19		
		3/4	15	1	230	2NFL72-8-P4	30	32	L7P4DJL	19	13	P42B0007A2	23		
		1	18	1	230	2NFL102-8-P4	34	37	L7P4EJL	22	15	P42B0010A2	25		
		1-1/2	22	1	230	2NFL152-8-P4	43	47	L7P4FJL	28	21	P42B0015A2	29		
	3 WIRE	1/2	10	1	115	3NFL51-8-P4	25-1/2	27	N58R	16	12	P43B0005A1	19	SMC-IR0511	4
		1/2	11	1	230	3NFL52-8-P4	26	27	N58R	16	11	P43B0005A2	18	SMC-CR0521	4
		3/4	15	1	230	3NFL72-8-P4	29	32	N78R	19	13	P43B0007A2	21	SMC-CR0721	4
		1	17	1	230	3NFL102-8-P4	31	35	N108R	20	14	P43B0010A2	23	SMC-CR0721	4
		1	17	3	230				N108R	22	17	P43B0010A3	23	SMC-CR1021	4
		1	17	3	460				N108R	22	17	P43B0010A4	23		
		1-1/2	22	1	230	3NFL152-8-P4	41	44	N158R	27-1/4	21	P43B0015A2	27		
		1-1/2	22	3	230				N158R	27-1/4	21	P43B0015A3	23	SMC-CR1521	7
		1-1/2	22	3	460				N158R	27-1/4	21	P43B0015A4	23		

†Please refer to the Pentek XE Series data for all three-phase motor options.

*Length and Weight are approximate.

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

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

4" SUBMERSIBLE PUMPS THE RUSTLER SERIES

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*
10/12**	2 WIRE	1/2	8	1	115	2NFL51-12-P4	23	28	N512R	13	9	P42B0005A1	19		
		1/2	8	1	230	2NFL52-12-P4	23	28	N512R	13	9	P42B0005A2	19		
		3/4	11	1	230	2NFL72-12-P4	26	31	N712R	15	10	P42B0007A2	23		
		1	13	1	230	2NFL102-12-P4	29	35	N1012R	17	11	P42B0010A2	25		
		1-1/2	17	1	230	2NFL152-12-P4	35	42	N1512R	20	12	P42B0015A2	29		
	3 WIRE	1/2	7	1	115	3NFL51-12-P4	22-3/4	27-1/2	N512R	12-3/4	9	P43B0005A1	19	SMC-IR0511	4
		1/2	8	1	230	3NFL52-12-P4	23	28	N512R	13	9	P43B0005A2	19	SMC-CR0521	4
		3/4	11	1	230	3NFL72-12-P4	26	31	N712R	15	10	P43B0007A2	21	SMC-CR0721	4
		1	13	1	230	3NFL102-12-P4	29	35	N1012R	17	11	P43B0010A2	23	SMC-CR1021	4
		1	13	3	230				N1012R	15-1/2	10-1/4	P43B0010A3	23		
		1	13	3	460				N1012R	15-1/2	10-1/4	P43B0010A4	23		
		1-1/2	17	1	230	3NFL152-12-P4	34	42	N1512R	20	12	P43B0015A2	27	SMC-CR1521	7
		1-1/2	17	3	230				N1512R	19-3/4	12-1/2	P43B0015A3	23		
		1-1/2	17	3	460				N1512R	19-3/4	12-1/2	P43B0015A4	23		
15**	2 WIRE	1/2	6	1	115	2NFL51-15-P4	23	27	N515R	13	9	P42B0005A1	19		
		1/2	6	1	230	2NFL52-15-P4	23	27	N515R	13	9	P42B0005A2	19		
		3/4	8	1	230	2NFL72-15-P4	26	31	N715R	15	10	P42B0007A2	23		
		1	10	1	230	2NFL102-15-P4	30	35	N1015R	17	11	P42B0010A2	25		
		1-1/2	12	1	230	2NFL152-15-P4	36	43	N1515R	21	13	P42B0015A2	29		
	3 WIRE	1/2	5	1	115	3NFL51-15-P4	22-1/4	27	N515R	12-1/4	9	P43B0005A1	19	SMC-IR0511	4
		1/2	6	1	230	3NFL52-15-P4	23	27	N515R	13	9	P43B0005A2	19	SMC-CR0521	4
		3/4	8	1	230	3NFL72-15-P4	26	31	N715R	15	10	P43B0007A2	21	SMC-CR0721	4
		1	10	1	230	3NFL102-15-P4	30	35	N1015R	17	11	P43B0010A2	23	SMC-CR1021	4
		1	9	3	230				N1015R	15-1/2	10-1/4	P43B0010A3	23		
		1	9	3	460				N1015R	15-1/2	10-1/4	P43B0010A4	23		
		1-1/2	12	1	230	3NFL152-15-P4	34	41	N1515R	21	13	P43B0015A2	27	SMC-CR1521	7
		1-1/2	12	3	230				N1515R	20-1/4	13	P43B0015A3	23		
		1-1/2	12	3	460				N1515R	20-1/4	13	P43B0015A4	23		
20**	2 WIRE	3/4	6	1	230	2NFL72-20-P4	23-3/4	30	N720R	13	9	P42B0007A2	23		
		1	7	1	230	2NFL102-20-P4	27-1/4	34	N1020R	15	10	P42B0010A2	25		
		1-1/2	10	1	230	2NFL152-20-P4	32	39	N1520R	17	11	P42B0015A2	29		
		1-1/2	10	1	230	2NFL152-20-P4	32	39	N1520R	17	11	P42B0015A2	29		
	3 WIRE	3/4	6	1	230	3NFL72-20-P4	23-3/4	30	N720R	13	9	P43B0007A2	23	SMC-CR0721	4
		1	7	1	230	3NFL102-20-P4	27-1/4	34	N1020R	15	10	P43B0010A2	25	SMC-CR1021	4
		1	7	3	230				N1020R	15-1/2	10-1/4	P43B0010A3	23		
		1	7	3	460				N1020R	15-1/2	10-1/4	P43B0010A4	23		
		1-1/2	10	1	230	3NFL152-20-P4	30-1/2	39	N1520R	17	11	P43B0015A2	29	SMC-CR1521	7
		1-1/2	9	3	230				N1520R	16-3/4	10-3/4	P43B0015A3	23		
		1-1/2	9	3	460				N1520R	16-3/4	10-3/4	P43B0015A4	23		
		2	12	1	230				N2020R	20-1/4	12-1/2	P43B0020A2	31	SMC-CR2021	7
		2	12	3	230				N2020R	20-1/4	12-1/2	P43B0020A3	23		
		2	12	3	460				N2020R	20-1/4	12-1/2	P43B0020A4	23		
30**	2 WIRE	1	5	1	230	2NFL102-30-P4	26-1/2	35	N1030R	14	10	P42B0010A2	25		
		1-1/2	6	1	230	2NFL152-30-P4	30-1/2	39	N1530R	15-1/4	11	P42B0015A2	29		
	3 WIRE	1	5	1	230	3NFL102-30-P4	26-1/2	35	N1030R	14	10	P43B0010A2	23	SMC-CR1021	4
		1	5	3	230				N1030R	15-1/2	10-1/4	P43B0010A3	23		
		1	5	3	460				N1030R	15-1/2	10-1/4	P43B0010A4	23		
		1-1/2	6	1	230	3NFL152-30-P4	29	39	N1530R	15-1/4	11	P43B0015A2	27	SMC-CR1521	7
		1-1/2	6	3	230				N1530R	15-1/4	11	P43B0015A3	23		
		1-1/2	6	3	460				N1530R	15-1/4	11	P43B0015A4	23		
		2	8	1	230				N2030R	18-1/4	12	P43B0020A2	31	SMC-CR2021	7
		2	8	3	230				N2030R	18-1/4	12	P43B0020A3	23		
		2	8	3	460				N2030R	18-1/4	12	P43B0020A4	23		

†Please refer to the Pentek XE Series data for all three-phase motor options.

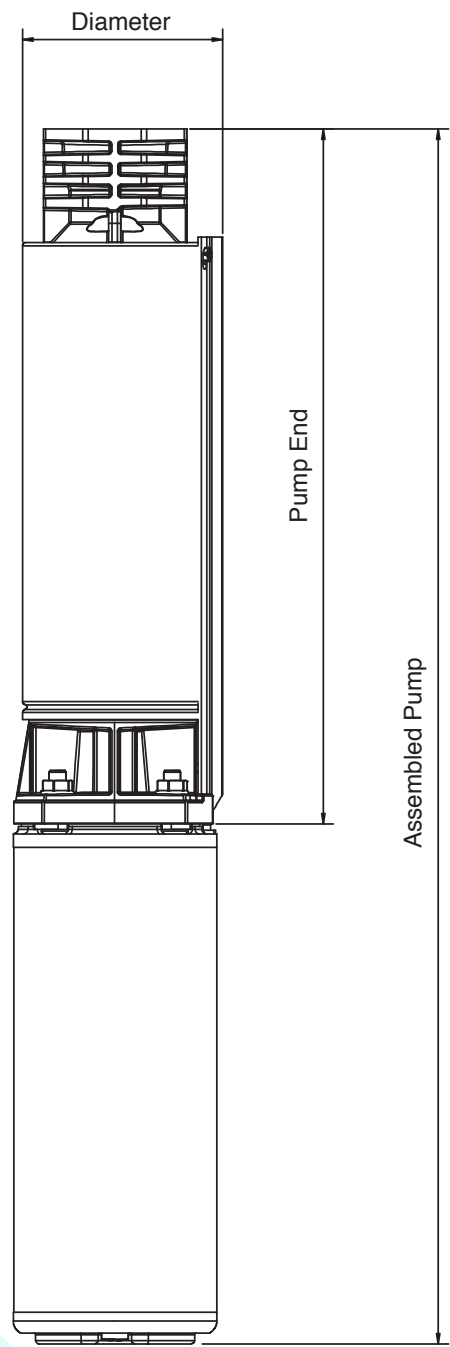
*Length and Weight are approximate.

**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 THE RUSTLER SERIES

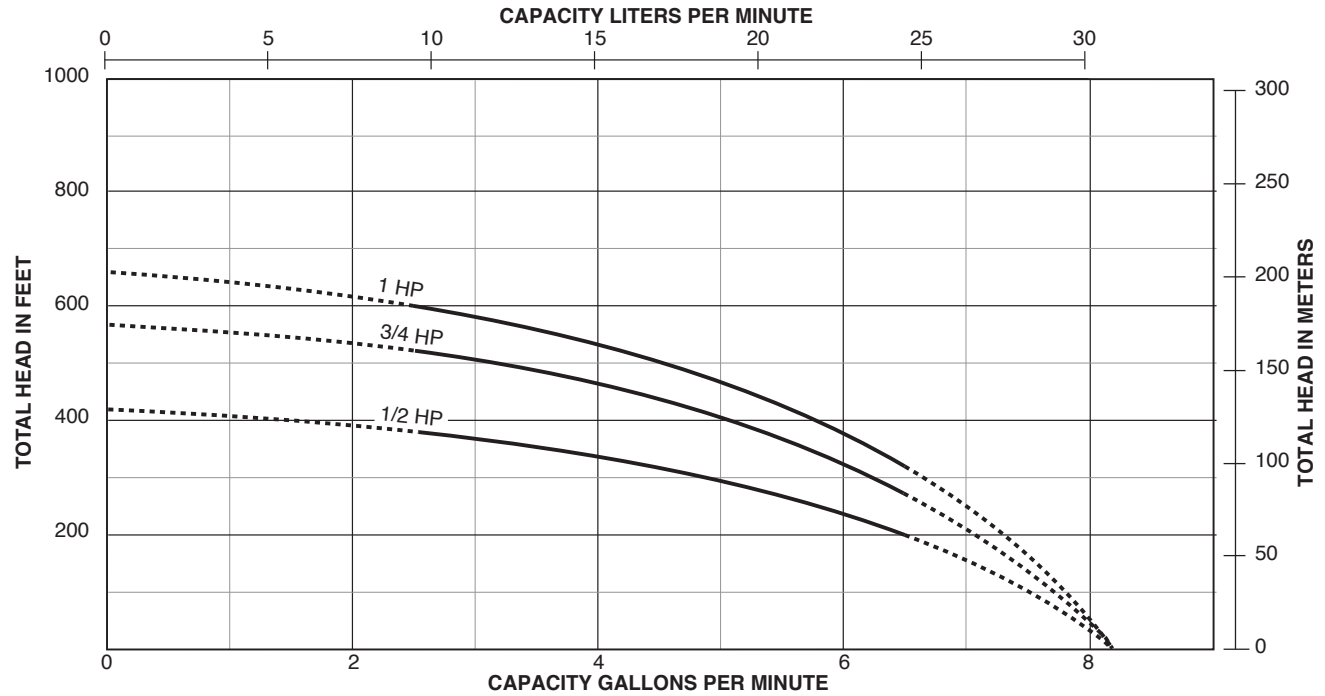
OUTLINE DIMENSIONS



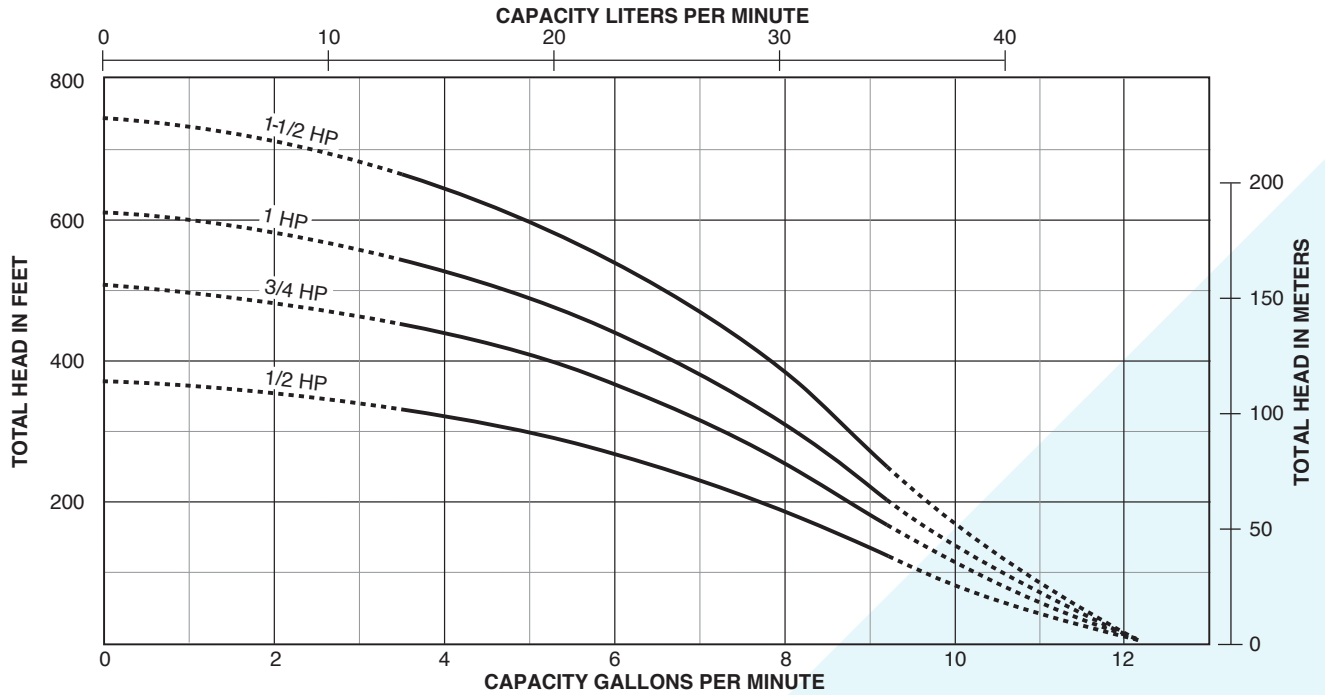
DISCHARGE	
5 GPM	1-1/4" NPT
7/8 GPM	1-1/4" NPT
10/12 GPM	1-1/4" NPT
15 GPM	1-1/4" NPT
20 GPM	1-1/4" NPT
30 GPM	1-1/4" NPT

For lengths, refer to Ordering Information tables.
Dimensions (in inches) are for estimating purposes only.
NOTE: The 5 and 7/8 GPM models are the smaller 3-3/4" diameter TrimLine.

PUMP PERFORMANCE: 5 GPM



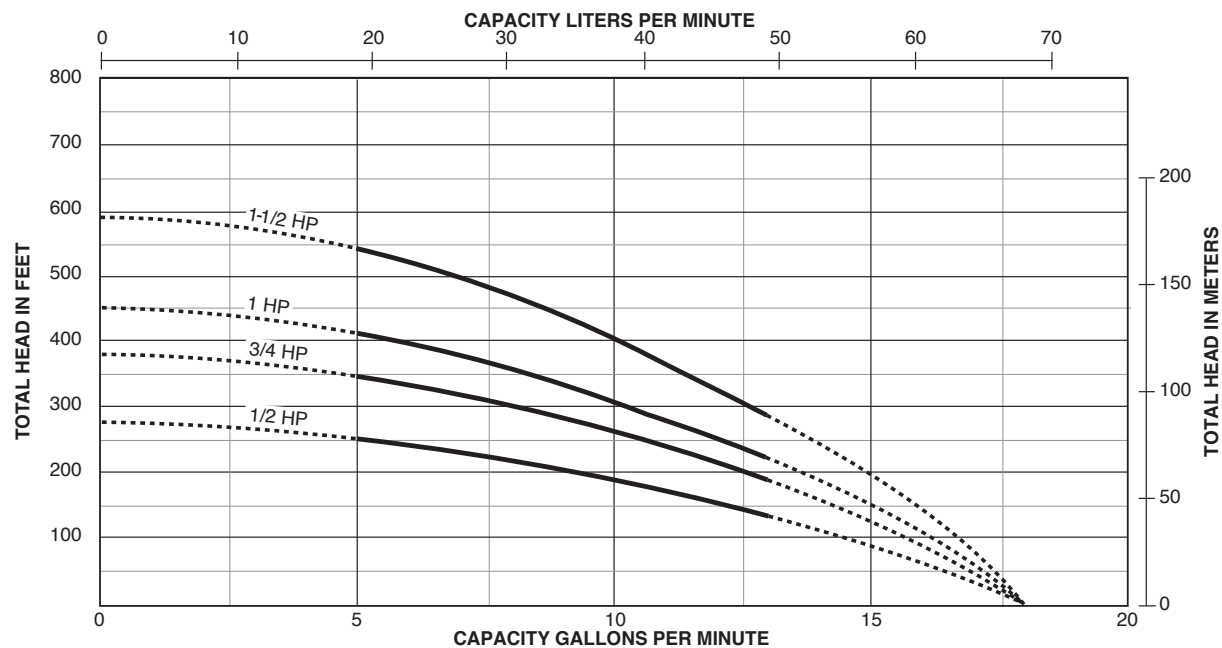
PUMP PERFORMANCE: 7/8 GPM



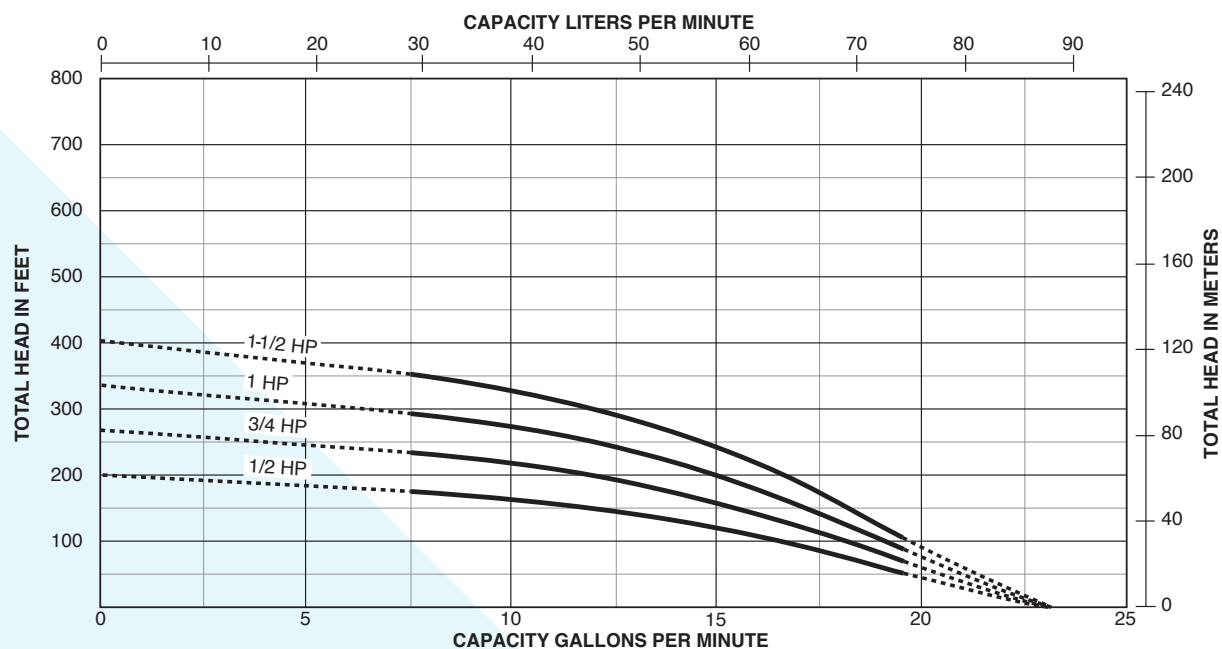
Tested and rated in accordance with Water Systems Council Standards.
NOTE: Pumps installed with a Pro-Source® tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve.
Relief valve must be capable of relieving entire flow of pump at relief pressure.

4" SUBMERSIBLE PUMPS THE RUSTLER SERIES

PUMP PERFORMANCE: 10/12 GPM



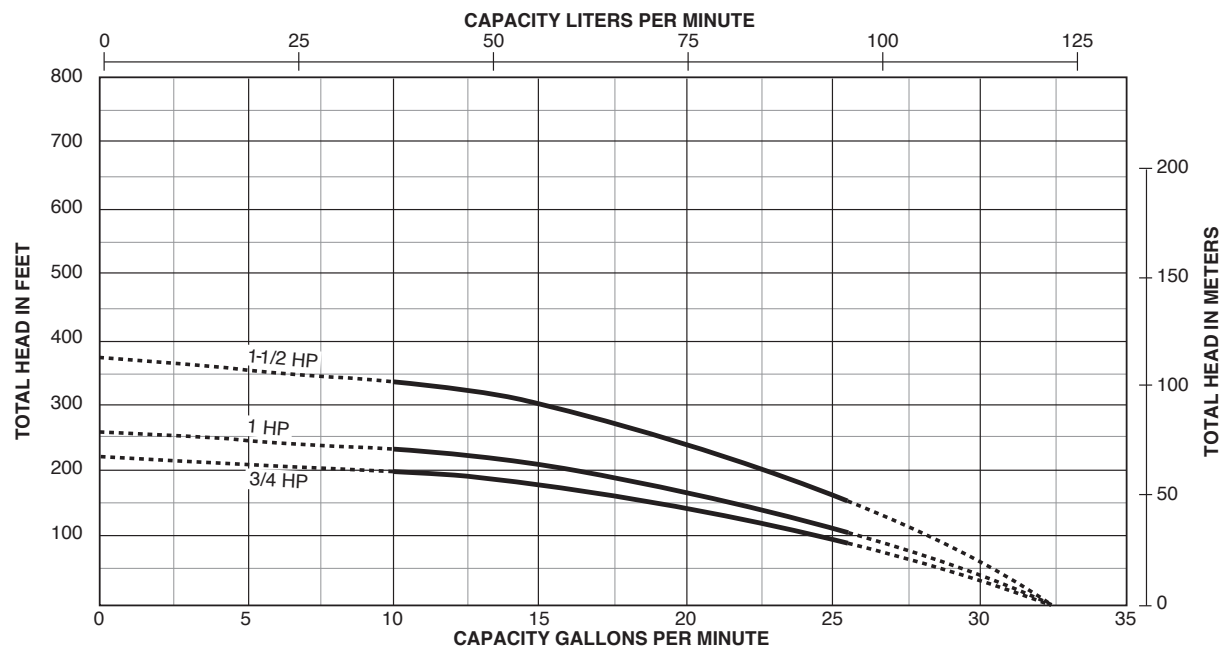
PUMP PERFORMANCE: 15 GPM



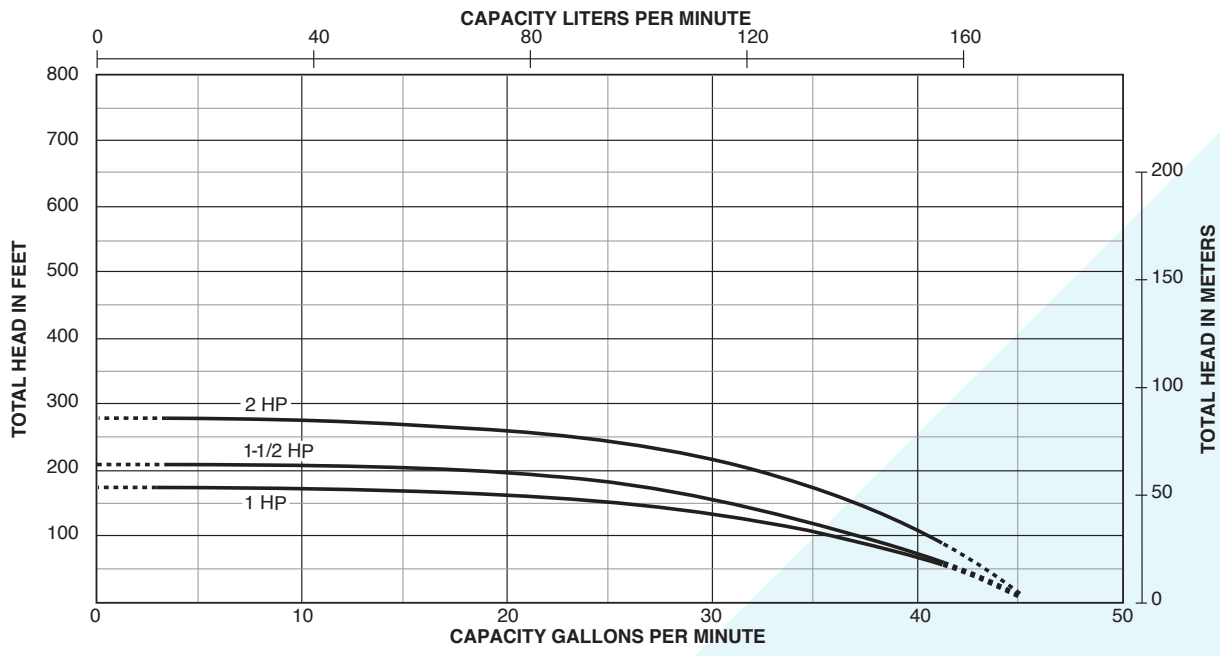
Tested and rated in accordance with Water Systems Council Standards.

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.

PUMP PERFORMANCE: 20 GPM



PUMP PERFORMANCE: 30 GPM



4" SUBMERSIBLE PUMPS THE RUSTLER SERIES

5 GALLONS PER MINUTE

PUMP PERFORMANCE (Capacity in gallons per minute)

HP	PSI	PUMPING DEPTH IN FEET																												SHUT-OFF HEAD					
		0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	450	500	550	600	650	700	750	800	850	FEET	PSI		
1/2	0	—	—	—	—	—	—	—	7.3	7.0	6.8	6.5	6.2	5.9	5.6	5.2	4.9	4.4	4.0	3.5	2.9	2.1											421	182	
	20	—	—	—	—	7.5	7.2	7.0	6.7	6.4	6.1	5.8	5.5	5.1	4.7	4.3	3.9	3.3	2.7	1.7															
	30	—	—	—	7.4	7.2	6.9	6.6	6.4	6.1	5.7	5.4	5.1	4.7	4.2	3.8	3.2	2.5	1.5																
	40	—	—	7.4	7.1	6.9	6.6	6.3	6.0	5.7	5.4	5.0	4.6	4.2	3.7	3.1	2.4	1.3																	
	50	—	7.4	7.1	6.8	6.6	6.3	6.0	5.6	5.3	4.9	4.5	4.1	3.6	3.0	2.3	1.0																		
	60	7.3	7.1	6.8	6.5	6.2	5.9	5.6	5.3	4.9	4.5	4.0	3.5	2.9	2.1																				
	70	7.0	6.8	6.5	6.2	5.9	5.5	5.2	4.8	4.4	4.0	3.4	2.8	2.0																					
	80	6.7	6.4	6.1	5.8	5.5	5.1	4.8	4.3	3.9	3.4	2.7	1.8																						
3/4	0	—	—	—	—	—	—	—	—	—	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.7	5.5	5.2	5.0	4.2	3.2	1.8								571	247	
	20	—	—	—	—	—	—	—	7.3	7.1	7.0	6.8	6.6	6.3	6.1	5.9	5.7	5.4	5.1	4.9	4.6	4.3	3.3	2.0											
	30	—	—	—	—	—	7.5	7.3	7.1	6.9	6.7	6.5	6.3	6.1	5.9	5.6	5.4	5.1	4.8	4.5	4.2	3.9	2.8												
	40	—	—	—	—	7.5	7.3	7.1	6.9	6.7	6.5	6.3	6.1	5.8	5.6	5.3	5.1	4.8	4.5	4.2	3.8	3.4	2.1												
	50	—	—	—	7.4	7.3	7.1	6.9	6.7	6.5	6.2	6.0	5.8	5.5	5.3	5.0	4.7	4.4	4.1	3.7	3.3	2.9													
	60	—	—	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.7	5.5	5.2	5.0	4.7	4.4	4.1	3.7	3.3	2.8	2.2													
	70	—	7.4	7.2	7.0	6.8	6.6	6.4	6.2	5.9	5.7	5.5	5.2	4.9	4.6	4.3	4.0	3.6	3.2	2.7	2.1	1.2													
	80	7.4	7.2	7.0	6.8	6.6	6.4	6.1	5.9	5.7	5.4	5.2	4.9	4.6	4.3	3.9	3.6	3.1	2.6	2.0															
1	0	—	—	—	—	—	—	—	—	—	7.5	7.3	7.1	7.0	6.8	6.6	6.4	6.3	6.1	5.9	5.7	5.1	4.5	3.8	2.8	1.2							661	286	
	20	—	—	—	—	—	—	—	—	7.4	7.3	7.1	6.9	6.7	6.6	6.4	6.2	6.0	5.8	5.6	5.4	5.2	4.5	3.8	2.9	1.4									
	30	—	—	—	—	—	—	7.5	7.4	7.2	7.1	6.9	6.7	6.5	6.4	6.2	6.0	5.8	5.6	5.3	5.1	4.9	4.2	3.4	2.3										
	40	—	—	—	—	—	7.5	7.4	7.2	7.0	6.9	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.3	5.1	4.8	4.6	3.9	3.0	1.6										
	50	—	—	—	—	7.5	7.3	7.2	7.0	6.8	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.3	5.0	4.8	4.5	4.3	3.5	2.4											
	60	—	—	—	7.5	7.3	7.2	7.0	6.8	6.6	6.5	6.3	6.1	5.9	5.7	5.5	5.2	5.0	4.8	4.5	4.2	3.9	3.1	1.7											
	70	—	—	7.4	7.3	7.1	7.0	6.8	6.6	6.4	6.2	6.1	5.9	5.6	5.4	5.2	5.0	4.7	4.5	4.2	3.9	3.6	2.5												
	80	—	7.4	7.3	7.1	6.9	6.8	6.6	6.4	6.2	6.0	5.8	5.6	5.4	5.2	4.9	4.7	4.4	4.1	3.8	3.5	3.1	1.9												

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 THE RUSTLER SERIES

7/8 GALLONS PER MINUTE

PUMP PERFORMANCE (Capacity in gallons per minute)

HP	PSI	PUMPING DEPTH IN FEET																												SHUT-OFF HEAD	
		0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	450	500	550	600	650	700	FEET	PSI	
1/2	0	—	11.0	10.7	10.4	10.0	9.7	9.3	8.9	8.6	8.1	7.7	7.2	6.7	6.2	5.6	5.0	4.2	3.3											372	161
	20	10.6	10.3	9.9	9.6	9.2	8.8	8.4	8.0	7.6	7.1	6.6	6.0	5.4	4.7	3.9	2.9														
	30	10.2	9.9	9.5	9.2	8.8	8.4	7.9	7.5	7.0	6.5	5.9	5.3	4.6	3.8	2.7															
	40	9.8	9.5	9.1	8.7	8.3	7.9	7.4	6.9	6.4	5.9	5.2	4.5	3.7	2.5																
	50	9.4	9.0	8.6	8.2	7.8	7.3	6.9	6.3	5.8	5.1	4.4	3.5	2.3																	
	60	9.0	8.6	8.2	7.7	7.3	6.8	6.2	5.7	5.0	4.3	3.3	2.0																		
	70	8.5	8.1	7.7	7.2	6.7	6.2	5.6	4.9	4.1	3.2																				
	80	8.0	7.6	7.1	6.6	6.1	5.5	4.8	4.0	3.0																					
3/4	0	—	—	10.9	10.6	10.4	10.2	9.9	9.6	9.4	9.1	8.8	8.5	8.2	7.9	7.6	7.2	6.9	6.5	6.1	5.7	5.2	3.8							507	220
	20	10.8	10.6	10.3	10.1	9.8	9.6	9.3	9.0	8.7	8.4	8.1	7.8	7.5	7.1	6.8	6.4	6.0	5.5	5.0	4.5	3.9									
	30	10.5	10.3	10.0	9.8	9.5	9.2	9.0	8.7	8.4	8.1	7.8	7.4	7.1	6.7	6.3	5.9	5.5	5.0	4.4	3.8	3.0									
	40	10.2	10.0	9.7	9.5	9.2	8.9	8.6	8.3	8.0	7.7	7.4	7.0	6.6	6.3	5.8	5.4	4.9	4.3	3.7	2.9										
	50	10.0	9.7	9.4	9.2	8.9	8.6	8.3	8.0	7.7	7.3	7.0	6.6	6.2	5.8	5.3	4.8	4.2	3.6	2.8											
	60	9.7	9.4	9.1	8.8	8.5	8.2	7.9	7.6	7.3	6.9	6.5	6.1	5.7	5.2	4.7	4.1	3.5	2.6												
	70	9.4	9.1	8.8	8.5	8.2	7.9	7.6	7.2	6.8	6.5	6.1	5.6	5.2	4.6	4.0	3.3	2.5													
	80	9.0	8.8	8.5	8.2	7.8	7.5	7.2	6.8	6.4	6.0	5.6	5.1	4.5	3.9	3.2	2.3														
1	0	—	—	11.0	10.8	10.6	10.4	10.2	9.9	9.7	9.5	9.3	9.1	8.8	8.6	8.3	8.1	7.8	7.5	7.2	6.9	6.6	5.8	4.8	3.5					608	263
	20	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.4	9.2	9.0	8.7	8.5	8.2	8.0	7.7	7.4	7.1	6.8	6.5	6.2	5.8	4.9	3.6							
	30	10.7	10.5	10.3	10.1	9.8	9.6	9.4	9.2	8.9	8.7	8.5	8.2	7.9	7.7	7.4	7.1	6.8	6.5	6.1	5.8	5.4	4.3	2.8							
	40	10.4	10.2	10.0	9.8	9.6	9.4	9.1	8.9	8.7	8.4	8.2	7.9	7.6	7.4	7.1	6.8	6.4	6.1	5.7	5.3	4.9	3.7								
	50	10.2	10.0	9.8	9.6	9.3	9.1	8.9	8.6	8.4	8.1	7.9	7.6	7.3	7.0	6.7	6.4	6.0	5.7	5.3	4.9	4.4	3.0								
	60	10.0	9.7	9.5	9.3	9.1	8.8	8.6	8.3	8.1	7.8	7.5	7.3	7.0	6.7	6.3	6.0	5.6	5.2	4.8	4.3	3.8									
	70	9.7	9.5	9.3	9.0	8.8	8.6	8.3	8.0	7.8	7.5	7.2	6.9	6.6	6.3	5.9	5.6	5.2	4.7	4.3	3.7	3.1									
	80	9.5	9.2	9.0	8.8	8.5	8.3	8.0	7.7	7.5	7.2	6.9	6.6	6.2	5.9	5.5	5.1	4.7	4.2	3.6	3.0	2.1									
1-1/2	0	—	—	11.0	10.9	10.7	10.5	10.4	10.2	10.0	9.9	9.7	9.5	9.3	9.1	8.9	8.8	8.6	8.3	8.1	7.9	7.7	7.1	6.5	5.8	5.0	4.0	2.7		744	322
	20	11.0	10.8	10.7	10.5	10.3	10.2	10.0	9.8	9.6	9.5	9.3	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.6	7.4	7.2	6.5	5.8	5.0	4.1	2.8				
	30	10.8	10.6	10.5	10.3	10.1	10.0	9.8	9.6	9.4	9.2	9.1	8.9	8.7	8.5	8.3	8.0	7.8	7.6	7.4	7.1	6.9	6.2	5.5	4.6	3.5					
	40	10.6	10.4	10.3	10.1	9.9	9.8	9.6	9.4	9.2	9.0	8.8	8.6	8.4	8.2	8.0	7.8	7.6	7.3	7.1	6.8	6.6	5.9	5.1	4.2	2.9					
	50	10.4	10.2	10.1	9.9	9.7	9.6	9.4	9.2	9.0	8.8	8.6	8.4	8.2	8.0	7.8	7.5	7.3	7.1	6.8	6.5	6.3	5.5	4.7	3.6	2.1					
	60	10.2	10.1	9.9	9.7	9.5	9.3	9.2	9.0	8.8	8.6	8.4	8.2	7.9	7.7	7.5	7.3	7.0	6.8	6.5	6.2	5.9	5.2	4.2	3.0						
	70	10.0	9.9	9.7	9.5	9.3	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.7	7.5	7.2	7.0	6.7	6.5	6.2	5.9	5.6	4.8	3.7	2.3						
	80	9.8	9.6	9.5	9.3	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.6	7.4	7.2	6.9	6.7	6.4	6.1	5.9	5.5	5.2	4.3	3.1							

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 THE RUSTLER SERIES

10/12 GALLONS PER MINUTE

PUMP PERFORMANCE (Capacity in gallons per minute)

HP	PSI	PUMPING DEPTH IN FEET																								SHUT-OFF HEAD		
		0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	450	500	550	FEET	PSI	
1/2	0	—	—	—	—	—	14.7	13.8	12.9	11.8	10.7	9.4	8.0	6.3	4.1												278	120
	20	—	—	—	14.4	13.5	12.5	11.5	10.3	9.0	7.5	5.7	3.2															
	30	—	—	14.3	13.4	12.4	11.3	10.1	8.8	7.3	5.4	2.7																
	40	—	14.2	13.2	12.2	11.1	9.9	8.6	7.0	5.1	2.0																	
	50	14.0	13.1	12.1	11.0	9.7	8.4	6.8	4.7																			
	60	12.9	11.9	10.8	9.5	8.1	6.5	4.3																				
	70	11.7	10.6	9.3	7.9	6.2	3.9																					
	80	10.4	9.1	7.7	5.9	3.4																						
3/4	0	—	—	—	—	—	—	—	14.6	14.0	13.3	12.6	11.8	11.0	10.1	9.2	8.2	7.0	5.6	3.9							382	165
	20	—	—	—	—	—	14.4	13.8	13.1	12.3	11.6	10.7	9.9	8.9	7.8	6.6	5.1	3.2										
	30	—	—	—	15.0	14.3	13.7	13.0	12.2	11.5	10.6	9.7	8.7	7.6	6.4	4.9	2.8											
	40	—	—	14.9	14.2	13.6	12.9	12.1	11.3	10.5	9.6	8.6	7.5	6.2	4.6	2.4												
	50	15.4	14.8	14.1	13.5	12.7	12.0	11.2	10.3	9.4	8.4	7.3	6.0	4.3														
	60	14.7	14.0	13.3	12.6	11.9	11.1	10.2	9.3	8.2	7.1	5.7	4.0															
	70	13.9	13.2	12.5	11.8	10.9	10.1	9.1	8.1	6.9	5.5	3.7																
	80	13.1	12.4	11.6	10.8	9.9	9.0	7.9	6.7	5.3	3.4																	
1	0	—	—	—	—	—	—	—	—	14.8	14.2	13.7	13.1	12.5	11.8	11.1	10.4	9.6	8.8	7.9	6.9	5.7					452	195
	20	—	—	—	—	—	—	14.6	14.1	13.5	12.9	12.3	11.6	10.9	10.2	9.4	8.5	7.6	6.6	5.3	3.8							
	30	—	—	—	—	—	14.5	14.0	13.4	12.8	12.2	11.5	10.8	10.1	9.3	8.4	7.5	6.4	5.1	3.5								
	40	—	—	—	15.0	14.5	13.9	13.3	12.7	12.1	11.4	10.7	9.9	9.1	8.3	7.3	6.2	4.9	3.2									
	50	—	—	14.9	14.4	13.8	13.2	12.6	12.0	11.3	10.6	9.8	9.0	8.1	7.1	6.0	4.7	2.9										
	60	—	14.8	14.3	13.7	13.1	12.5	11.9	11.2	10.5	9.7	8.9	8.0	7.0	5.8	4.4	2.6											
	70	14.7	14.2	13.6	13.0	12.4	11.8	11.1	10.4	9.6	8.7	7.8	6.8	5.6	4.2	2.2												
	80	14.1	13.5	12.9	12.3	11.7	11.0	10.2	9.5	8.6	7.7	6.6	5.4	3.9														
1-1/2	0	—	—	—	—	—	—	—	—	—	15.0	14.6	14.1	13.7	13.3	12.8	12.3	11.8	11.3	10.8	10.2	8.6	6.8	4.3			590	256
	20	—	—	—	—	—	—	—	—	14.9	14.4	14.0	13.6	13.1	12.6	12.2	11.7	11.1	10.6	10.0	9.4	8.8	6.9	4.5				
	30	—	—	—	—	—	—	—	14.8	14.4	13.9	13.5	13.0	12.6	12.1	11.6	11.1	10.5	9.9	9.3	8.7	8.0	5.9	2.9				
	40	—	—	—	—	—	—	14.7	14.3	13.9	13.4	13.0	12.5	12.0	11.5	11.0	10.4	9.8	9.2	8.6	7.9	7.1	4.7					
	50	—	—	—	—	—	14.7	14.2	13.8	13.4	12.9	12.4	11.9	11.4	10.9	10.3	9.7	9.1	8.5	7.7	7.0	6.1	3.2					
	60	—	—	—	15.0	14.6	14.2	13.7	13.3	12.8	12.4	11.9	11.3	10.8	10.2	9.6	9.0	8.3	7.6	6.8	6.0	4.9						
	70	—	—	14.9	14.5	14.1	13.7	13.2	12.8	12.3	11.8	11.3	10.7	10.1	9.5	8.9	8.2	7.5	6.7	5.8	4.8	3.5						
	80	—	14.9	14.5	14.0	13.6	13.2	12.7	12.2	11.7	11.2	10.6	10.1	9.5	8.8	8.1	7.4	6.6	5.7	4.6	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 THE RUSTLER SERIES

15 GALLONS PER MINUTE

PUMP PERFORMANCE (Capacity in gallons per minute)

HP	PSI	PUMPING DEPTH IN FEET																				SHUT-OFF HEAD		
		0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	FEET	PSI
1/2	0	—	—	20.5	19.2	17.8	16.3	14.7	12.8	10.5	7.5												201	87
	20	20.1	18.8	17.4	15.8	14.1	12.1	9.7	6.2															
	30	18.6	17.1	15.6	13.8	11.8	9.2	5.5																
	40	16.9	15.3	13.5	11.4	8.8	4.6																	
	50	15.1	13.2	11.0	8.3	3.4																		
	60	12.9	10.7	7.8																				
	70	10.3	7.2																					
	80	6.6																						
3/4	0	—	—	—	20.2	19.2	18.2	17.1	15.9	14.7	13.3	11.7	9.8	7.5	3.6								269	116
	20	20.8	19.9	18.9	17.9	16.7	15.5	14.2	12.8	11.2	9.2	6.6												
	30	19.7	18.7	17.7	16.6	15.4	14.0	12.6	10.9	8.8	6.1													
	40	18.6	17.5	16.4	15.2	13.8	12.3	10.6	8.5	5.5														
	50	17.3	16.2	15.0	13.6	12.1	10.3	8.1	4.8															
	60	16.0	14.8	13.4	11.8	10.0	7.7	4.0																
	70	14.5	13.1	11.5	9.7	7.3	3.0																	
	80	12.9	11.3	9.3	6.8																			
1	0	—	—	—	—	20.4	19.6	18.7	17.8	16.9	15.9	14.8	13.6	12.3	10.9	9.3	7.3	4.5					336	145
	20	—	21.0	20.2	19.3	18.5	17.5	16.6	15.5	14.4	13.2	11.9	10.4	8.7	6.6	3.2								
	30	20.9	20.1	19.2	18.3	17.4	16.4	15.4	14.3	13.0	11.7	10.2	8.4	6.2	2.4									
	40	19.9	19.1	18.2	17.3	16.3	15.2	14.1	12.8	11.5	9.9	8.1	5.7											
	50	18.9	18.0	17.1	16.1	15.0	13.9	12.6	11.3	9.7	7.8	5.3												
	60	17.9	17.0	15.9	14.9	13.7	12.4	11.0	9.4	7.5	4.8													
	70	16.8	15.8	14.7	13.5	12.2	10.8	9.1	7.1	4.2														
	80	15.6	14.5	13.3	12.0	10.6	8.8	6.7	3.6															
1-1/2	0	—	—	—	—	20.5	19.9	19.2	18.5	17.8	17.1	16.3	15.5	14.7	13.7	12.8	11.7	10.5	9.1	7.5	5.3		403	174
	20	—	20.9	20.3	19.7	19.0	18.3	17.6	16.9	16.1	15.3	14.4	13.4	12.4	11.3	10.1	8.7	6.9	4.3					
	30	20.8	20.2	19.6	18.9	18.2	17.5	16.7	16.0	15.1	14.2	13.3	12.3	11.2	9.9	8.4	6.6	3.8						
	40	20.1	19.5	18.8	18.1	17.4	16.6	15.8	15.0	14.1	13.1	12.1	11.0	9.7	8.2	6.2	3.0							
	50	19.4	18.7	18.0	17.3	16.5	15.7	14.9	14.0	13.0	11.9	10.8	9.5	7.9	5.9	1.8								
	60	18.6	17.9	17.1	16.4	15.6	14.7	13.8	12.8	11.8	10.6	9.2	7.6	5.5										
	70	17.8	17.0	16.3	15.4	14.6	13.7	12.7	11.6	10.4	9.0	7.3	5.1											
	80	16.9	16.1	15.3	14.4	13.5	12.5	11.4	10.2	8.8	7.0	4.6												

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 THE RUSTLER SERIES

20 GALLONS PER MINUTE

PUMP PERFORMANCE (Capacity in gallons per minute)

HP	PSI	PUMPING DEPTH IN FEET																						SHUT-OFF HEAD	
		0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	FEET	PSI	
3/4	0	—	—	—	—	26.9	25.0	23.0	20.7	18.1	15.1	11.3	4.9										225	97	
	20	—	—	26.3	24.4	22.3	19.9	17.3	14.1	9.8															
	30	27.9	26.1	24.1	21.9	19.6	16.8	13.5	9.0																
	40	25.8	23.8	21.6	19.2	16.4	12.9	8.0																	
	50	23.4	21.2	18.8	15.9	12.3	7.0																		
	60	20.9	18.3	15.4	11.6	5.7																			
	70	17.9	14.9	10.9	3.8																				
	80	14.3	10.2																						
1	0	—	—	—	—	27.9	26.4	24.7	23.0	21.0	18.9	16.5	13.6	10.0	2.8								262	114	
	20	—	—	27.5	25.9	24.2	22.4	20.4	18.2	15.7	12.6	8.5													
	30	—	27.2	25.6	23.9	22.1	20.1	17.8	15.2	12.1	7.6														
	40	27.0	25.4	23.7	21.8	19.7	17.5	14.8	11.5	6.6															
	50	25.1	23.4	21.5	19.4	17.1	14.3	10.9	5.5																
	60	23.1	21.2	19.1	16.7	13.9	10.3	3.9																	
	70	20.9	18.7	16.3	13.4	9.6																			
	80	18.4	15.9	12.9	8.8																				
1-1/2	0	—	—	—	—	—	—	27.9	26.8	25.6	24.4	23.1	21.7	20.2	18.6	16.9	15.0	12.7	10.0	6.1			375	162	
	20	—	—	—	—	27.5	26.4	25.2	24.0	22.6	21.3	19.8	18.1	16.3	14.3	12.0	9.0	4.1							
	30	—	—	—	27.4	26.2	25.0	23.8	22.4	21.0	19.5	17.9	16.0	14.0	11.6	8.4	2.6								
	40	—	—	27.2	26.0	24.8	23.6	22.2	20.8	19.3	17.6	15.7	13.6	11.1	7.8										
	50	—	27.0	25.8	24.6	23.4	22.0	20.6	19.0	17.3	15.4	13.3	10.7	7.2											
	60	26.8	25.7	24.4	23.2	21.8	20.3	18.8	17.0	15.1	12.9	10.2	6.5												
	70	25.5	24.2	23.0	21.6	20.1	18.5	16.8	14.8	12.5	9.7	5.6													
	80	24.1	22.7	21.4	19.9	18.2	16.5	14.5	12.2	9.2	4.7														

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.

4" SUBMERSIBLE PUMPS THE RUSTLER SERIES

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	—	—	41.9	39.9	37.5	34.1	30.9	26.9	17.0						210	91
	20	41.2	39.1	36.5	34.0	31.5	27.8	21.5									
	30	38.9	36.1	33.8	31.0	27.9	21.8										
	40	36.0	33.5	30.8	27.7	20.2											
	50	32.9	30.1	26.8	21.5												
	60	29.5	25.9	18.1													
2	0	—	—	—	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.

STAINLESS STEEL 4" HI-FLO SUBMERSIBLE PUMPS

RANGER 50 GPM SERIES



APPLICATIONS

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

SPECIFICATIONS

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

Top Bearing: Nylatron®.

Top Bearing Journal: 300 grade stainless steel.

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

Impellers: Noryl (20% glass filled).

Bowls: Noryl (20% glass filled).

Diffuser Bearing: Nylatron.

Diffuser Bearing Journal: 300 grade stainless steel.

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

Coupling: 300 grade stainless steel.

Shell: 300 grade stainless steel.

Motor Adapter: 300 grade stainless steel.

Suction Screen: 300 grade stainless steel.

Cable Guard: 300 grade stainless steel.

Fastener: 300 grade stainless steel.

FEATURES

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

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

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

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

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

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

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

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

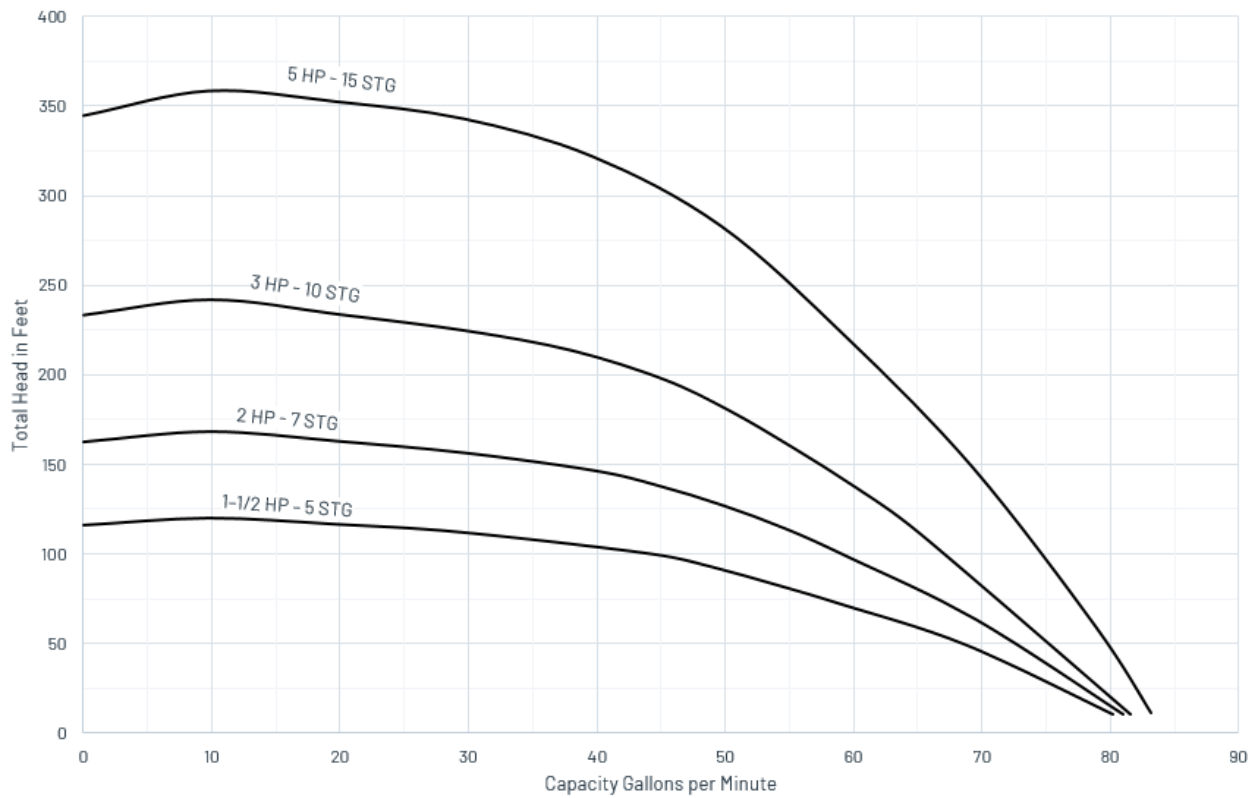
Intake Screen: 300 series stainless steel material offers maximum corrosion resistance and protects against damaging solids entering the pump.

The 50 GPM Stainless Steel 4" High-Flo Submersible Pumps deliver efficient and dependable performance even in rough, aggressive water. New stack design delivers better efficiency and head per stage than previous model.

STAINLESS STEEL 4" HI-FLO SUBMERSIBLE PUMPS RANGER 50 GPM SERIES

PUMP PERFORMANCE

PEI (CL) = 0.85



Tested and rated in accordance with Water Systems Council Standards.

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. Check valve sold separately.

STAINLESS STEEL 4" HI-FLO SUBMERSIBLE PUMPS RANGER 50 GPM SERIES

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	-	-	64	56	43												116	50
	20	62	52	37															
	30	50	34																
	40	48	30																
	50	25																	
	60																		
2	0	-	-	-	65	59	50	37										164	71
	20	-	64	57	50	39													
	30	63	56	49	38														
	40	55	47	35															
	50	45	33																
	60	30																	
3	0	-	-	-	-	67	63	57	51	43								235	101
	20	-	-	66	62	58	52	45	34										
	30	-	66	62	57	53	45	35											
	40	65	61	57	52	46	36												
	50	61	56	51	45	37													
	60	55	50	44	35														
5	0	-	-	-	-	-	-	69	66	63	55	45	26					346	150
	20	-	-	-	-	-	66	63	59	56	46	29							
	30	-	-	-	-	67	63	60	56	52	40								
	40	-	-	-	66	64	60	56	52	47	31								
	50	-	-	66	63	61	57	52	47	41									
	60	-	66	63	60	57	53	48	42	33									

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.

STAINLESS STEEL 4" HI-FLO SUBMERSIBLE PUMPS RANGER 50 GPM SERIES

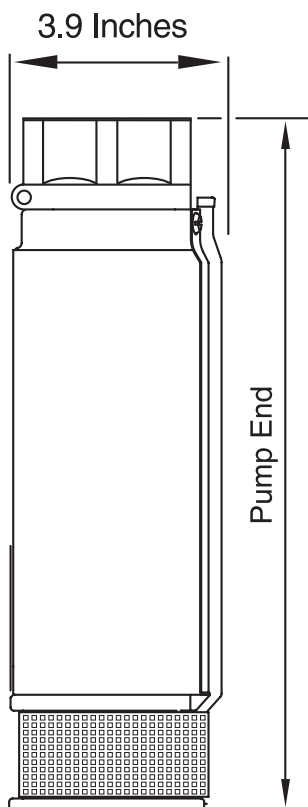
ORDERING INFORMATION

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	1.5	5	1	230	SS15-50-02	18-3/4	11	P42B0015A2	29		
3 WIRE	1.5	5	1	230	SS15-50-02	18-3/4	11	P43B0015A2	27	SMC-CR1521	7
			3	230	SS15-50-02	18-3/4	11	P43B0015A3	23		
			3	460	SS15-50-02	18-3/4	11	P43B0015A4	23		
			3	575	SS15-50-02	18-3/4	11	P43B0015A5	23		
	2	7	1	230	SS20-50-02	24-1/8	16	P43B0020A2	31	SMC-CR2021	7
			3	230	SS20-50-02	24-1/8	16	P43B0020A3	27		
			3	460	SS20-50-02	24-1/8	16	P43B0020A4	27		
			3	575	SS20-50-02	24-1/8	16	P43B0020A5	32		
	3	10	1	230	SS30-50-02	32	19	P43B0030A2	40	SMC-CR3021	7
			3	230	SS30-50-02	32	19	P43B0030A3	32		
			3	460	SS30-50-02	32	19	P43B0030A4	32		
			3	575	SS30-50-02	32	19	P43B0030A5	32		
	5	15	1	230	SS50-50-02	45-3/8	24	P43B0050A2	70	SMC-CR5021	8
			3	230	SS50-50-02	45-3/8	24	P43B0050A3	55		
			3	460	SS50-50-02	45-3/8	24	P43B0050A4	55		
			3	575	SS50-50-02	45-3/8	24	P43B0050A5	70		

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

STAINLESS STEEL 4" HI-FLO SUBMERSIBLE PUMPS RANGER 50 GPM SERIES

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

For lengths, refer to Ordering Information table.

4" MULTI-STAGE IRON SUBMERSIBLE PUMPS

RANGER 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: Noryl®.

Upthrust Bearing: Nylatron®.

Discharge Bearing: Nylatron.

Bowl and Intake Bearings: Nitrile (proprietary spec.).

Pump Shaft: 300 Series Stainless steel.

Lead Guard: 300 Series Stainless steel.

Intake Bracket: Cast iron, ASTM A48 Class 30.

Intake Screen: 300 Series Stainless steel.

Pump/Motor Coupling: 300 Series Stainless steel.

FEATURES

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

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

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

Upthrust Bearing: Nylatron upthrust bearing provides positive momentary upthrust protection during start-up.

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

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

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

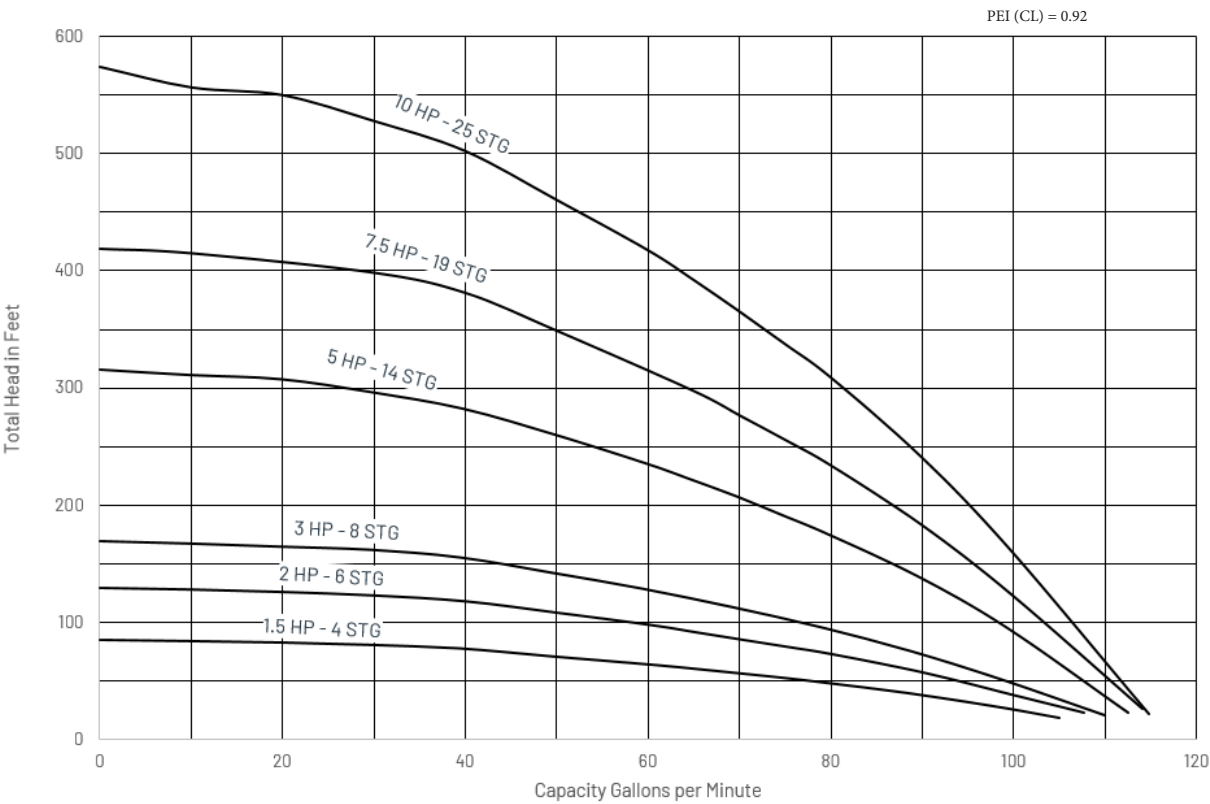
Intake Screen: Stainless steel material offers maximum corrosion resistance... protects against damaging solids entering the pump assembly.

Motor Bracket: Incorporates an efficient hydraulic design for maximum volume and access to motor mounting nuts.

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

4" MULTI-STAGE CAST IRON SUBMERSIBLE PUMPS RANGER 70 GPM SERIES

PUMP PERFORMANCE



Tested and rated in accordance with Water Systems Council Standards.
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.
Check valve sold separately.

4" MULTI-STAGE CAST IRON SUBMERSIBLE PUMPS RANGER 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	105	88	66	33																				
	20	58	15																						
	30																								
	40																								
	50																								
	60																								
2	0	-	99	88	75	59	26																		
	20	84	70	53	23																				
	30	68	49	13																					
	40	46																							
	50																								
	60																								
3	0	-	103	95	86	77	63	43																	
	20	93	84	74	62	47																			
	30	82	72	60	44																				
	40	71	58	41																					
	50	56	37																						
	60	35																							
5	0	-	110	106	102	98	93	87	80	72	64	54	42	27											
	20	105	101	97	92	88	81	74	65	56	45	30													
	30	100	96	92	87	81	74	66	57	46	31														
	40	96	91	86	81	74	67	58	47	32															
	50	90	85	80	74	67	58	48	34																
	60	84	79	73	66	59	48	35																	
7-1/2	0	-	-	109	106	103	100	96	91	87	82	76	71	65	58	50	41	29							
	20	-	106	103	100	96	92	87	82	77	71	65	59	52	42	31									
	30	105	102	99	96	92	88	83	78	72	66	59	52	43	32										
	40	102	98	95	92	88	83	78	73	67	60	53	44	33											
	50	98	95	91	87	84	78	73	67	61	53	44	34												
	60	94	90	87	83	79	73	68	61	54	46	35													
10	0	-	-	-	109	107	104	101	98	95	92	88	85	81	77	73	69	64	59	53	46	39	30		
	20	-	-	106	104	101	98	96	92	89	85	82	78	74	69	64	59	54	48	40					
	30	-	105	103	101	99	96	92	89	86	82	78	74	70	65	60	54	48	41	33					
	40	105	103	101	98	96	93	89	86	82	78	74	70	65	60	55	49	41	34						
	50	103	100	98	96	93	90	86	83	78	75	70	66	61	55	49	42	34							
	60	100	98	95	93	90	86	83	79	75	71	66	61	56	49	43	35								

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.

4" MULTI-STAGE CAST IRON SUBMERSIBLE PUMPS RANGER 70 GPM SERIES

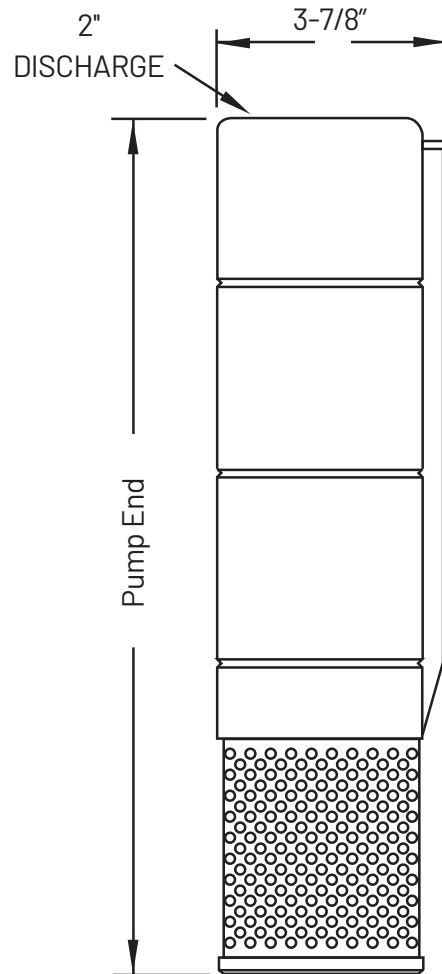
ORDERING INFORMATION

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	M70-15	21	28	P42B0015A2	29		
	1-1/2	4	1	230	M70-15	21	28	P42B0015A2	29	SMC-CR1521	7
	1-1/2	4	3	230	M70-15	21	28	P42B0015A3	23		
	1-1/2	4	3	460	M70-15	21	28	P42B0015A4	23		
	1-1/2	4	3	575	M70-15	21	28	P43B0015A5	23		
3 WIRE	2	6	1	230	M70-20	27-3/8	32	P43B0020A2	31	SMC-CR2021	7
	2	6	3	230	M70-20	27-3/8	32	P43B0020A3	31		
	2	6	3	460	M70-20	27-3/8	32	P43B0020A4	31		
	2	6	3	575	M70-20	27-3/8	32	P43B0020A5	32		
	3	8	1	230	M70-30	34	42	P43B0030A2	40	SMC-CR3021	7
	3	8	3	230	M70-30	34	42	P43B0030A3	32		
	3	8	3	460	M70-30	34	42	P43B0030A4	32		
	3	8	3	575	M70-30	34	42	P43B0030A5	32		
	5	14	1	230	M70-50	54	68	P43B0050A2	70		
	5	14	3	230	M70-50	54	68	P43B0050A3	55		
	5	14	3	460	M70-50	54	68	P43B0050A4	55		
	5	14	3	575	M70-50	54	68	P43B0050A5	70		
	7-1/2	19	3	230	M70-75	70	116	P43B0075A3	70		
	7-1/2	19	3	460	M70-75	70	116	P43B0075A4	70		
	7-1/2	19	3	575	M70-75	70	116	P43B0075A5	70		
	10	25	3	460	M70-100	90	156	P43B0100A4	78		

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

4" MULTI-STAGE CAST IRON SUBMERSIBLE PUMPS RANGER 70 GPM SERIES

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

For lengths, refer to Ordering Information table.

STAINLESS STEEL 4" HI-FLO SUBMERSIBLE PUMPS

RANGER 90 GPM SERIES



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

APPLICATIONS

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

SPECIFICATIONS

Discharge: 300 grade stainless steel with 2" NPT Threads

Top Bearing: Nylatron®

Top Bearing Journal: 300 grade stainless steel

Diffuser Assembly: Noryl® (20% glass filled)

Impellers: Noryl (20% glass filled)

Bowls: Noryl (20% glass filled)

Diffuser Bearing: Nylatron

Diffuser Bearing Journal: 300 grade stainless steel

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

Coupling: 300 grade stainless steel

Shell: 300 grade stainless steel

Motor Adapter: 300 grade stainless steel

Suction Screen: 300 grade stainless steel

Cable Guard: 300 grade stainless steel

Fastener: 300 grade stainless steel

FEATURES

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

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

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

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

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

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

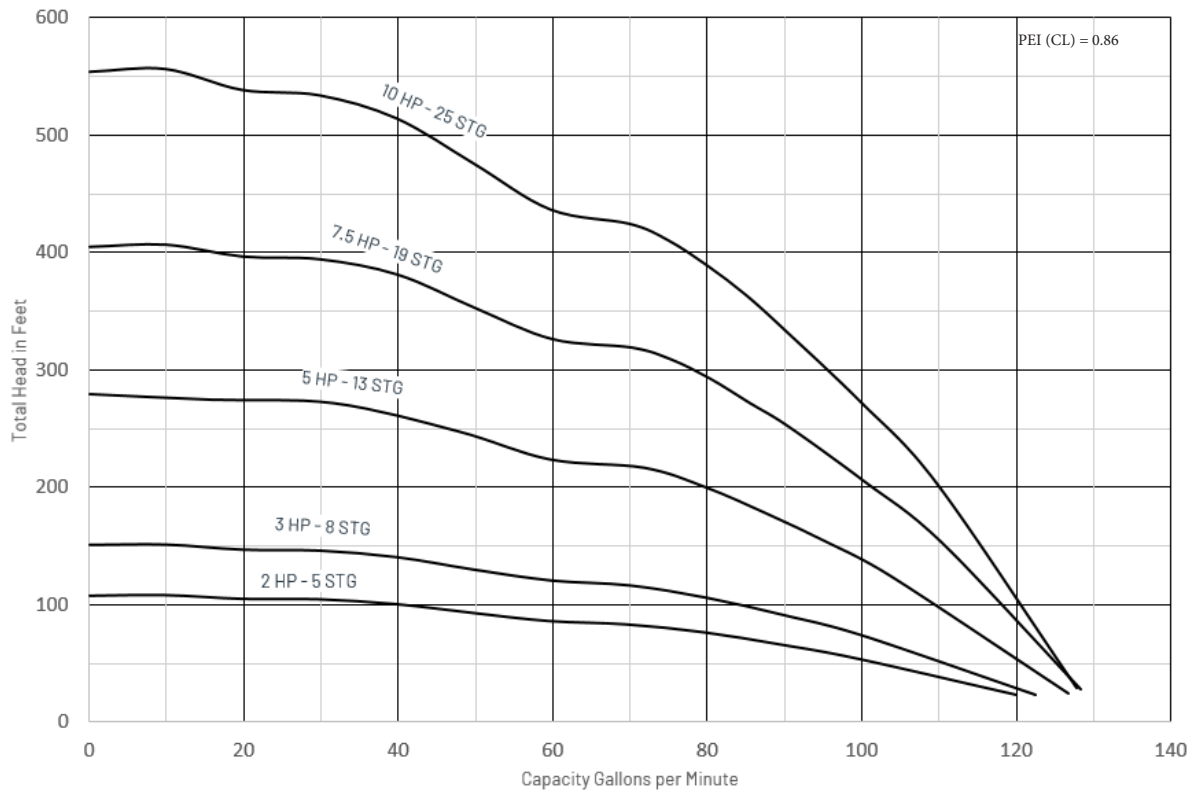
Motor Coupling: Pressed-on, sintered 300 grade stainless steel for maximum corrosion resistance provides trouble-free transfer of power between motor and pump shaft.

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

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

STAINLESS STEEL 4" HI-FLO SUBMERSIBLE PUMPS RANGER 90 GPM SERIES

PUMP PERFORMANCE



Tested and rated in accordance with Water Systems Council Standards.

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.

Check valve sold separately.

STAINLESS STEEL 4" HI-FLO SUBMERSIBLE PUMPS RANGER 90 GPM SERIES

PUMP PERFORMANCE (CAPACITY IN GALLONS PER MINUTE)

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

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

STAINLESS STEEL 4" HI-FLO SUBMERSIBLE PUMPS RANGER 90 GPM SERIES

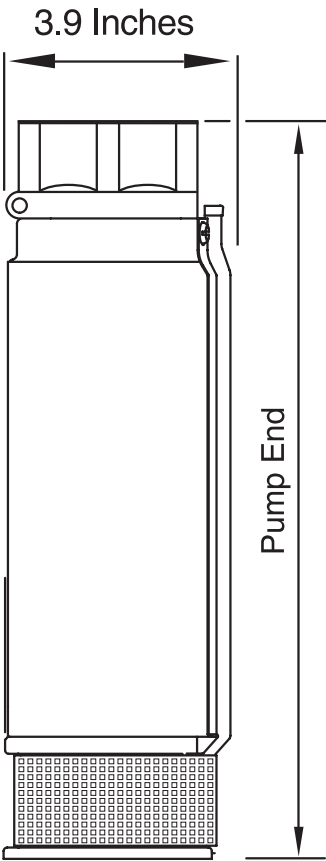
ORDERING INFORMATION

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*
3 WIRE	2	5	1	230	SS20-90-02	22	15	P43B0020A2	31	SMC-CR2021	7
			3	230	SS20-90-02	22	15	P43B0020A3	28		
			3	460	SS20-90-02	22	15	P43B0020A4	28		
			3	575	SS20-90-02	22	15	P43B0020A5	32		
	3	8	1	230	SS30-90-02	32-1/8	17	P43B0030A2	40	SMC-CR3021	7
			3	230	SS30-90-02	32-1/8	17	P43B0030A3	32		
			3	460	SS30-90-02	32-1/8	17	P43B0030A4	32		
			3	575	SS30-90-02	32-1/8	17	P43B0030A5	32		
	5	13	1	230	SS50-90-02	48-7/8	22	P43B0050A2	70	SMC-CR5021	8
			3	230	SS50-90-02	48-7/8	22	P43B0050A3	55		
			3	460	SS50-90-02	48-7/8	22	P43B0050A4	55		
			3	575	SS50-90-02	48-7/8	22	P43B0050A5	70		
	7-1/2	19	3	230	SS75-90-02	69-1/8	33	P43B0075A3	70		
			3	460	SS75-90-02	69-1/8	33	P43B0075A4	70		
			3	575	SS75-90-02	69-1/8	33	P43B0075A5	70		
	10	25	3	460	SS100-90-02	89-3/8	46	P43B0100A4	78		

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

STAINLESS STEEL 4" HI-FLO SUBMERSIBLE PUMPS
RANGER 90 GPM SERIES

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.
 For lengths, refer to Ordering Information table.

4" SUBMERSIBLE PUMPS

KS SERIES



Powered by water-filled submersible motors, KS Series pumps in 10 and 20 GPM models offer dependable performance and value while handling dry run conditions. Proven "Floating Impeller" staging system is designed with a corrosive resistant stainless steel wear surface that greatly reduces problems with abrasives and sand lock-up. Additionally, these pumps feature the proven SignaSeal™ staging system.

APPLICATIONS

Water systems for residential, commercial, irrigation, and farm use.

SPECIFICATIONS

Shell: Stainless steel.

Discharge: Stainless steel.

Discharge Bearing: Nylatron®.

Impellers: Acetal.

Diffusers: Polycarbonate.

Suction Caps: Polycarbonate with stainless steel wear ring.

Thrust Pads: Proprietary specifications.

Shaft and Coupling: Stainless steel 300 grade.

Intake: Polypropylene.

Motor Bracket: Stainless steel.

Check Valve: Durable internal check valve.

Intake Screen: Polypropylene.

Cable Guard: Stainless steel.

FEATURES

Proven "Floating Impeller" Staging System:

Incorporates high performance, sand handling and thrust management staging system with "dry run" design. Reinforced engineered composites and stainless steel, offering high resistance to corrosion and abrasion.

Discharge: Corrosion-resistant, heavy-duty 300-grade stainless steel with proven internal check valve. Large wrench flats and rope hole.

Shell: 300-grade stainless steel pump shell offers high corrosion resistance.

Shaft: Hexagonal 3/8", 300-grade stainless steel pump shaft; offers generous impeller drive surfaces.

Shaft Bearing: Exclusive self-lubricating Nylatron bearing resists wear surface from sand.

Motor Bracket: Corrosion-resistant, heavy-duty 300-grade stainless steel.

Cable Guard: Corrosion resistant rigid PVC with 300-grade stainless steel fasteners..

Pentek XE Series Motor: NEMA standard all stainless.

POWERED BY
PENTEK®

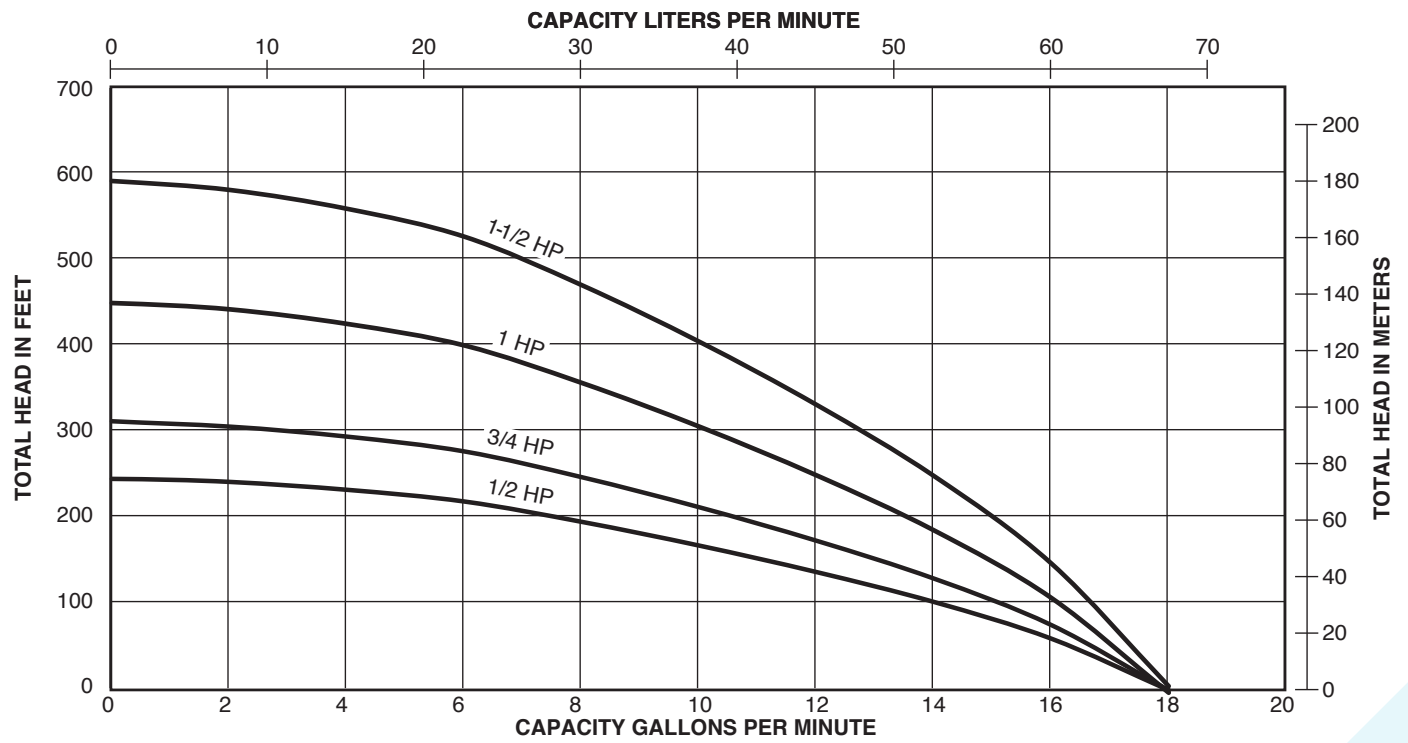


4" SUBMERSIBLE PUMPS KS SERIES

ORDERING INFORMATION

GPM	MOTOR TYPE	HP	PHASE	VOLT	ASSEMBLED PUMP	
					CATALOG NUMBER	WEIGHT LBS. (APPROX)
10 GPM	2 WIRE	1/2	1	115	M10KS05121	35.2
		1/2	1	230	M10KS05221	35.2
		3/4	1	230	M10KS07221	42.7
		1	1	230	M10KS10221	46.5
		1-1/2	1	230	M10KS15221	56.9
	3 WIRE	1/2	1	115	M10KS05131	34.9
		1/2	1	230	M10KS05231	34.1
		3/4	1	230	M10KS07231	41.4
		1	1	230	M10KS10231	45.1
		1-1/2	1	230	M10KS15231	55.4
20 GPM	2 WIRE	1	1	230	M20KS10221	46.5
		1 1/2	1	230	M20KS15221	56.9
	3 WIRE	1	1	230	M20KS10231	45.1
		1 1/2	1	230	M20KS15231	55.4

PUMP PERFORMANCE - 10 GPM



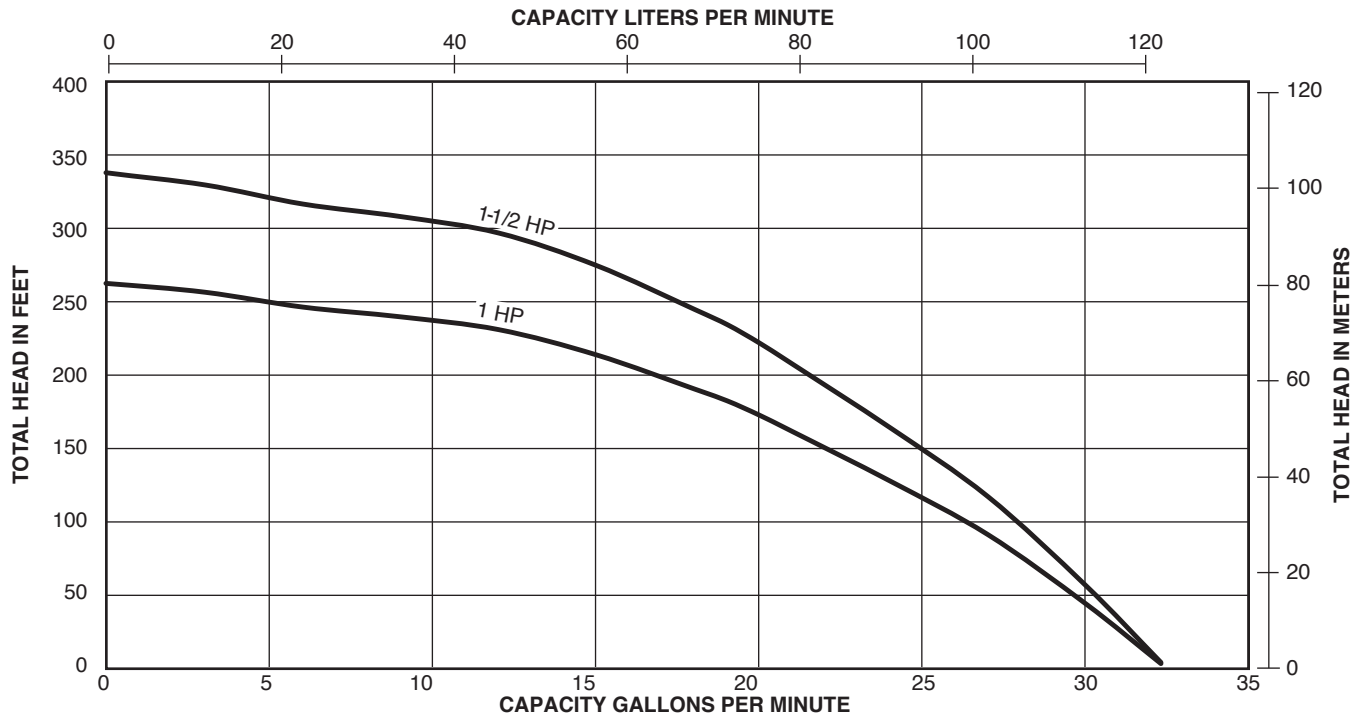
4" SUBMERSIBLE PUMPS KS SERIES

PUMP PERFORMANCE - 10 GPM, CONTINUED

CAPACITY IN GALLONS PER MINUTE

HP	PSI	PUMPING DEPTH IN FEET														
		0	20	40	60	80	100	125	150	175	200	250	300	350	400	500
17 STAGES, 1.5 HP	0	-	-	-	-	-	-	-	-	-	14.8	13.8	12.7	11.6	10.3	7.0
	20	-	-	-	-	-	-	-	14.9	14.4	13.9	12.8	11.7	10.4	8.9	4.8
	30	-	-	-	-	-	-	14.9	14.4	13.9	13.4	12.3	11.1	9.7	8.1	3.2
	40	-	-	-	-	-	14.9	14.5	14.0	13.4	12.9	11.7	10.5	9.0	7.3	
	50	-	-	-	-	14.9	14.5	14.0	13.5	12.9	12.4	11.2	9.8	8.3	6.3	
	60	-	-	-	14.8	14.4	14.0	13.5	13.0	12.4	11.8	10.6	9.1	7.4	5.2	
	70	-	-	14.8	14.4	14.0	13.6	13.0	12.5	11.9	11.3	9.9	8.4	6.5	3.8	
	80	-	14.7	14.3	13.9	13.5	13.1	12.5	11.9	11.3	10.7	9.2	7.6	5.4		
13 STAGES, 1 HP	0	-	-	-	-	-	-	-	14.9	14.2	13.6	12.1	10.5	8.5	6.0	
	20	-	-	-	-	-	15.0	14.3	13.7	13.0	12.2	10.6	8.7	6.2		
	30	-	-	-	-	14.9	14.4	13.7	13.0	12.3	11.5	9.8	7.6	4.6		
	40	-	-	-	14.8	14.3	13.8	13.1	12.3	11.6	10.7	8.8	6.4	2.2		
	50	-	-	14.7	14.2	13.7	13.1	12.4	11.6	10.8	9.9	7.8	4.9			
	60	-	14.7	14.1	13.6	13.0	12.5	11.7	10.9	10.0	9.0	6.6	2.8			
	70	14.6	14.1	13.5	13.0	12.4	11.7	10.9	10.0	9.1	8.0	5.2				
	80	14.0	13.4	12.9	12.3	11.7	11.0	10.1	9.2	8.1	6.8	3.2				
9 STAGES, 0.75 HP	0	-	-	-	-	-	15.0	14.1	13.1	12.0	10.9	8.0	3.4			
	20	-	-	-	14.8	14.0	13.3	12.2	11.0	9.8	8.3	3.9				
	30	-	-	14.7	13.9	13.1	12.3	11.1	9.9	8.4	6.6					
	40	-	14.6	13.8	13.0	12.1	11.2	10.0	8.5	6.8	4.4					
	50	14.4	13.7	12.9	12.0	11.1	10.1	8.6	6.9	4.6						
	60	13.6	12.7	11.9	10.9	9.9	8.7	7.1	4.8							
	70	12.6	11.7	10.8	9.7	8.6	7.2	5.0								
	80	11.6	10.6	9.6	8.4	7.0	5.2									
7 STAGES, 0.5 HP	0	-	-	-	-	14.9	13.9	12.7	11.2	9.5	7.5					
	20	-	-	14.6	13.6	12.6	11.4	9.8	7.9	5.3						
	30	-	14.5	13.5	12.4	11.2	9.9	8.0	5.5							
	40	14.3	13.3	12.2	11.1	9.7	8.2	5.7								
	50	13.2	12.1	10.9	9.5	7.9	6.0									
	60	11.9	10.7	9.3	7.7	5.6	2.1									
	70	10.5	9.0	7.4	5.2											
	80	8.8	7.1	4.8												

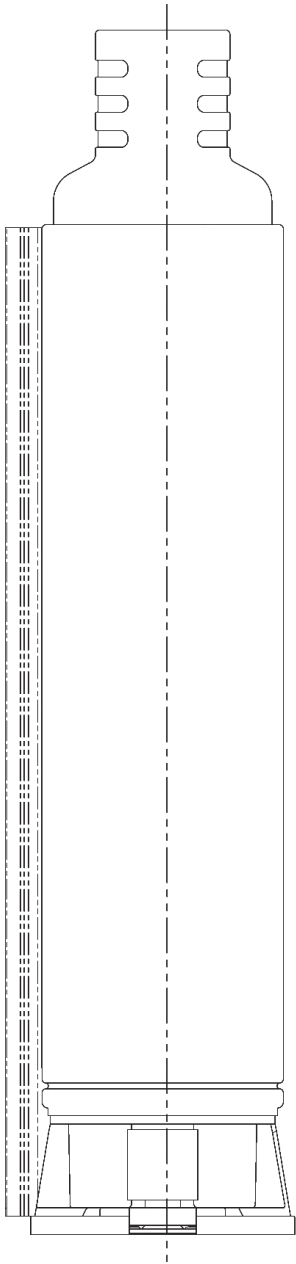
PUMP PERFORMANCE - 20 GPM



CAPACITY IN GALLONS PER MINUTE

HP	PSI	PUMPING DEPTH IN FEET											
		0	20	40	60	80	100	125	150	175	200	250	300
9 STAGES, 1.5 HP	0	-	-	-	-	-	27.7	26.3	24.8	23.2	21.4	17.4	11.6
	20	-	-	-	27.4	26.2	25.0	23.4	21.7	19.8	17.7	12.2	
	30	-	-	27.2	26.0	24.8	23.6	21.9	20.0	17.9	15.4	8.0	
	40	-	27.0	25.9	24.6	23.4	22.0	20.1	18.0	15.6	12.7		
	50	26.8	25.7	24.5	23.2	21.8	20.3	18.2	15.8	12.9	8.9		
	60	25.5	24.3	22.9	21.5	20.0	18.4	16.0	13.2	9.2			
	70	24.1	22.7	21.3	19.8	18.1	16.2	13.4	9.6				
	80	22.5	21.1	19.5	17.8	15.9	13.7	10.0					
7 STAGES, 0.5 HP	0	-	-	-	-	27.6	26.1	24.1	22.0	19.5	16.7	7.4	
	20	-	-	27.1	25.6	24.0	22.3	19.9	17.1	13.7	8.6		
	30	-	26.9	25.4	23.8	22.0	20.1	17.4	14.0	9.1			
	40	26.7	25.1	23.5	21.7	19.8	17.6	14.3	9.6				
	50	24.9	23.2	21.4	19.5	17.2	14.6	10.1					
	60	23.0	21.2	19.1	16.8	14.1	10.5						
	70	20.9	18.8	16.5	13.6	9.8							
	80	18.5	16.1	13.1	9.0								

PUMP DIMENSIONS



DISCHARGE		
10 GPM	1-1/4" NPT	3 7/8 "D"
20 GPM	1-1/4" NPT	3 7/8 "D"

PENTAIR® PENTEK® XE SERIES

4" SUBMERSIBLE MOTORS

Built with the latest design, manufacturing and testing technology, these motors 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.



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 Pentek VIP 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**

SPECIFICATIONS

- ◆ **End Bell:** 304 stainless steel over cast iron
- ◆ **Shell:** 304 stainless steel
- ◆ **Motor Shaft:** 17-4 precipitation hardened stainless steel
- ◆ **Winding:** Copper
- ◆ **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.

PENTEK XE SERIES 4" SUBMERSIBLE MOTORS

ORDERING INFORMATION

RATING					CATALOG NUMBER	FULL LOAD AMPS	MAX. LOAD (SF LOAD) AMPS	LOCKED ROTOR AMPS	WINDING		THRUST RATING	LENGTH		WEIGHT	
HP	kW	VOLTS	Hz	SERVICE FACTOR					MAIN RESISTANCE	START RESISTANCE		IN.	MM	LB.	KG
PERMANENT SPLIT CAPACITOR (PSC) 2 WIRE															
1/2	0.37	115	60	1.6	P42B0005A1-01	8.1	10.2	28.0	1.4-2.0	700	11.0	279	19.2	8.7	
		230		1.6	P42B0005A2-01	4.3	4.8	16.0	6.1-7.2		11.0	279	19.2	8.7	
3/4	0.55	230		1.5	P42B0007A2-01	5.0	6.4	18.0	5.9-6.9		12.4	314	22.7	10.3	
1	0.75	230		1.4	P42B0010A2-01	6.7	8.2	23.5	4.2-5.2		13.0	337	24.5	11.1	
1-1/2	1.1	230		1.3	P42B0015A2-01	9.1	10.5	43.0	1.8-2.4		14.9	378	28.9	13.1	
CAPACITOR START/INDUCTION RUN (CSIR) 3 WIRE															
1/2	0.37	115	60	1.6	P43B0005A1-01	9.8	11.6	44.0	1.0-1.4	2.5-3.1	700	10.0	253	18.9	8.6
		230		1.6	P43B0005A2-01	5.7	6.3	20.5	5.1-6.1	12.4-13.7		9.7	246	18.1	8.2
3/4	0.55	230		1.5	P43B0007A2-01	6.7	7.9	32.0	2.6-3.3	10.4-11.7		10.8	275	21.4	9.7
1	0.75	230		1.4	P43B0010A2-01	8.5	9.5	41.0	2.0-2.6	9.3-10.4		11.7	297	23.1	10.5
CAPACITOR START/CAPACITOR RUN (CSCR) 3 WIRE															
1/2	0.37	230	60	1.6	P43B0005A2-01	4.4	5.0	21.0	5.1-6.1	12.4-13.7	700	9.7	246	18.1	8.2
3/4	0.55			1.5	P43B0007A2-01	4.6	6.1	32.0	2.6-3.3	10.4-11.7		10.8	275	21.4	9.7
1	0.75			1.4	P43B0010A2-01	6.2	7.4	41.0	2.0-2.6	9.3-10.4		11.7	297	23.1	10.5
1-1/2	1.1			1.3	P43B0015A2-01	9.2	11.0	49.0	2.1-2.5	10.0-10.8		13.6	345	27.4	12.4
2	1.5			1.25	P43B0020A2	9.9	12.2	49.0	1.6-2.2	4.8-5.9	900	15.1	383	31.0	14.1
3	2.2			1.15	P43B0030A2	14.3	16.5	76.0	1.0-1.4	2.0-2.5		18.3	466	40.0	18.1
5	3.7			1.15	P43B0050A2	24.0	27.0	101.0	.6-.8	1.3-1.7	1500	27.7	703	70.0	31.8

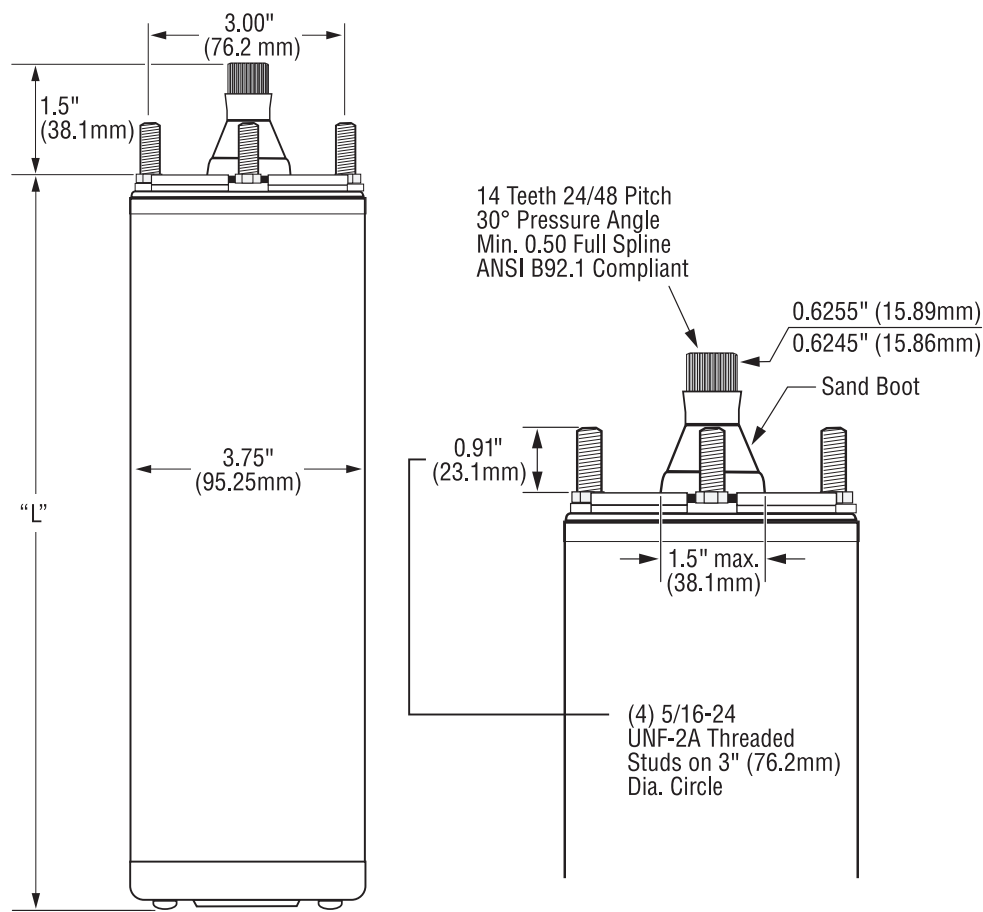
NOTE: Amp ratings on 3-wire motors reflect use with CSIR controls. A CSCR control is recommended for lower values.

PENTEK XE SERIES 4" SUBMERSIBLE MOTORS

RATING					CATALOG NUMBER	FULL LOAD AMPS	MAX. LOAD (SF LOAD) AMPS	LINE TO LINE RESISTANCE OHMS	LOCKED ROTOR AMPS	THRUST RATING	LENGTH		WEIGHT	
HP	KW	VOLTS	Hz	SERVICE FACTOR							IN.	MM	LB.	KG
3 PHASE														
1/2	0.37	200	60	1.6	P43B0005A8	2.9	3.5	4.1-5.2	22	700	10.0	254	18.9	8.6
		230			P43B0005A3	2.4	3.0	5.7-7.2	18		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	3.9	4.7	2.8-3.7	30		10.8	274	21.4	9.7
		230			P43B0007A3	3.3	4.0	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	4.8	5.7	2.2-3.1	34		11.7	297	23.1	10.5
		230			P43B0010A3	4.1	4.9	3.2-4.2	26		11.7	297	23.1	10.5
		460			P43B0010A4	2.2	2.5	16.8-18.6	15		11.7	297	23.1	10.5
1-1/2	1.1	200	60	1.3	P43B0015A8	6.6	7.6	1.9-2.5	40		11.7	297	23.1	10.5
		230			P43B0015A3	5.8	6.6	2.5-3.1	36		11.7	297	23.1	10.5
		460			P43B0015A4	3.0	3.4	9.5-10.5	16		11.7	297	23.1	10.5
		575			P43B0015A5	2.3	2.6	15.6-17.3	15		11.7	297	23.1	10.5
2	1.5	200	60	1.25	P43B0020A8	8.0	9.3	1.4-2.0	51	900	13.8	351	27.4	12.4
		230			P43B0020A3	6.7	8.0	2.2-2.8	44		13.8	351	27.4	12.4
		460			P43B0020A4	3.6	4.1	7.5-9.3	23		13.8	351	27.4	12.4
		575			P43B0020A5	2.7	3.3	10.2-12.5	21		15.3	389	32.0	14.5
3	2.2	200	60	1.15	P43B0030A8	10.9	12.0	1.2-1.5	71		15.3	389	32.0	14.5
		230			P43B0030A3	9.2	10.1	1.6-2.0	59		15.3	389	32.0	14.5
		460			P43B0030A4	4.8	5.3	6.3-7.7	30		15.3	389	32.0	14.5
		575			P43B0030A5	3.7	4.1	10.2-12.5	21		15.3	389	32.0	14.5
5	3.7	200	60	1.15	P43B0050A8	18.3	20.2	.7-.9	113	1500	21.7	551	55.0	24.9
		230			P43B0050A3	15.7	17.5	.9-1.3	93		21.7	551	55.0	24.9
		460			P43B0050A4	7.6	8.5	3.9-4.9	48		21.7	551	55.0	24.9
		575			P43B0050A5	7.0	7.6	3.6-4.2	55		27.7	703	70.0	31.8
7-1/2	5.6	200	60	1.15	P43B0075A8	27.0	30.0	.4-.6	165		27.7	703	70.0	31.8
		230			P43B0075A3	24.0	26.4	.5-.9	140		27.7	703	70.0	31.8
		460			P43B0075A4	12.2	13.5	2.1-2.7	87		27.7	703	70.0	31.8
		575			P43B0075A5	9.1	10	3.6-4.2	55		27.7	703	70.0	31.8
10	7.5	460	60	1.15	P43B0100A4	15.6	17.2	1.8-2.2	110		30.7	780	78.0	35.4

PENTEK XE SERIES 4" SUBMERSIBLE MOTORS

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

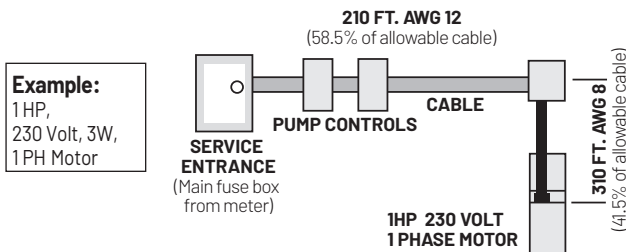
LEAD LENGTH

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
P18-1678K	3-Wire	XLPE	180"	14 AWG

XE SERIES CABLE SELECTION

4" SUBMERSIBLE MOTORS

Two different cable sizes can be used. The example below is for reference. 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.



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 $210 \div 359 = 58.5\%$, 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: 2-WIRE PSC 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
230	1/2	115	183	293	463	721	1150	1445	1825	2299	2902	3662	4623	5824
	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: 3-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
230	1/2	87	138	221	349	544	867	1090	1376	1734	2188	2761	3485	4391
	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	-	-

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 4" SUBMERSIBLE MOTORS

MOTOR LEAD LENGTHS: 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.

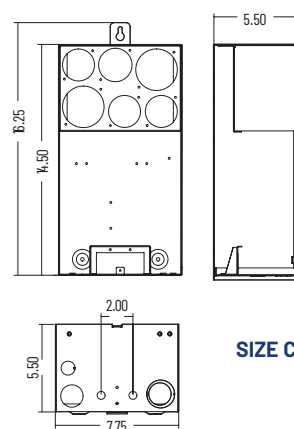
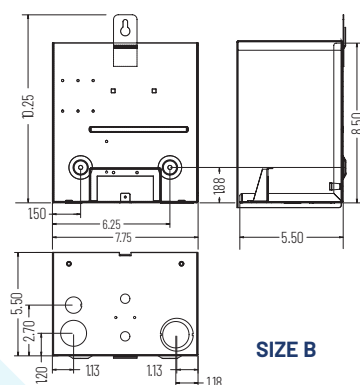
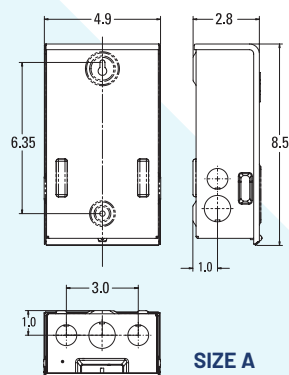
PENTEK HP MODELS SUBMERSIBLE MOTOR CONTROLS

ORDERING INFORMATION

HP	KW	PH	VOLTS	60 HZ CATALOG NUMBER	50 HZ CATALOG NUMBER	WEIGHT		ENCLOSURE SIZE
						LBS	KG	
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)*	-	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	-	7	3.2	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	-	7	3.2	B
3	2.2	1	230	SMC-CRP3021	-	8	3.6	B
5	3.7	1	230	SMC-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



Dimensions (in inches) are for estimating purposes only.

VIP PRO SERIES CONTROLS

Capacitor start, capacitor run designed for the full range of single-phase 1/2, 3/4, 1, 1-1/2, 2, 3 and 5 HP, 3-wire submersible motors

APPLICATIONS

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

FEATURES

Enclosure:

1. Weather resistant construction – NEMA 3R/IP24 rated enclosure for indoor/outdoor use
2. Control box rated for 50°C (122°F) ambient temperature
3. One screw removal for easy panel access with motor running
4. Proprietary dielectric control panel board, UL and CSA Certified

Internals:

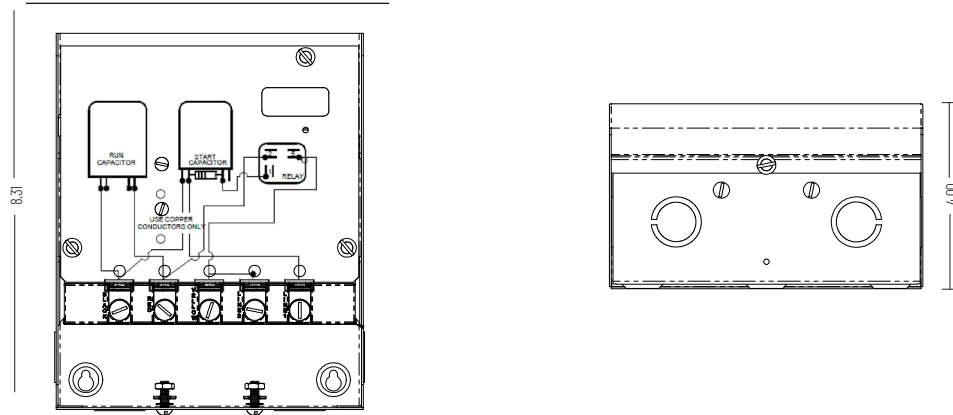
5. Universal controls—designed to work on most manufacturers 3-wire submersible motors
6. Large wiring area offers generous space to make your wiring connections. Incorporates 1/2", 3/4" and 1" conduit knock-outs
7. Control box is functional with the cover removed, offering easier in-the-field troubleshooting

Agency Approvals: CSA CUS Certified. Pentek Submersible Motor Controls can be used with Pentek XE Series motors.

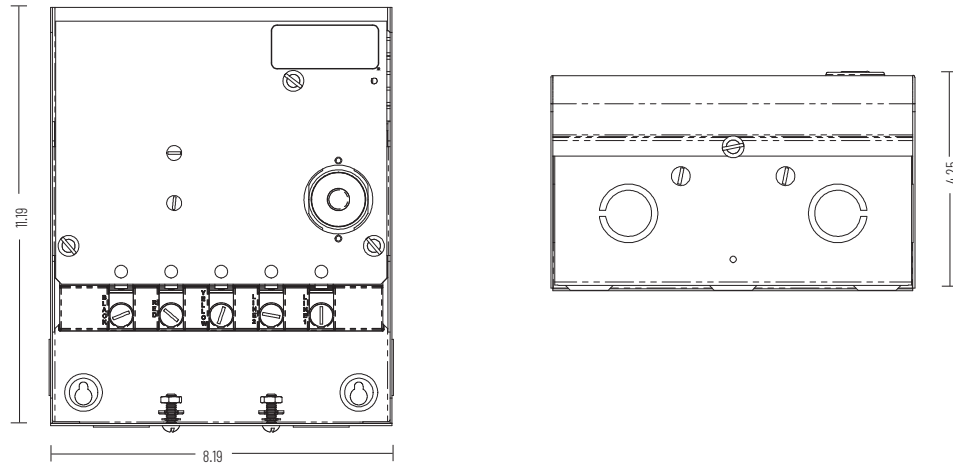


PENTEK VIP PRO SERIES CONTROLS

SIZE A



SIZE B



VIP CONTROL BOX SPECIFICATION

CATALOG NUMBER	HP	KW	PHASE	VOLTS	HERTZ	TYPE	WEIGHT		ENCLOSURE SIZE	START CAPACITOR		RUN CAPACITOR		VOLTAGE RELAY	PROTECTOR
							LBS	KG		PN	RATING	PN	RATING		
VIP4C02	0.50	0.37	1	230	60	CSCR	4.6	2.1	A	U17-1422	43MFD-270V-15kΩ	U17-2072	15MFD-370V	U17-2077	None
VIP4D02	0.75	0.55	1	230	60	CSCR	4.4	2.0	A	U17-1423	59MFD-270V-15kΩ	U17-2073	20MFD-370V	U17-2077	None
VIP4E02	1.00	0.75	1	230	60	CSCR	4.4	2.0	A	U17-1424	86MFD-270V-15kΩ	U17-2074	23MFD-370V	U17-2077	None
VIP4F02	1.50	1.1	1	230	60	CSCR	4.6	2.1	A	U17-1430	105MFD-330V-15kΩ	U17-1438	10MFD-370V	U17-2078	CGP69JB-7
VIP4G02	2.00	1.5	1	230	60	CSCR	4.6	2.1	A	U17-1430	105MFD-330V-15kΩ	U17-1440	23MFD-370V	U17-1431	CET38EB-7
VIP4H02	3.00	2.2	1	230	60	CSCR	5.4	2.4	A	U17-1428	208MFD-330V-15kΩ	U17-1443	45MFD-370V	U17-1431	CGT66DD-07
VIP4J02	5.00	3.7	1	230	60	CSCR	8.2	3.7	B	U17-1437	270MFD-330V-15kΩ	U17-1442	40MFD-370V (2 pcs)	U17-2079	BET00EE-21

Control boxes are designed to be used on Pentair motors with the same HP and Voltage ratings. Do not use on motors with different ratings.

SINGLE-PHASE PUMP PROTECTION

Pentair 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

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"

SINGLE-PHASE PUMP PROTECTION

THE INSIDER SPP-111P/SPP-231P

For 1/3 - 1 HP applications, the SPP-111P and SPP-231P Insider fits within 1/3 - 1 HP 115V and 230V CSIR control boxes. This "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 Pentair® Pentek® Informer Remote Handheld Diagnostic Tool (sold separately) communicates directly with ALL Pentair 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"

SINGLE-PHASE PUMP PROTECTION

SPP-111-3RLP, SPP-233P AND SPP-235P

For 1/2 - 15 HP applications, these 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). 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.

FEATURES

Protects Pumps: from dry well overvoltage, flow restriction (dead head), under voltage and overcurrent (jammed impeller).



SPP-233P



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.

ORDERING INFORMATION

HP	PHASE	VOLTS	FREQUENCY	CATALOG NUMBER	WEIGHT		CARTON SIZE
					LBS.	KG.	
1/2-1	1	115	50 - 60Hz	SPP-111-2RLP	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	0.7	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.

PENTEK® INFORMER

REMOTE DIAGNOSTIC

APPLICATIONS

The Pentek Informer is 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, and dry well.
- ◆ **Overload Trip Points**
- ◆ **Calibration Voltage**
- ◆ **Last Fault**
- ◆ **Highest/Lowest Voltage:** Since last calibration

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.



CATALOG NUMBER	WEIGHT		CARTON SIZE
	LBS.	KG	
SPP-Informer	1	0.45	4.375" x 3.375" x 6.75"

PENTEK INTELLIDRIVE™

WATER PRESSURE CONTROL CENTER



Homeowners with water pressure problems experience weak showers, unclean dishes, dry lawns and more. The Pentek Intellidrive Water Pressure Control Center is an intelligent variable frequency drive that directs changes in submersible pump motor speed, responding to fluctuations in household demand. It maintains constant water pressure, regardless of how many people or appliances are using water at the same time.

APPLICATIONS

Residential water systems, landscape irrigation, and water transfer.

FEATURES

- ◆ **4 MODELS MEET ALL YOUR NEEDS:** 1/2 HP - 5 HP Capabilities. 2-Wire, 3-Wire & 3-Phase in same unit. 3-Phase Output (60 Hz/80 Hz).**
- ◆ **PUMP AND MOTOR LAST LONGER:** "Soft Start/Coast to Stop" minimizes mechanical stress. Constant pressure eliminates frequent on/off "pressure cycling".
- ◆ **ADVANCED CONTROL SYSTEM:** Needed for installation, system monitoring and troubleshooting. Easy touchpad operation.
- ◆ **GROUND DETECTION:** Detects and displays when there is a grounding problem. Shuts down system until problem is corrected.

SPECIFICATIONS

- ◆ **Enclosure Dimensions:** Width: 9.72" Height: 19" Depth: 6.93"
- ◆ **Carton Dimensions:** Width: 10.4" Height: 22.3" Depth: 9.4"
- ◆ **Shipping Weight:** 22 pounds
- ◆ **Ambient Temperature Range:** -20°C (-4°F) to 50°C (122°F)
- ◆ **Ambient Humidity Range:** 95% non-condensing
- ◆ **Includes:** Variable Frequency Drive
- ◆ **Transducer:** 1/4" thread size, 18 NPT type
- ◆ **Transducer Cable:** 10' length standard

60Hz operation is recommended as the industry standard. Intermittent 80Hz operation is an acceptable option.

** Ongoing 80Hz operation may reduce the life of the pump and motor.

PENTEK INTELLIDRIVE WATER PRESSURE CONTROL CENTER

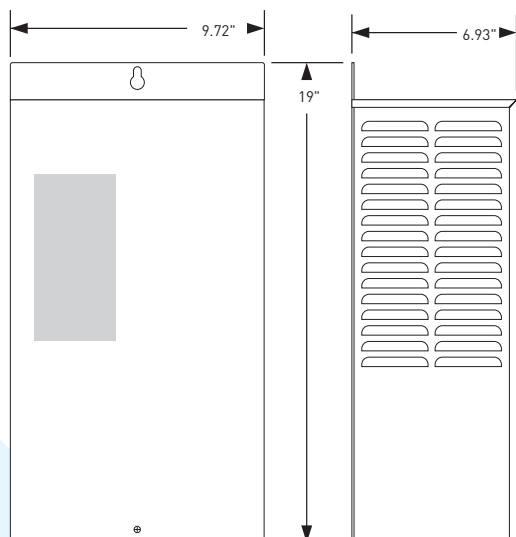
ORDERING INFORMATION

MODEL NUMBER	MOTOR TYPE	HP RANGE	INPUT VOLTAGE	MAXIMUM OUTPUT AMPS	ENCLOSURE TYPE
PID10	2-WIRE* 1-PHASE	0.5 – 1 HP	190V – 265V	9.5A	NEMA 3R outdoor
	3-WIRE* 1-PHASE			7.5A	
	3-PHASE			5A	
PID20	2-WIRE* 1-PHASE	0.5 – 1.5 HP		11A	
	3-WIRE* 1-PHASE	0.5 – 2 HP		13.5A	
	3-PHASE			8.5A	
PID30	2-WIRE* 1-PHASE	0.5 – 1.5 HP		11A	
	3-WIRE* 1-PHASE	0.5 – 2 HP		13.5A	
	3-PHASE	0.5 – 3 HP		11.5A	
PID50	2-WIRE* 1-PHASE	0.5 – 1.5 HP		11A	
	3-WIRE* 1-PHASE	0.5 – 2 HP		13.5A	
	3-PHASE	0.5 – 5 HP		18A	

*4" Submersible 2-Wire (PSC) and 3-Wire motors only.

OUTLINE DIMENSIONS

Dimensions (in inches) are for estimating purposes only.



Keyhole Mount

For fast and easy installation

LCD Information Center

Displays installation, status and fault information in easy-to-understand language instead of codes

Ground Detection

Message Center shows if there is a grounding problem

Multiple Accessory Inputs

Additional inputs allow use of multiple drive accessories at the same time

Best-In-Class EMI/RFI Filter

Superior noise and interference protection, including AM radio signals

Spacious Wiring Area

For fast and easy installation

Programmable Input/Output Relays

Provide application flexibility

Easy-Access Conduit Openings

Align with appropriate terminals for straight-in accessibility. Fits 1/2", 3/4" or 1-1/4"



Electronic Pressure Transducer

More accurate and reliable than mechanical pressure switch, with piezo resistive technology designed to resist water hammer

Temperature-Sensitive Intelligent Fan

Operates when needed for quiet operation

SD Card Slot

For easy software updates when provided by manufacturer

Spring Terminals

For secure connections and easy installation without special tools

Removable Terminal Blocks

For easy wiring of motor and power supply – field replaceable



PENTEK INTELLIKIT™

CONSTANT PRESSURE CONTROLLER



The Pentek Intellidrive Constant Pressure Controller 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.

- ◆ 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

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. Myers 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.

ORDERING INFORMATION

60HZ NEMA 3 KITS

ORDER NUMBER	FLOW SERIES	HP	SHUT-OFF HEAD	AT RATED FLOW	AT MAX RUNOUT		PUMP	DRIVE	MOTOR
			TDH (FT)	TDH (FT)	FLOW (GPM)	TDH (FT)			
M5PIK10-60	5	1HP	610	495	8	200	ST10-5PLUS	PID10	P43B0010A3-C
M5PIK15-60	5	1.5HP	865	670	8	295	ST15-5PLUS	PID20	P43B0015A3-C
M8PIK10-60	8	1HP	495	375	11	240	ST10-8PLUS	PID10	P43B0010A3-C
M8PIK15-60	8	1.5HP	650	495	11	315	ST15-8 PLUS	PID20	P43B0015A3-C
M8PIK20-60	8	2HP	795	590	11	390	ST20-8 PLUS	PID20	P43B0020A3-C
M12PIK10-60	12	1HP	390	275	15	205	ST10-12PLUS	PID10	P43B0010A3-C
M12PIK15-60	12	1.5HP	575	385	15	300	ST15-12 PLUS	PID20	P43B0015A3-C
M12PIK20-60	12	2HP	630	450	15	330	ST20-12 PLUS	PID20	P43B0020A3-C
M12PIK30-60	12	3HP	890	610	15	460	ST30-12 PLUS	PID50	P43B0030A3-C
M15PIK10-60	15	1HP	310	200	21	95	ST10-15PLUS-3	PID10	P43B0010A3-C
M15PIK15-60	15	1.5HP	420	280	21	120	ST15-15PLUS-3	PID20	P43B0015A3-C
M15PIK20-60	15	2HP	522	380	21	150	ST20-15PLUS-3	PID20	P43B0020A3-C
M15PIK30-60	15	3HP	770	520	21	230	ST30-15PLUS-3	PID30	P43B0030A3-C
M20PIK10-60	20	1HP	280	175	25	100	ST10-20PLUS	PID10	P43B0010A3-C
M20PIK15-60	20	1.5HP	375	245	25	150	ST15-20 PLUS	PID20	P43B0015A3-C
M20PIK20-60	20	2.0HP	470	298	25	190	ST20-20 PLUS	PID20	P43B0020A3-C
M20PIK30-60	20	3.0HP	600	390	25	220	ST30-20 PLUS	PID50	P43B0030A3-C
M25PIK15-60	25	1.5 HP	270	170	25	105	ST15-25 PLUS	PID20	P43B0015A3-C
M25PIK20-60	25	2.0HP	310	210	35	170	SS20-25	PID20	P43B0020A3-C
M25PIK30-60	25	3.0HP	445	310	35	220	SS30-25	PID50	P43B0030A3-C
M35PIK15-60	35	1.5HP	175	105	50	75	SS15-35	PID20	P43B0015A3-C
M35PIK20-60	35	2.0HP	210	190	50	115	SS20-35	PID20	P43B0020A3-C
M35PIK30-60	35	3.0HP	305	205	50	150	SS30-35	PID50	P43B0030A3-C
M50PIK15-60	50	1.5HP	170	100	65	80	SS15-50	PID20	P43B0015A3-C
M50PIK20-60	50	2.0HP	205	125	65	90	SS20-50	PID20	P43B0020A3-C
M50PIK30-60	50	3.0HP	295	175	65	110	SS30-50	PID50	P43B0030A3-C

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 using 60Hz solutions.

80HZ NEMA 3 KITS

ORDER NUMBER	FLOW SERIES	HP	SHUT-OFF HEAD	AT RATED FLOW	AT MAX RUNOUT		PUMP	DRIVE	MOTOR
			TDH (FT)	TDH (FT)	FLOW (GPM)	TDH (FT)			
M8PIK15-80	8	1.5HP	650	495	11	315	ST7-8 PLUS	PID20	P43B0015A3-C
M8PIK20-80	8	2HP	795	590	11	390	ST10-8 PLUS	PID20	P43B0020A3-C
M8PIK30-80	8	3HP	1090	800	11	530	ST15-8 PLUS	PID50	P43B0030A3-C
M12PIK15-80	12	1.5HP	575	385	15	300	ST7-12 PLUS	PID20	P43B0015A3-C
M12PIK20-80	12	2HP	630	450	15	330	ST10-12 PLUS	PID20	P43B0020A3-C
M12PIK30-80	12	3HP	890	610	15	460	ST15-12 PLUS	PID50	P43B0030A3-C
M15PIK15-80	15	1.5HP	420	280	21	120	ST7-15PLUS-3	PID20	P43B0015A3-C
M15PIK20-80	15	2HP	522	380	21	150	ST10-15PLUS-3	PID20	P43B0020A3-C
M15PIK30-80	15	3HP	770	520	21	230	S15-15PLUS-3	PID30	P43B0030A3-C
M20PIK15-80	20	1.5HP	375	245	25	150	ST7-20 PLUS	PID20	P43B0015A3-C
M20PIK20-80	20	2.0HP	470	298	25	190	ST10-20 PLUS	PID20	P43B0020A3-C
M20PIK30-80	20	3.0HP	600	390	25	220	ST15-20 PLUS	PID50	P43B0030A3-C
M25PIK20-80	25	2.0 HP	318	226	25	185	ST10-25 PLUS	PID20	P43B0020A3-C
M25PIK30-80	25	3.0 HP	435	316	25	220	ST15-25 PLUS	PID50	P43B0030A3-C
M35PIK20-80	35	2.0HP	210	190	50	115	SS10-35	PID20	P43B0020A3-C
M35PIK30-80	35	3.0HP	305	205	50	150	SS15-35	PID50	P43B0030A3-C
M50PIK30-80	50	3.0HP	295	175	65	110	SS15-50	PID50	P43B0030A3-C
M80PIK30-80	80	3.0HP	205	100	100	55	SS20-80	PID50	P43B0030A3-C

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 using 60Hz solutions.

PENTEK INTELLIDRIVE™ XL

PUMP CONTROLLERS



Variable Frequency Drives designed for large horsepower pumping applications. Power ratings to 730A with enclosures for indoor and outdoor applications.

APPLICATIONS

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

SPECIFICATIONS

AMP Ratings: 1.7-730

Voltage: 230, 460, 575

Frequency: 50/60 Hz

Standard I/O: Digital Inputs: 6; Analog Inputs: 2; Pulse Inputs: 2; Relays: 2; Digital Outputs: 2; Analog Outputs: 4

Communication: Modbus RTU

Enclosure Type: NEMA 1, 3R, 4X, IP20 Open/Chassis

FEATURES

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

Pump System Protection: Dry Run detection, check valve ramp, pipe fill mode, Sleep mode, no/low flow detection, end of pump curve detection, integrated mains disconnect switch (optional), and real-time clock battery backup.

Phase Conversion: Single phase input drives are available that convert to 3 phase output.

Simple Setup:

- ◆ Pump and Motor Settings: Above/Below Ground, Horsepower, Voltage, Current, Nominal Speed.
- ◆ System Learning: No Load, Sleep, No Flow.

PENTEK INTELLIDRIVE™ XL PUMP CONTROLLERS

ORDERING INFORMATION

SINGLE-PHASE INPUT DRIVES				
OUTPUT AMPS	INPUT VOLTAGE	INPUT PHASE	NEMA RATING	MODEL NUMBER
24.2	230	1	NEMA 1	PID007512ND
30.8				PID010012ND
59.4				PID020012ND
88				PID030012ND
24.2			NEMA 3R	PID007532NDBP
30.8				PID010032NDBP
59.4				PID020032NDBP
88				PID030032NDBP

SINGLE-PHASE INPUT DRIVES				
OUTPUT AMPS	INPUT VOLTAGE	INPUT PHASE	NEMA RATING	MODEL NUMBER
24.2	230	1	NEMA 4X	PID007542NDBP
30.8				PID010042NDBP
59.4				PID020042NDBP
88				PID030042NDBP

230V 1-PHASE INPUT DRIVES (VARIOUS ENCLOSURES, NO DISCONNECT)

THREE-PHASE INPUT DRIVES			NEMA 1		NEMA 3R		NEMA 4X		OPEN CHASSIS
OUTPUT AMPS	INPUT VOLTAGE	INPUT PHASE	NO DISCONNECT	DISCONNECT	NO DISCONNECT	DISCONNECT	NO DISCONNECT	DISCONNECT	NO DISCONNECT
4.6	230	3	PID001013ND	PID001013FD	PID001033NDBP	PID001033FDBP	PID001043NDBP	PID001043FDBP	PID001003ND
7.5			PID002013ND	PID002013FD	PID002033NDBP	PID002033FDBP	PID002043NDBP	PID002043FDBP	PID002003ND
10.6			PID003013ND	PID003013FD	PID003033NDBP	PID003033FDBP	PID003043NDBP	PID003043FDBP	PID003003ND
16.7			PID005013ND	PID005013FD	PID005033NDBP	PID005033FDBP	PID005043NDBP	PID005043FDBP	PID005003ND
24.2			PID007513ND	PID007513FD	PID007533NDBP	PID007533FDBP	PID007543NDBP	PID007543FDBP	PID007503ND
30.8			PID010013ND	PID010013FD	PID010033NDBP	PID010033FDBP	PID010043NDBP	PID010043FDBP	PID010003ND
46.2			PID015013ND	PID015013FD	PID015033NDBP	PID015033FDBP	PID015043NDBP	PID015043FDBP	PID015003ND
59.4			PID020013ND	PID020013FD	PID020033NDBP	PID020033FDBP	PID020043NDBP	PID020043FDBP	PID020003ND
74.8			PID025013ND	PID025013FD	PID025033NDBP	PID025033FDBP	PID025043NDBP	PID025043FDBP	PID025003ND
88			PID030013ND	PID030013FD	PID030033NDBP	PID030033FDBP	PID030043NDBP	PID030043FDBP	PID030003ND
115			PID040013ND	PID040013FD	PID040033NDBP	PID040033FDBP	PID040043NDBP	PID040043FDBP	PID040003ND
143			PID050013ND	PID050013FD	PID050033NDBP	PID050033FDBP	PID050043NDBP	PID050043FDBP	PID050003ND
170			PID060013ND	PID060013FD	PID060033NDBP	PID060033FDBP	PID060043NDBP	PID060043FDBP	PID060003ND
2.1	460	3	PID001014ND	PID001014FD	PID001034NDBP	PID001034FDBP	PID001044NDBP	PID001044FDBP	PID001004ND
3.4			PID002014ND	PID002014FD	PID002034NDBP	PID002034FDBP	PID002044NDBP	PID002044FDBP	PID002004ND
4.8			PID003014ND	PID003014FD	PID003034NDBP	PID003034FDBP	PID003044NDBP	PID003044FDBP	PID003004ND
8.2			PID005014ND	PID005014FD	PID005034NDBP	PID005034FDBP	PID005044NDBP	PID005044FDBP	PID005004ND
11			PID007514ND	PID007514FD	PID007534NDBP	PID007534FDBP	PID007544NDBP	PID007544FDBP	PID007504ND

ORDERING INFORMATION

230V 1-PHASE INPUT DRIVES (VARIOUS ENCLOSURES, NO DISCONNECT)

THREE PHASE INPUT DRIVES			NEMA 1		NEMA 3R		NEMA 4X		OPEN CHASSIS
OUTPUT AMPS	INPUT VOLTAGE	INPUT PHASE	NO DISCONNECT	DISCONNECT	NO DISCONNECT	DISCONNECT	NO DISCONNECT	DISCONNECT	NO DISCONNECT
14.5	460	3	PID010014ND	PID010014FD	PID010034NDBP	PID010034FDBP	PID010044NDBP	PID010044FDBP	PID010004ND
21			PID015014ND	PID015014FD	PID015034NDBP	PID015034FDBP	PID015044NDBP	PID015044FDBP	PID015004ND
27			PID020014ND	PID020014FD	PID020034NDBP	PID020034FDBP	PID020044NDBP	PID020044FDBP	PID020004ND
34			PID025014ND	PID025014FD	PID025034NDBP	PID025034FDBP	PID025044NDBP	PID025044FDBP	PID025004ND
40			PID030014ND	PID030014FD	PID030034NDBP	PID030034FDBP	PID030044NDBP	PID030044FDBP	PID030004ND
52			PID040014ND	PID040014FD	PID040034NDBP	PID040034FDBP	PID040044NDBP	PID040044FDBP	PID040004ND
65			PID050014ND	PID050014FD	PID050034NDBP	PID050034FDBP	PID050044NDBP	PID050044FDBP	PID050004ND
80			PID060014ND	PID060014FD	PID060034NDBP	PID060034FDBP	PID060044NDBP	PID060044FDBP	PID060004ND
105			PID075014ND	PID075014FD	PID075034NDBP	PID075034FDBP	PID075044NDBP	PID075044FDBP	PID075004ND
130			PID100014ND	PID100014FD	PID100034NDBP	PID100034FDBP	PID100044NDBP	PID100044FDBP	PID100004ND
160			PID125014ND	PID125014FD	PID125034NDBP	PID125034FDBP	PID125044NDBP	PID125044FDBP	PID125004ND
1.7	575	3	PID001015ND	PID001015FD	PID001035NDBP	PID001035FDBP	PID001045NDBP	PID001045FDBP	PID001005ND
2.7			PID002015ND	PID002015FD	PID002035NDBP	PID002035FDBP	PID002045NDBP	PID002045FDBP	PID002005ND
3.9			PID003015ND	PID003015FD	PID003035NDBP	PID003035FDBP	PID003045NDBP	PID003045FDBP	PID003005ND
6.1			PID005015ND	PID005015FD	PID005035NDBP	PID005035FDBP	PID005045NDBP	PID005045FDBP	PID005005ND
9			PID007515ND	PID007515FD	PID007535NDBP	PID007535FDBP	PID007545NDBP	PID007545FDBP	PID007505ND
11			PID010015ND	PID010015FD	PID010035NDBP	PID010035FDBP	PID010045NDBP	PID010045FDBP	PID010005ND
18			PID015015ND	PID015015FD	PID015035NDBP	PID015035FDBP	PID015045NDBP	PID015045FDBP	PID015005ND
22			PID020015ND	PID020015FD	PID020035NDBP	PID020035FDBP	PID020045NDBP	PID020045FDBP	PID020005ND
27			PID025015ND	PID025015FD	PID025035NDBP	PID025035FDBP	PID025045NDBP	PID025045FDBP	PID025005ND
34			PID030015ND	PID030015FD	PID030035NDBP	PID030035FDBP	PID030045NDBP	PID030045FDBP	PID030005ND
41			PID040015ND	PID040015FD	PID040035NDBP	PID040035FDBP	PID040045NDBP	PID040045FDBP	PID040005ND
52			PID050015ND	PID050015FD	PID050035NDBP	PID050035FDBP	PID050045NDBP	PID050045FDBP	PID050005ND
62			PID060015ND	PID060015FD	PID060035NDBP	PID060035FDBP	PID060045NDBP	PID060045FDBP	PID060005ND
83			PID075015ND	PID075015FD	PID075035NDBP	PID075035FDBP	PID075045NDBP	PID075045FDBP	PID075005ND
100			PID100015ND	PID100015FD	PID100035NDBP	PID100035FDBP	PID100045NDBP	PID100045FDBP	PID100005ND
131			PID125015ND	PID125015FD	PID125035NDBP	PID125035FDBP	PID125045NDBP	PID125045FDBP	PID125005ND

6" AND 8" SUBMERSIBLE MOTORS

XE-6/XE-8

Delivers outstanding performance through lower amp draw and higher efficiencies, which yields lower operating costs. Combined with many durable, innovative, and advanced design features, the Pentek XE-6 and XE-8 are the perfect solution for your submersible motor needs.

APPLICATIONS

High-thrust water well applications.

FEATURES

- ◆ Exceptional insulation rating (Class F) and temperature rating (95 F / 35 C).
- ◆ IP68 protection rating.
- ◆ VFD-compatible.
- ◆ Vertical or Horizontal operation.

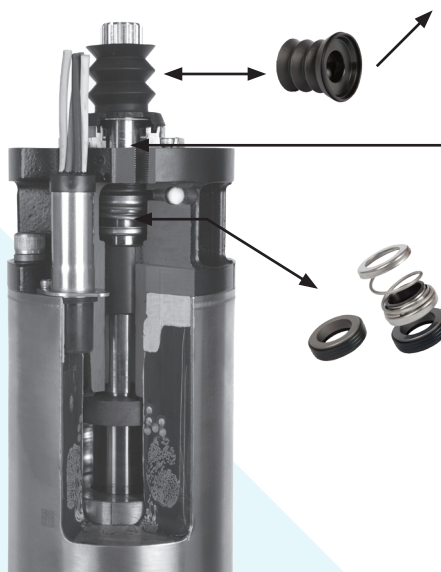
SPECIFICATIONS

- ◆ **Shaft:** 17-4 stainless steel.
- ◆ **Motor Casing:** 304 stainless steel.
- ◆ **Upper and Lower Bracket:** Epoxy-coated cast iron coating is TNEMEC 140, an NSF-certified coating.
- ◆ **Upper Bracket:** "dual-flange" design.
- ◆ **Motor Lead:** XLPE.
- ◆ **Thrust Bearing:** Water-lubricated, Kingsbury-type.
- ◆ **Pressure Equalizing Diaphragm:** Springless design.

EXCLUSIVE ADVANCED PROTECTION SYSTEM

Provides THREE layers of defense against sand and debris intrusion.

- ◆ **External Sand Slinger Boot**
 - Features a labyrinth seal design to better capture any sand or debris, keeping it away from the shaft.
- ◆ **Lip Seal**
 - Located below the sand slinger, providing an extra layer of protection.
- ◆ **Mechanical Seal – Silicon Carbide**
 - Excellent abrasion, wear and corrosion resistance.
 - Resists deflection in high-pressure, high-heat, and high-speed conditions.
 - High thermal conductivity (heat dissipation).
 - Provides superior protection against sand intrusion.



MOTOR PERFORMANCE AND DIMENSIONAL DATA

	XE-6	XE-8
NOMINAL DIAMETER	6" / 152.4mm	8" / 203.2mm
EFFECTIVE DIAMETER	5.43" / 138mm	7.70" / 195.6mm
SHAFT EXTENSION	2.87" / 73mm	4.00" / 101.6mm
INSULATION	Class F	
HZ/POLE/SPEED	60Hz / 2 Pole / 3450 RPM	

					FULL LOAD				SERVICE FACTOR 1.15				LOCKED ROTOR AMPS	THRUST LOAD (LBS)	KVA CODE	LENGTH (includes shaft ext)			WEIGHT		CRATE						WEIGHT MOOR +CRATE				
PHASE	MODEL #	HP	KW	VOLTS	AMPS	WATTS	EFF%	PF%	AMPS	WATTS	EFF%	PF%				IN	MM	LBS	KG	IN	MM	IN	MM	IN	MM	LBS	KG				
6" Motors	1	P60A0050A2	5	3.70	230	22.8	4975	74.5	97.0	26.0	5625	75.5	97.0	104	3600	E	25.6	650	104	47.2	32	813	10	254	13.5	343	134	60.8			
		P60A0075A2	7.5	5.60		35.2	7300	77.0	92.0	40.0	8300	77.5	92.5	162		F	28.1	714	117	53.1							151	68.5			
		P60A0100A2	10	7.50		45.7	9700	76.5	94.0	52.4	11175	76.5	94.0	202		E	30.3	770	132	59.9							166	75.3			
		P60A0150A2	15	11.20		62.4	13725	81.5	98.0	72.5	15825	81.5	98.0	296		E	32.8	833	144	65.3	178	80.7									
	2	P60A0050A8	5	3.7	200	16.1	4830	77.5	86.5	18.0	5490	78.5	88.0	96		H	23.0	583	87	39.5	32	813	10	254	13.5	343	115	52.2			
		P60A0075A8	7.5	5.5		23.3	7000	80.0	87.5	26.8	8070	80.0	88.5	140		H	24.3	618	97	44.0							127	57.6			
		P60A0100A8	10	7.5		31.5	9090	82.5	86.5	35.0	10400	82.5	88.0	187		H	25.6	650	104	47.2							134	60.8			
		P60A0150A8	15	11		44.9	13440	83.5	87.0	50.8	15460	83.5	88.5	268		H	28.1	713	117	53.1							151	68.5			
		P60A0200A8	20	15		59.0	17850	83.0	87.5	67.1	20630	83.0	89.0	354		H	30.3	770	132	59.9	48	1219	10	254	13.5	343	166	75.3			
		P60A0250A8	25	19		76.8	22110	84.0	85.5	86.5	25520	84.0	87.5	445		H	32.8	834	144	65.3							180	81.6			
		P60A0300A8	30	22		91.7	26420	84.5	86.0	103.3	30450	84.5	87.5	530		H	35.6	904	165	74.8							207	93.9			
		P60A0050A3	5	3.7		230	14.4	4830	77.5	86.5	16.1	5490	78.5	88.0		87	H	23.0	583	87	39.5	32	813	10	254	13.5	343	115	52.2		
		P60A0075A3	7.5	5.5			21.5	7000	80.0	87.5	24.1	8070	80.0	88.5		127	H	24.3	618	97	44.0							127	57.6		
		P60A0100A3	10	7.5			28.0	9090	82.5	86.5	31.5	10400	82.5	88.0		164	H	25.6	650	104	47.2							134	60.8		
		P60A0150A3	15	11	40.9		13440	83.5	87.0	46.3	15460	83.5	88.5	237		H	28.1	713	117	53.1	151							68.5			
		P60A0200A3	20	15	53.2		17850	83.0	87.5	60.8	20630	83.0	89.0	312		G	30.3	770	132	59.9	48	1219	10	254	13.5	343	166	75.3			
		P60A0250A3	25	19	66.7		22110	84.0	85.5	76.0	25520	84.0	87.5	387		G	32.8	834	144	65.3							180	81.6			
		P60A0300A3	30	22	79.3		26420	84.5	86.0	90.2	30450	84.5	87.5	458		G	35.6	904	165	74.8							207	93.9			
	P60A0050A4	5	3.7	460	7.0		4830	77.5	86.5	8.0	5490	78.5	88.0	44	H	23.0	583	87	39.5	32							813	10	254	13.5	343
	P60A0075A4	7.5	5.5		10.0	7000	80.0	87.5	11.3	8070	80.0	88.5	62	H	24.3	618	97	44.0	127		57.6										
	P60A0100A4	10	7.5		13.1	9090	82.5	86.5	14.8	10400	82.5	88.0	82	H	25.6	650	104	47.2	134		60.8										
	P60A0150A4	15	11		20.4	13440	83.5	87.0	23.0	15460	83.5	88.5	117	G	28.1	713	117	53.1	151		68.5										
	P60A0200A4	20	15		25.8	17850	83.0	87.5	29.4	20630	83.0	89.0	151	G	30.3	770	132	59.9	48	1219	10	254	13.5	343	166	75.3					
	P60A0250A4	25	19		32.8	22110	84.0	85.5	36.8	25520	84.0	87.5	187	G	32.8	834	144	65.3							180	81.6					
	P60A0300A4	30	22		39.3	26420	84.5	86.0	44.6	30450	84.5	87.5	226	G	35.6	904	165	74.8							207	93.9					
	P60A0400A4	40	30		51.3	35030	85.0	87.5	58.6	40500	85.0	89.0	302	G	39.3	999	187	84.8							64	1626	10	254	13.5	343	229
	P60A0500A4	50	37	65.8	44350	84.0	87.0	75.1	51200	84.0	88.0	385	G	54.1	1374	265	120.2	319	144.7												
	3	P60A0050A5	5	3.7	575	5.8	4830	77.5	86.5	6.5	5490	78.5	88.0	35	3600	H	23.0	584	87	39.5	32	813	10	254	13.5	343	115	52.2			
		P60A0075A5	7.5	5.5		8.2	7000	80.0	87.5	9.3	8070	80.0	88.5	51		H	24.3	617	97	44.0							127	57.6			
		P60A0100A5	10	7.5		10.5	9090	82.5	86.5	11.8	10400	82.5	88.0	61		G	25.6	650	104	47.2							134	60.8			
		P60A0150A5	15	11		15.0	13440	83.5	87.0	17.1	15460	83.5	88.5	88		G	28.1	714	117	53.1	48	1219	10	254	13.5	343	151	68.5			
		P60A0200A5	20	15		20.9	17850	83.0	87.5	23.7	20630	83.0	89.0	122		G	30.3	770	132	59.9							166	75.3			
		P60A0250A5	25	19		26.2	22110	84.0	85.5	29.7	25520	84.0	87.5	153		G	32.8	833	144	65.3							180	81.6			
		P60A0300A5	30	22		31.0	26420	84.5	86.0	35.0	30450	84.5	87.5	179		G	35.6	904	165	74.8							207	93.9			
		P60A0400A5	40	30		41.5	35030	85.0	87.5	47.3	40500	85.0	89.0	247		G	39.3	998	187	84.8	64	1626	10	254	13.5	343	229	103.9			
8" Motors		3	P86A0500A4	50		37	460	65	43675	85.5	87.0	74	49950	86.0		88.0	540	10000	K	38.9	987	330	150	60	1524					382	174
			P86A0600A4	60		45		78	52225	85.5	88.0	89	59825	86.0		88.5	645		K	41.6	1057	371	168							423	192
			P80A0500A4	50		37		65	43675	85.5	87.0	74	49950	86.0		88.0	540		K	38.9	987	344	156							396	180
	P80A0600A4		60	45	78	52225		85.5	88.0	89	59825	86.0	88.5	645	K	41.6	1057		385	175	437	199									
	P80A0750A4		75	56	95	64850		86.5	88.5	109	74650	86.5	89.0	803	K	46.6	1184		444	201	96	2438.4	12	304.8	15	381	496	225			
	P80A1000A4		100	75	128	85075		87.5	87.5	146	98350	87.5	88.5	1080	K	58.6	1488		525	238							609	277			
	P80A1250A4		125	93	165	110125		84.5	87.0	188	126825	85.0	87.5	1410	K	66.9	1699		819	371							903	410			
	P80A1500A4		150	112	203	133025		84.5	85.5	228	151100	85.0	86.5	1643	K	75.1	1908		932	423	1016	462									
	P80A0500A5		50	37	52	43675		85.5	87.0	60	49950	86.0	88.0	439	K	38.9	987		344	156	396	180									
	P80A0600A5		60	45	61	52225		85.5	88.0	70	59825	86.0	88.5	518	K	41.6	1057		385	175	60	1524	437	199							
	P80A0750A5		75	56	76	64850		86.5	88.5	88	74650	86.5	89.0	645	K	46.6	1184		444	201	496	225									
	P80A1000A5		100	75	100	85075		87.5	87.5	115	98350	87.5	88.5	855	K	58.6	1488		525	238	609	277									
	P80A1250A5		125	93	129	110125		84.5	87.0	148	126825	85.0	87.5	1133	L	66.9	1699		819	371	96	2438.4	903	410							
	P80A1500A5		150	112	159	133025		84.5	85.5	178	151100	85.0	86.5	1320	K	75.1	1908		932	423	1016	462									

PENTEK 6" AND 8" SUBMERSIBLE MOTORS

CONTROLS FOR PENTEK XE-6 SINGLE PHASE MOTORS



14 ga Steel Enclosure with Polyester Powder-Coated Paint

- Heavy-duty construction, high durability and corrosion-resistance.

Continuous Hinge Door

- Easy access - no need to remove during installation or service.
- Opens past 180° for easy access.

Integral Mounting Flange

- Easy to wall-mount while maintaining NEMA 4 rating.

Multiple Knockout (Embossed) Options

- 2 - dual 1/2" - 3/4".
- 2 - dual 3/4" - 1".
- 2 - dual 1-1/4" - 1-1/2".

Seamless, Foamed-In-Place Door Gasket

- Excellent protection against intrusion from dirt, dust, rain, sleet, snow or wind-directed water.

Bonding Provision on Door

- When required by code.

NEMA 4 Rated Enclosure (Compare to Competition at Only NEMA 3)

IP66 Ingress Protection Rating

Opens with Two Quarter-Turn Latches

- No risk of lost door fasteners, no tools needed.

Locking Hasp

- Added security.

Size - 16" x 14"

- Generous size allows for more room to work inside the box.
- Easier conduit attachment, wire pulling and wire connections.

Terminals Accept Up to 4AWG Wire

Magnetic Line Contactors

- Included standard on each box.

Removable Back Panel

- All electric components mounted on panel.
- Easy installation and servicing, when downtime is critical.

PENTEK SINGLE PHASE CONTROL BOXES FOR PENTEK XE-6 SINGLE PHASE MOTORS

60Hz • 2 POLE

ORDERING INFORMATION

					CONTROL BOX DIMENSIONS							
					HEIGHT		WIDTH		DEPTH			
PHASE	MODEL #	HP	KW	VOLTS	IN	MM	IN	MM	IN	MM	LBS	KG
1	PTKX-5SCB	5	3.70	230	14.0	356	12.0	304.8	6.0	152.4	30	13.6
	PTKX-7SCB	7.5	5.60								32	14.5
	PTKX-10SCB	10	7.50								33.2	15.1
	PTKX-15SCB	15	11.20									

FAST SHIPPING

- ◆ Available same day from the following Pentair locations:
 - Fresno, CA; Grand Island, NE; Delavan, WI; Jacksonville, FL; Lubbock, TX
- ◆ Motors not stocked at your nearest facility will be drop shipped from another stocking location.

PRE-PAID FREIGHT

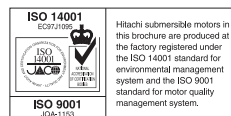
- ◆ Pre-paid freight to distributor location on one or more motors.
- ◆ If motor order is combined with other Pentair products, standard pre-paid freight terms apply.

WARRANTY

- ◆ 12 months from Date of Installation / 24 months from Date of Manufacture
- ◆ For members of the Pro Dealer program, warranty is 24 months from Date of Installation / 36 months from Date of Manufacture

NOTE:
Pentek XE-6 single phase motors must use the corresponding Pentek control box. Use of any other control box will void the warranty.

HITACHI® 6" SUBMERSIBLE MOTORS



Hitachi motors are designed for a long service life with years of dependable operation. Designed with internal lubrication and a cooling blend of water, antifreeze, and an antirust mixture, and 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) while robust design features that 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.

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



HITACHI® 6" SUBMERSIBLE MOTORS

ORDERING INFORMATION

6" DIAMETER 60HZ

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
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

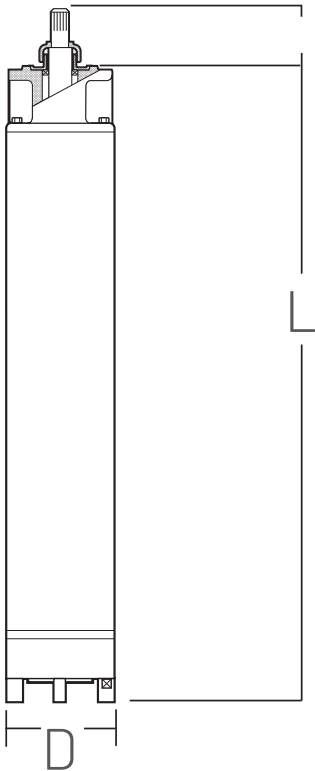
Note: 6" motors are 3450 rpm, 60 Hz, 1.15 SF. See pages 105-108 for Cable Selection Guides. *8" motor with 6" pump connection

Single phase motors require a control box.

ORDERING INFORMATION: HITACHI CONTROL BOX

HP	KW	VOLTS	PH	CATALOG NUMBER
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

OUTLINE DIMENSIONS



Shaft Extension
2.87" (72.9 mm)

For lengths, refer to
Ordering Information tables.

Dimensions are for
estimating purposes only.

SHALLOW WELL JET PUMPS

MPN SERIES

MPN 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 at 30 PSI. Available in 1/2, 3/4 and 1 HP models. Supplied with the industry standard 30-50 pressure switch setting.

APPLICATIONS

Water systems such as booster pump, marine, poultry, mist sprayers, fountains, and water features.



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 engineered composite nozzle and venturi.
- ◆ **Impeller:** Precision-molded for perfect balance—ultra-smooth for highest performance and efficiency.
- ◆ **Precision Molded Diffuser:** Engineered composite 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:** 1/2, 3/4 and 1 HP models have dual voltage motors and are shipped at 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.

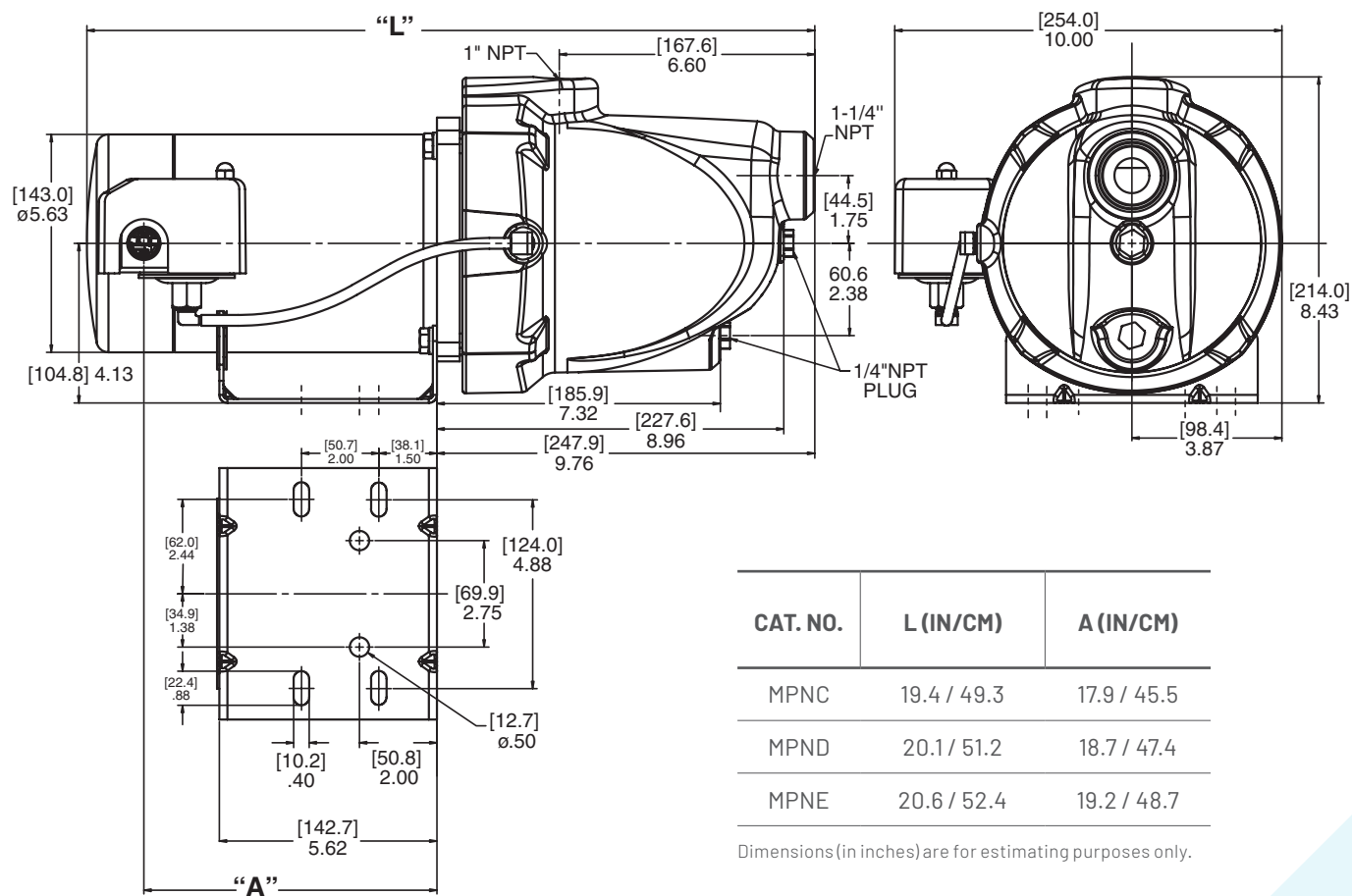
SPECIFICATIONS

- ◆ **Body and Seal Plate:** Fiberglass-reinforced thermoplastic.
- ◆ **Impeller:** Engineered composite.
- ◆ **Base:** 10-gauge steel.
- ◆ **Nozzle, Venturi, Diffuser:** Engineered composite.

ORDERING INFORMATION

CATALOG NUMBER	HP	DESCRIPTION	PIPE TAPPING SIZES		MOTOR VOLTAGE	APPROX. WT. LBS. / KG.
			SUCT.	DISCH.		
MPNC	1/2	Base Mounted Pump	1-1/4"	1"	115/230	21 / 9.5
MPND	3/4	Base Mounted Pump	1-1/4"	1"	115/230	24 / 11
MPNE	1	Base Mounted Pump	1-1/4"	1"	115/230	26 / 12

OUTLINE DIMENSIONS



CAT. NO.	L (IN/CM)	A (IN/CM)
MPNC	19.4 / 49.3	17.9 / 45.5
MPND	20.1 / 51.2	18.7 / 47.4
MPNE	20.6 / 52.4	19.2 / 48.7

Dimensions (in inches) are for estimating purposes only.

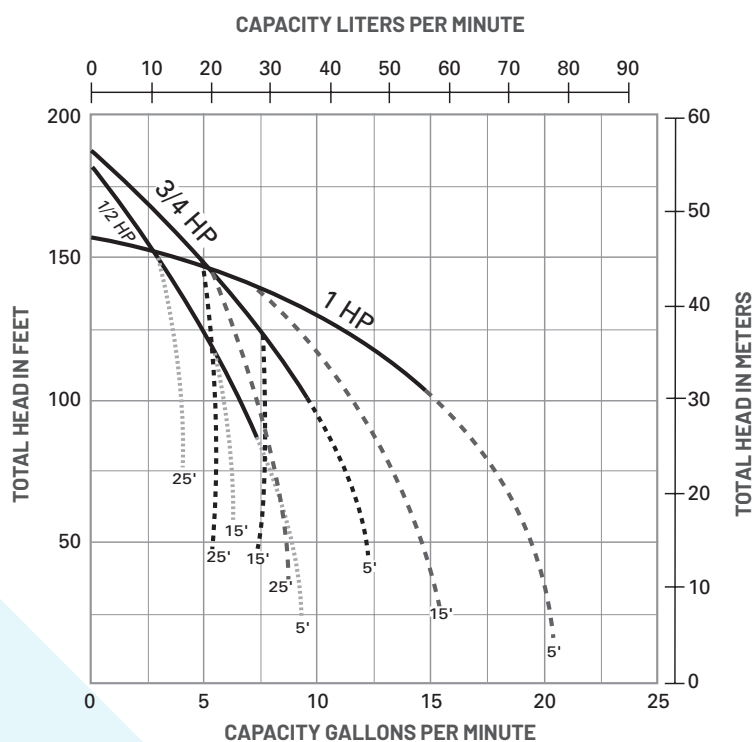
MYERS SHALLOW WELL JET PUMP

PUMP PERFORMANCE

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	
MPNC	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	
MPND	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	
MPNE	1	5 / 1.5	18 / 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 / 49.2	
		20 / 6.1	12.6 / 47.7	12.2 / 46.2	12 / 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.



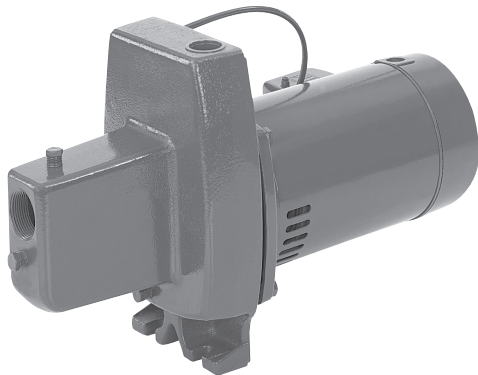
CAST IRON, SELF-PRIMING SHALLOW WELL JET PUMPS

MFN SERIES

The MFN Series cast iron, self-priming shallow well jet pump 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 home, farms, and cottages.



SPECIFICATIONS

- ◆ **MFNC PRIMING TIME** (in minutes):
 - 15': 2.25 minutes max.
 - 25': 6.5 minutes max.
- ◆ **MFND PRIMING TIME** (in minutes):
 - 15': 1.7 minutes max.
 - 25': 4.4 minutes max.
- ◆ **MAX. LIQUID TEMPERATURE:** 140°F.
- ◆ **MFNC MAX. INLET PRESSURE:** 60 psi.
- ◆ **MFND 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.

FEATURES

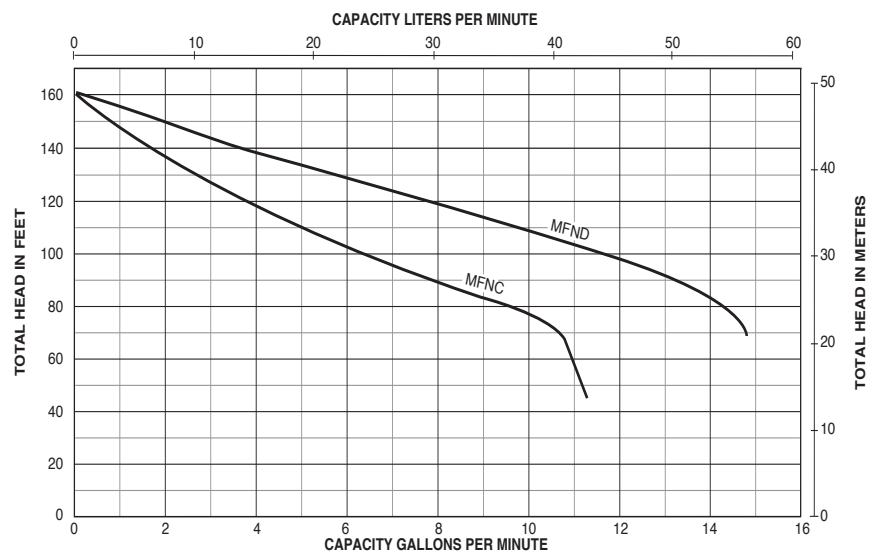
- ◆ **QUALITY CONSTRUCTION:** Close-grained cast iron body and base, specially treated for corrosion resistance. Drain port provided for easy winterizing.
- ◆ **BUILT-IN JET:** High-strength polycarbonate nozzle and venturi for maximum resistance to corrosion and abrasion. Clean out plug provided for 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 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:** 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.
- ◆ **DUST PROOF COVER:** All electrical components are protected from dirt, dust and insects by a dust proof canopy; ventilating air cannot contaminate vital switching components.
- ◆ **PRESSURE SWITCH:** Adjustable cut-in and fixed differential (20 psi).

ORDERING INFORMATION

CATALOG NUMBER	HP	SWITCH SETTINGS	PIPE TAPPING SIZES		MOTOR VOLTAGE	APPROX. WT. LBS.
			SUCTION	DISCHARGE		
MFNC	1/2	30-50	1-1/4"	1"	115/230	46
MFND	3/4	30-50	1-1/4"	1"	115/230	47

MYERS MFN SERIES SHALLOW WELL JET PUMPS

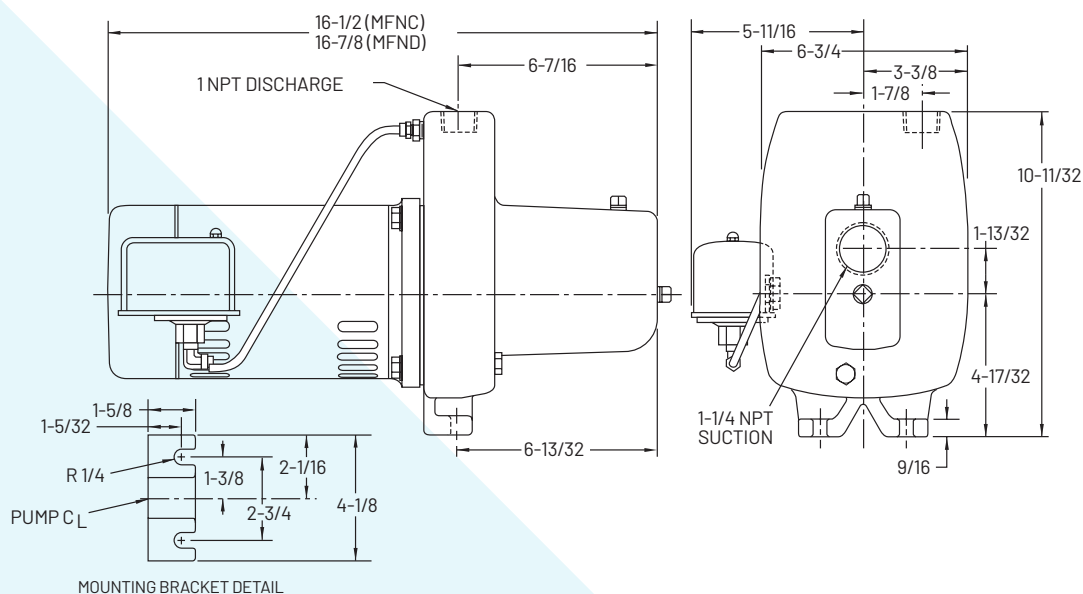
PERFORMANCE DATA



CATALOG #	HP	DISCHARGE PRESSURE		DYNAMIC SUCTION LIFT					SHUT-OFF PRESSURE PSI
		PSI	FEET HEAD	5'	10'	15'	20'	25'	
MFNC	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	
MFND	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	

Capacity in gallons per minute.

DIMENSIONAL DATA



Dimensions (in inches) are for estimating purposes only.

SHALLOW WELL JET PUMPS

QUICK DRAW SERIES

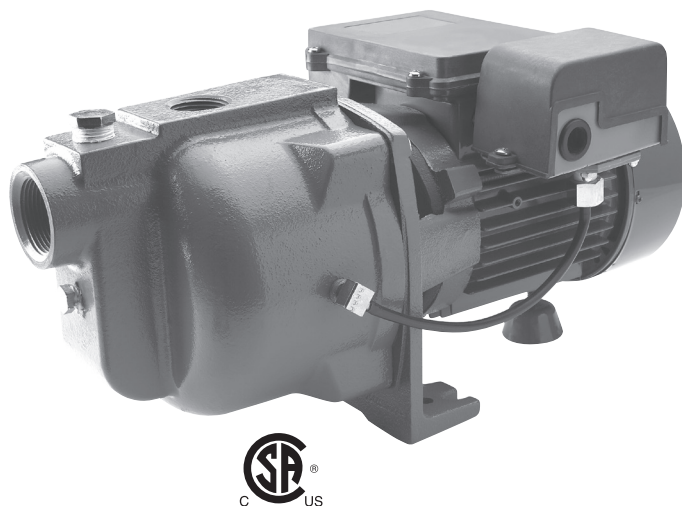
The Quick Draw Jet Pumps deliver strong performance with a moisture and insect proof motor for optimum service. Additionally, the pumps feature a large capacity top suction case and internal priming plate for quick and reliable priming. The motor provides dependable long life to all critical bearings with electrical connections enclosed and protected from harsh environments. Available in 1/2, 3/4, and 1 HP pumps that quickly deliver water for home, farm, commercial, and industrial water systems.

APPLICATIONS

Water systems for home, farm, commercial and industrial.

SPECIFICATIONS

- ◆ Improved shallow well design.
- ◆ Cast iron construction.
- ◆ Corrosion resistant impellers.
- ◆ 1/2, 3/4, and 1 HP models.
- ◆ Maximum pressures to 65 PSI.
- ◆ Flows to 27 GPM.



FEATURES

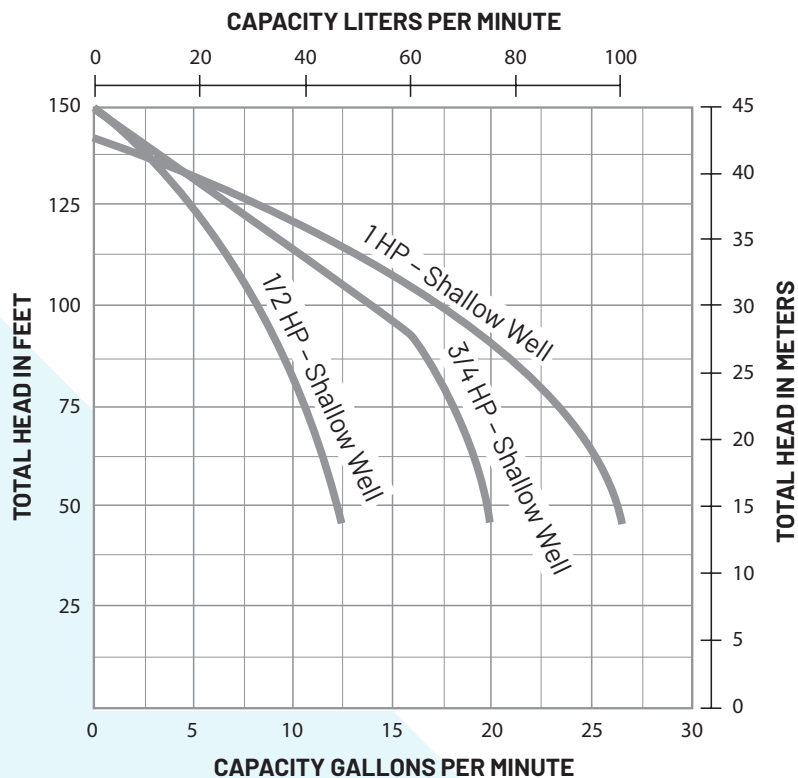
- ◆ **Quick and Easy Priming**
 - Faster priming.
 - Large capacity, top suction case.
 - Internal priming plate.
 - Separate priming plug on case.
- ◆ **Long Life Motor**
 - 115/230 volt with dual voltage selector switch.
 - Prevents moisture, insect or dirt damage to critical electrical components.
 - Provides clean, dry environment to electrical components for maximum motor life.
 - Permanently lubricated double-ball bearings.
 - Strong capacitor starting torque.
 - Non-overloading, continuous duty rating.
 - Internal thermal overload protection.
- ◆ **Strong Pump Performance**
 - Maximum pressures to 65 PSI.
 - Flow capabilities to 26 GPM.
 - 1-1/4" suction, 1" discharge on all models.
- ◆ **Heavy Duty Pump Case Motor Bracket**
 - High tensile strength cast iron.
- ◆ **Easy Serviceability**
 - Convenient back pullout design.
 - Nozzle clean-out and priming fitting.
- ◆ **Mechanical Shaft Seal**
 - Precision lapped and polished carbon/ceramic faces, buna elastomers, and stainless steel components.
- ◆ **Direct Mount Pressure Switch**
 - Pre-set at 30/50 PSI setting.
- ◆ **Corrosion Resistant Design**
 - Engineered reinforced thermoplastic impeller.
 - Thermoset diffuser with stainless steel wear ring.

MYERS SHALLOW WELL JET PUMPS

ORDERING INFORMATION

PUMP CATALOG NO.	HP	DISCHARGE PRESSURE (LBS.)	CAPACITY IN U.S. GALLONS						SHUT-OFF PRESSURE
			SUCTION LIFT						
			0'	5'	10'	15''	20'	25''	
QD50S	1/2	20	12.5	11.5	10.5	9'	7.5	6	65 PSI
		30	11	10	9.5	8	6.5	5	
		40	9	8	7.5	6	4.5	3	
		50	6.5	5.5	5	4	3	2	
QD75S	3/4	20	20	18	16.5	15	13	10	65 PSI
		30	19	17	15.5	14	12	9	
		40	16	14.5	12	11	9	8	
		50	9.5	8.5	7.5	6.5	4.5	3.5	
QD100S	1	20	26.5	24	22	19	16	13	62 PSI
		30	25	23	21	18	15	11	
		40	20	18.5	16	13	10.5	7	
		50	12.5	11	9.5	7	5		

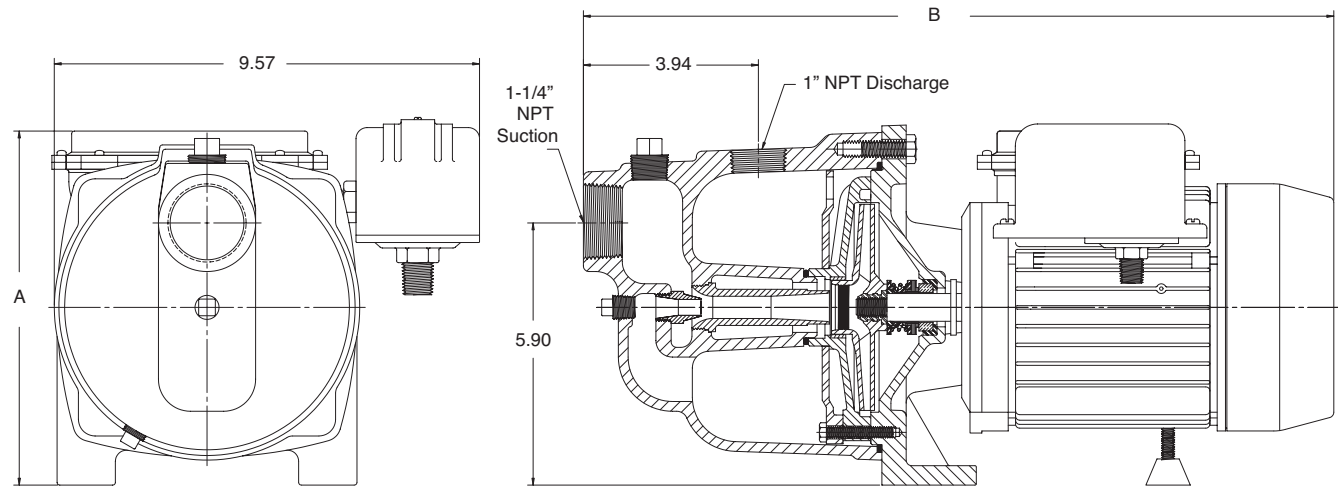
PUMP PERFORMANCE



OUTLINE DIMENSIONS

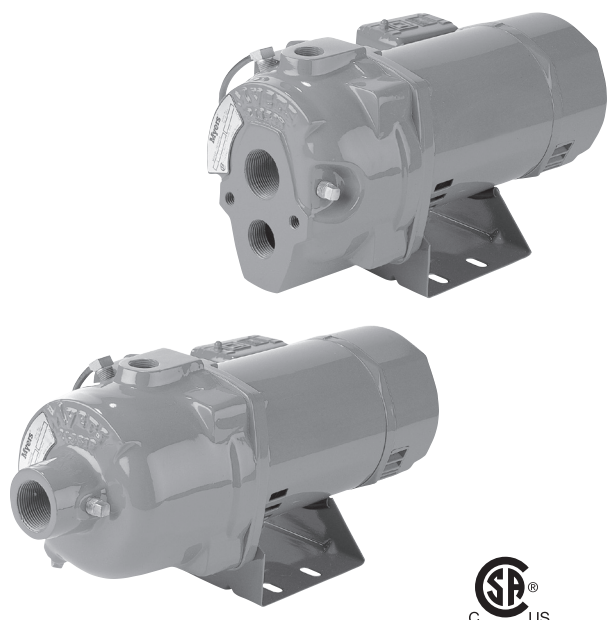
CATALOG NUMBER	A	B
QD50S	7.97	16.89
QD75S	8.50	17.86
QD100S	8.50	17.86

Dimensions (in inches) are for estimating purposes only.



SHALLOW WELL AND CONVERTABLE PUMP

HR SERIES



Myers® HR Series jet pumps provide reliable service for many residential homes and farms, as well as commercial and industrial applications.

APPLICATIONS

Supply water systems and sprinkling systems for homes, farms and industry.

FEATURES

- ◆ **Quality Construction:** Durable machined heavy-duty construction pump body provides long product life.
- ◆ **Impellers:** Precision molded impellers and diffuser provide smooth, balanced performance and efficiency.
- ◆ **Pressure Switch:** High quality proven pressure switch with adjustable on/off pressure settings. 20 PSI differential.
- ◆ **Motor:** Heavy-duty motor with double ball bearing design and voltage selection device.
- ◆ **Shaft Seal:** Mechanical shaft seal with ceramic face and stainless steel construction for long seal life.

SPECIFICATIONS

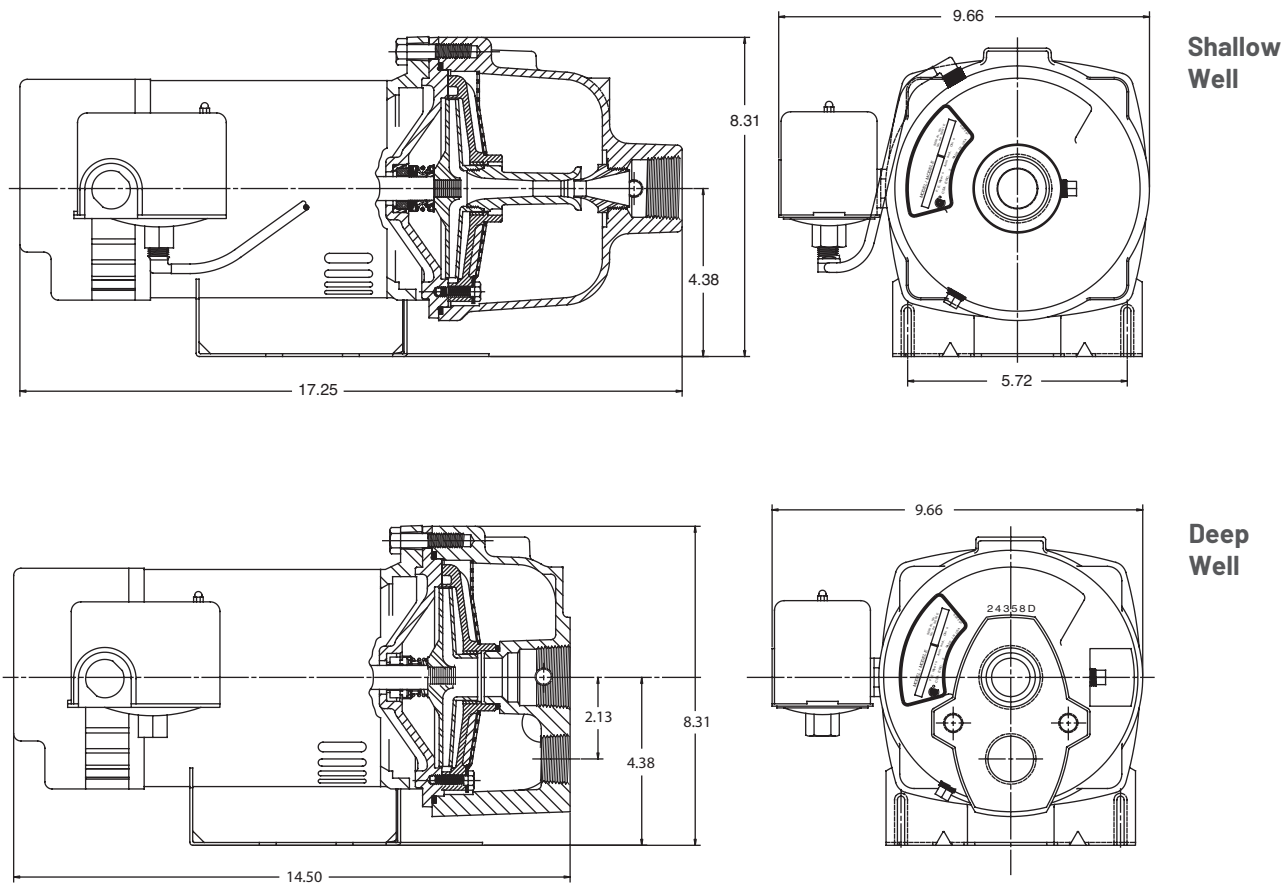
- ◆ Cast iron pump case
- ◆ Dual compartment, 115/230 Volt double-ball bearing motor with voltage selector switch
- ◆ Priming screen
- ◆ Diffuser with stainless steel wear ring
- ◆ Square D pressure switch

ORDERING INFORMATION

CATALOG NUMBER	HP	DISCHARGE PRESSURE IN LBS.	CAPACITY IN U.S. GALLONS PER MINUTE SUCTION LIFT IN FEET			SHUT-OFF PSI
			5	15	20	
HR50S	1/2	20	11.5	9	6	70
		30	11.5	9	6	
		40	10.5	7.5	5	
		50	5.5	3.5	2	

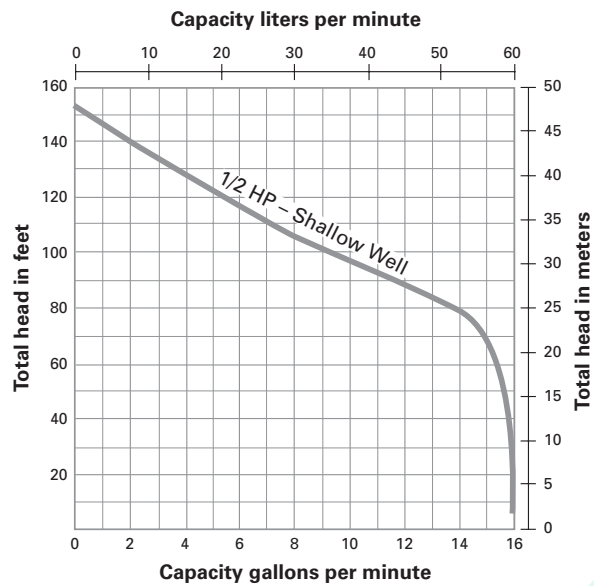
CATALOG NUMBER	HP	PRESSURE SWITCH SETTING	AVERAGE REGULATOR SETTING	JET PACKAGE CAT. NUMBER			CAPACITY IN U.S. GALLONS PER MINUTE DISTANCE TO LOW WATER LEVEL IN FEET					
				CAST IRON	BRONZE	PACKER FOR 2" WELL	30	40	50	60	70	80
HR50D	1/2	20/40	22	DW50-1	DW50	P50	10	8	7	5.5	4.5	3.5
		30/50	22	DW50-1	DW50	P50	9.5	7.5	6.5	5	4	3.5

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

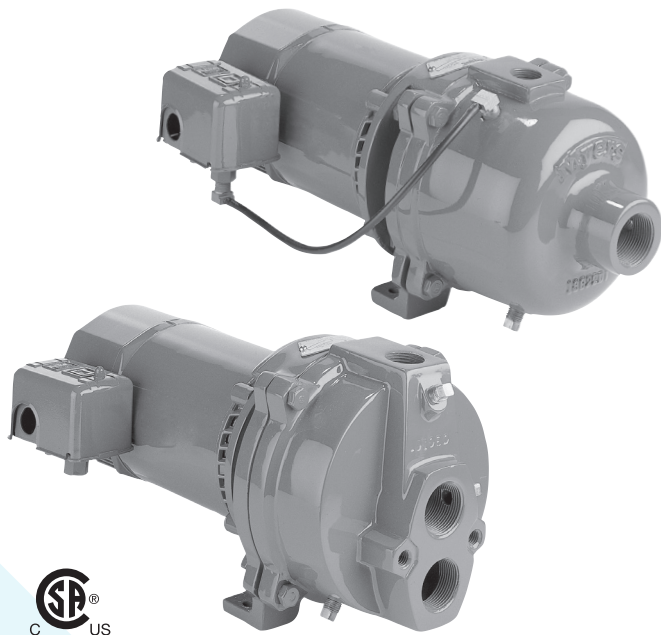
PUMP PERFORMANCE



REPAIR PARTS KIT FOR HR SERIES	
Kit	Includes
PK50	Shaft seal, impeller, diffuser, gasket, O-ring, venturi, and nozzle

SHALLOW WELL AND CONVERTABLE PUMP

HJ SERIES



Myers® HJ Series is one of the most popular pump series in the market today. The HJ Series is known for its superior performance and dependability in home, farm, business and industrial applications around the world.

APPLICATIONS

Supply water systems and sprinkling systems for homes, farms, businesses and industry.

FEATURES

- ◆ **Quality Construction:** Durable machined heavy-duty construction pump body provides long product life.
- ◆ **Impellers:** Precision molded impellers and diffuser provide smooth, balanced performance and efficiency.
- ◆ **Pressure Switch:** High quality proven pressure switch with adjustable on/off pressure settings. 20 PSI differential.
- ◆ **Motor:** Heavy-duty motor with double ball bearing design and voltage selection device.
- ◆ **Shaft Seal:** Mechanical shaft seal with ceramic face and stainless steel construction for long seal life.

SPECIFICATIONS

- ◆ Heavy duty cast iron case and motor bracket.
- ◆ Dual compartment, 115/230 volt double-ball bearing motor with voltage selector switch.
- ◆ Dual adjustment pressure switch. Includes priming tee on shallow well models and pressure regulator on deep well models.
- ◆ Priming screen.
- ◆ Stainless steel impeller wear ring.

ORDERING INFORMATION

SHALLOW WELL

CATALOG NUMBER	HP	DISCHARGE PRESSURE IN LBS.	CAPACITY IN U.S. GALLONS PER MINUTE SUCTION LIFT IN FEET			SHUT-OFF PSI
			5	15	20	
HJ50S*	1/2	20	14.5	11.5	6	65
		30	14.5	11.5	6	
		40	10	8	5	
		50	5.5	3.5	2	
HJ75S*	3/4	20	23.5	17.5	10.5	69
		30	23.5	17.5	10.5	
		40	19.5	16.5	10.5	
		50	12.5	9	5	
HJ100S*	1	20	27.5	21	13	67
		30	27.5	21	13	
		40	25.5	21	13	
		50	19	15.5	12	

*For brass impeller add "-1" to Catalog Number, i.e.: HJ50D-1

DEEP WELL

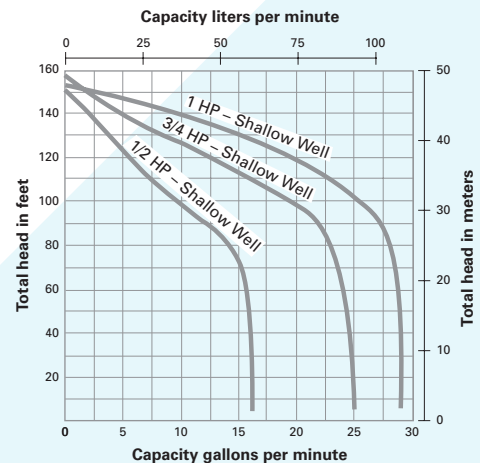
CATALOG NUMBER	HP	PRESSURE SWITCH SETTING	AVERAGE REGULATOR SETTING	JET PACKAGE CAT. NUMBER			CAPACITY IN U.S. GALLONS PER MINUTE DISTANCE TO LOW WATER LEVEL IN FEET									
				CAST IRON	BRONZE	PACKER FOR 2" WELL	30	40	50	60	70	80	90	100	110	120
HJ50D*	1/2	20/40	22	DW50-I	DW50	P50	10.5	9.5	8	6	5	4	2.5			
		30/50	22	DW50-I	DW50	P50	9	8	7	5.5	4.5	3.5				
HJ75D*	3/4	20/40	26	DW75-I	DW75	P75	16.5	13.5	10	8	7	6	4	3	1	
		30/50	26	DW75-I	DW75	P75	15.5	12	10.5	7.5	6	5	3	2		
HJ100D*	1	20/40	34	DW100-I	DW100	P100	18	15.5	12.5	10	9	8	5.5	4.5	2.5	1
		30/50	34	DW100-I	DW100	P100	18	15	12	10	9	7.5	5	4	2	1

*For brass impeller add "-1" to Catalog Number, i.e.: HJ50D-1

PUMP PERFORMANCE

REPAIR PARTS KIT FOR HJ SERIES

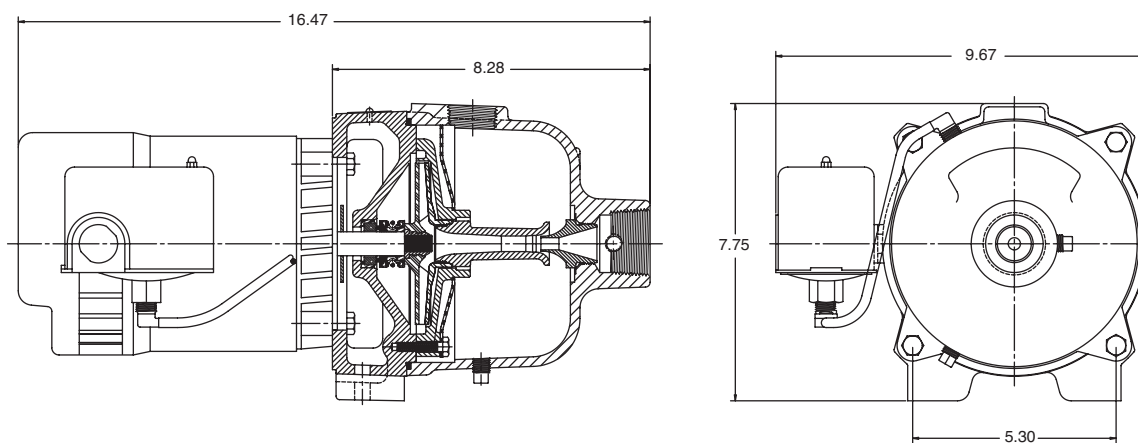
MODEL	KIT	INCLUDES
HJ50D	PK50	Shaft seal, impeller, diffuser, gasket, O-ring, venturi, and nozzle
HJ75D	PK75	
HJ100D	PK100	



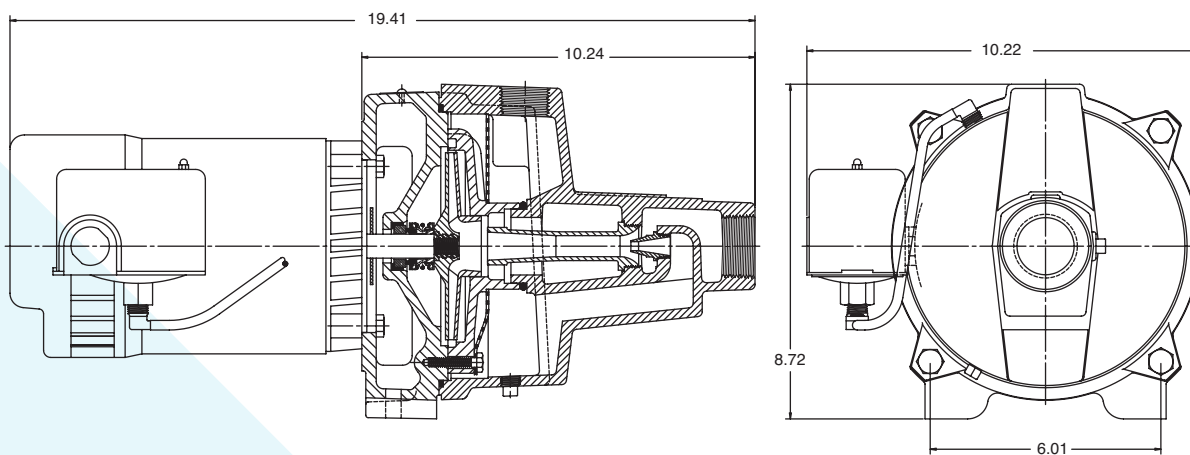
MYERS HJ SERIES SHALLOW WELL AND CONVERTABLE

OUTLINE DIMENSIONS

HJ50 Shallow Well



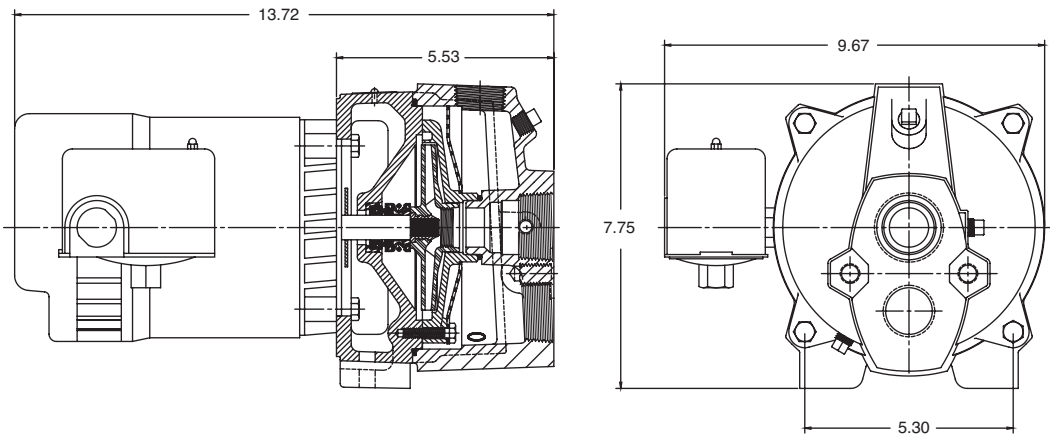
HJ75 and HJ100 Shallow Well



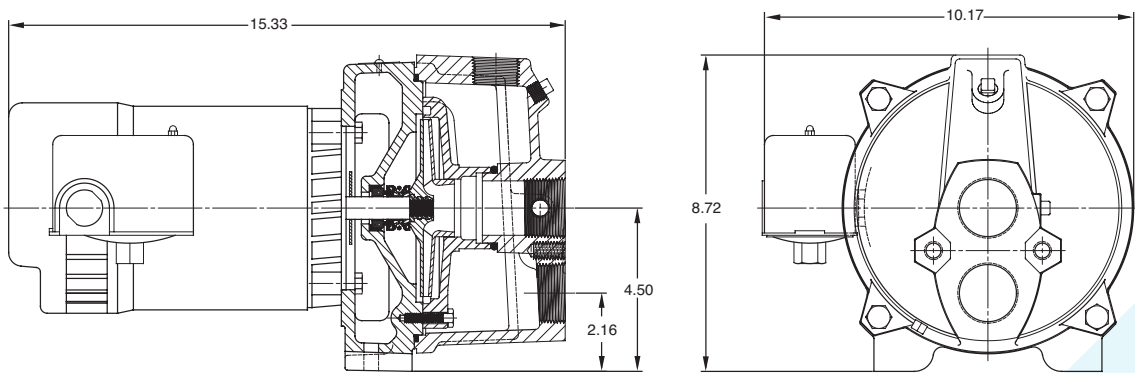
Dimensions (in inches) are for estimating purposes only.

OUTLINE DIMENSIONS

HJ50 Deep Well



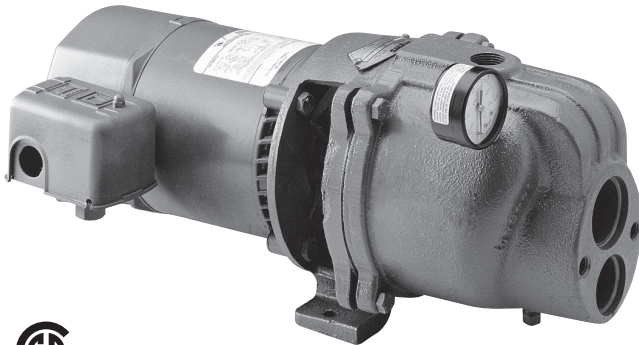
HJ75 and HJ100 Deep Well



Dimensions (in inches) are for estimating purposes only.

CONVERTABLE JET PUMPS

HC AND HCM SERIES



Myers® convertible jet pumps provide all the water and pressure needed for today's family living needs. High quality materials and simplified construction combine for excellent performance in shallow and deep wells. The same twin ejector is used for both types of well service.

APPLICATIONS

Water systems and sprinkling for homes, farms and industry.

FEATURES

- ◆ **Heavy-Duty Cast Iron Case Construction.**
- ◆ **Primes Easily:** Under maximum shallow well conditions.
- ◆ **Stainless Steel Impeller:** Balanced for smooth operation.
- ◆ **Fast Connect Flanges:** Eliminates threading and fitting at pipe end.
- ◆ **Stream-flo Design:** Provides optimum hydraulic performance.
- ◆ **Durable Cast Iron Pressure Regulator Included.**
- ◆ **Pressure Switch and Pressure Gauge Included.**

SPECIFICATIONS

- ◆ **Motor:** 2-Compartment 115/230 Volt
- ◆ **Rotary Seal:** Stainless Steel/Buna N
- ◆ **Impeller:** Stainless Steel
- ◆ **Motor Bracket:** Cast iron
- ◆ **Discharge Diffuser:** Cast iron
- ◆ **Second Stage Diffuser (HCM's):** Cast iron
- ◆ **Diffuser Housing:** Cast iron
- ◆ **Motor Shaft:** Stainless Steel
- ◆ **Pressure Switch:** Square D dual adjustment

ORDERING INFORMATION

CATALOG NUMBER	PART NUMBER	DISCHARGE	PRESSURE SWITCH SETTING	PACKER TYPE INNER PIPE SIZE FOR 2" WELL	TWIN TYPE DROP PIPE SIZE	FOOT VALVE SIZE - TWIN TYPE ONLY	MOTOR CAPACITOR TYPE BUILT-IN OVERLOAD PROTECTION	SHIPPING WT. PUMP UNIT ONLY	SHIPPING WEIGHT JET PACKAGES FOR		
									4" WELL		2" WELL
									BRONZE	CAST IRON	
HC50											
HC50	14435D000	3/4"	20-40	1"	1-1/4"x 1"	1-1/4"	115/230 volt	54	5	4	4
HCM											
HCM100	14456D000	1"	40-60	1"	1-1/4" x 1-1/4"	1-1/4"	115/230 volt	78	5	4	4
HCM150	14457D000	1"	40-60	1"	1-1/4" x 1-1/4"	1-1/4"	115/230 volt	85	5	4	4

PUMP PERFORMANCE

HC50 SHALLOW WELL

CATALOG NUMBER	HP	JET PACKAGE CAT. NO.	5 FOOT SUCTION LIFT					15 FOOT SUCTION LIFT					20 FOOT SUCTION LIFT				
			DISCHARGE PRESSURE, PSI					DISCHARGE PRESSURE, PSI					DISCHARGE PRESSURE, PSI				
			20	30	40	50	60	20	30	40	50	60	20	30	40	50	60
			CAPACITY IN U.S. GALLONS PER MINUTE														
HC50	1/2	SW50	13.5	13	11.5	10	6.6	10	10	9.3	8	4.6	5.5	5.5	5.5	5	2

HC50 DEEP WELL

CATALOG NUMBER	HP	MAX. AMPS 115/230 V	AVERAGE REGULATOR SETTING	JET PACKAGE CAT. NO.			VERTICAL DISTANCE IN FEET FROM PUMP TO LOW WATER LEVEL									
				TWIN TYPE		PACKER	30	40	50	60	70	80	90	100	110	
				4" MIN. WELL			CAPACITY IN U.S. GALLONS PER MINUTE									
				CAST IRON	BRONZE											
HC50	1/2	10.6 / 5.3	22 PSI	DW50-I	DW-50	P50	12	11	9.8	8.3	6.5	4.5	2.3			

HCM SHALLOW WELL

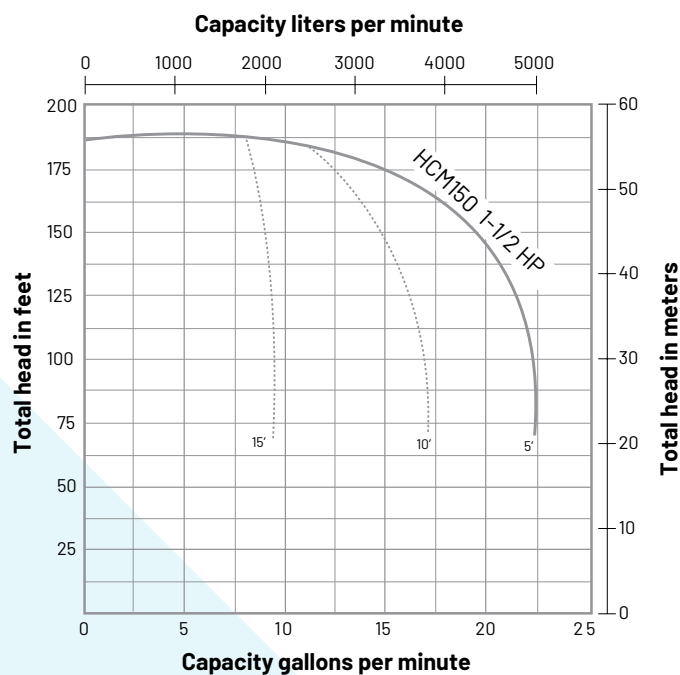
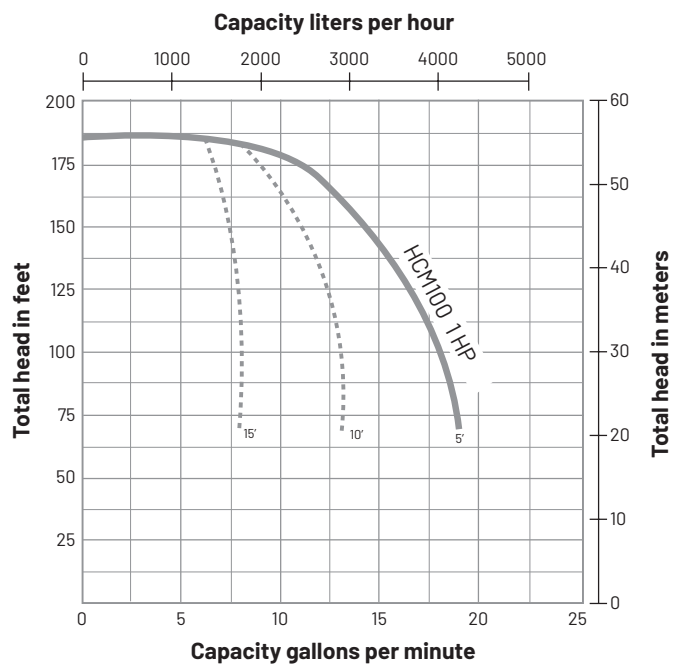
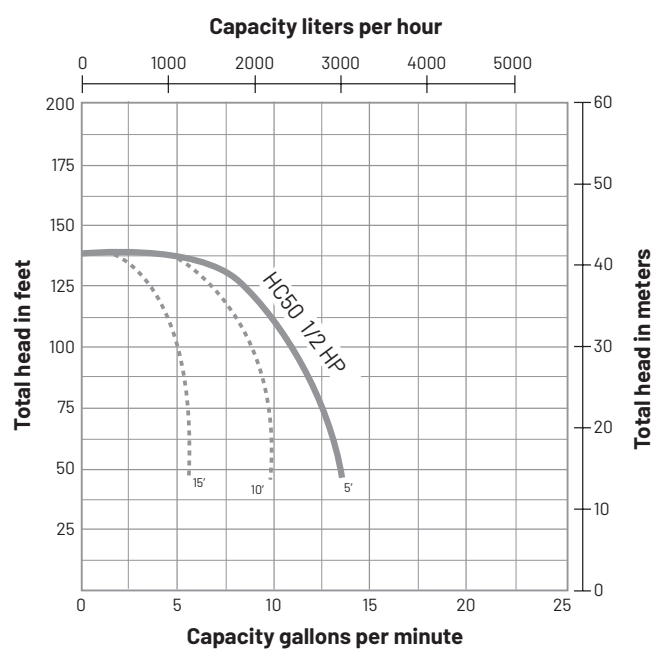
CATALOG NUMBER	HP	JET PACKAGE CAT. NO.	5 FOOT SUCTION LIFT						15 FOOT SUCTION LIFT						20 FOOT SUCTION LIFT					
			DISCHARGE PRESSURE, PSI						DISCHARGE PRESSURE, PSI						DISCHARGE PRESSURE, PSI					
			30	40	50	60	70	80	30	40	50	60	70	80	30	40	50	60	70	80
			CAPACITY IN U.S. GALLONS PER MINUTE																	
HCM100	1	SW100	19	19	16.5	16	13	10	13	13	13	12	10	8	8	8	8	8	8	6.5
HCM150	1-1/2	SW150	22.5	22.5	22.5	20	20	13	17	17	16.5	16	14	11	9.3	9.3	9.3	9.3	8.8	8.3

HCM DEEP WELL

CATALOG NUMBER	HP	MAX. AMPS 115/230 V	AVERAGE REGULATOR SETTING	JET PACKAGE CAT. NO.		VERTICAL DISTANCE IN FEET FROM PUMP TO LOW WATER LEVEL														
				TWIN TYPE		PACKER	30	40	50	60	70	80	90	100	110	120	130	140	150	
				4" MIN. WELL			CAPACITY IN U.S. GALLONS PER MINUTE													
				CAST IRON	BRONZE															
HCM100	1	17.0 / 8.5	34 PSI	DW100-I	DW100	P100	15	13.3	12	10.6	9.3	8	6.6	5.3	4	2.6	2			
HCM150	1-1/2	19.8/9.9	40 PSI	DW150-I	DW150	P150	17.5	16	14.5	12.8	11.6	9.5	8	7	6	5	4	3	2	

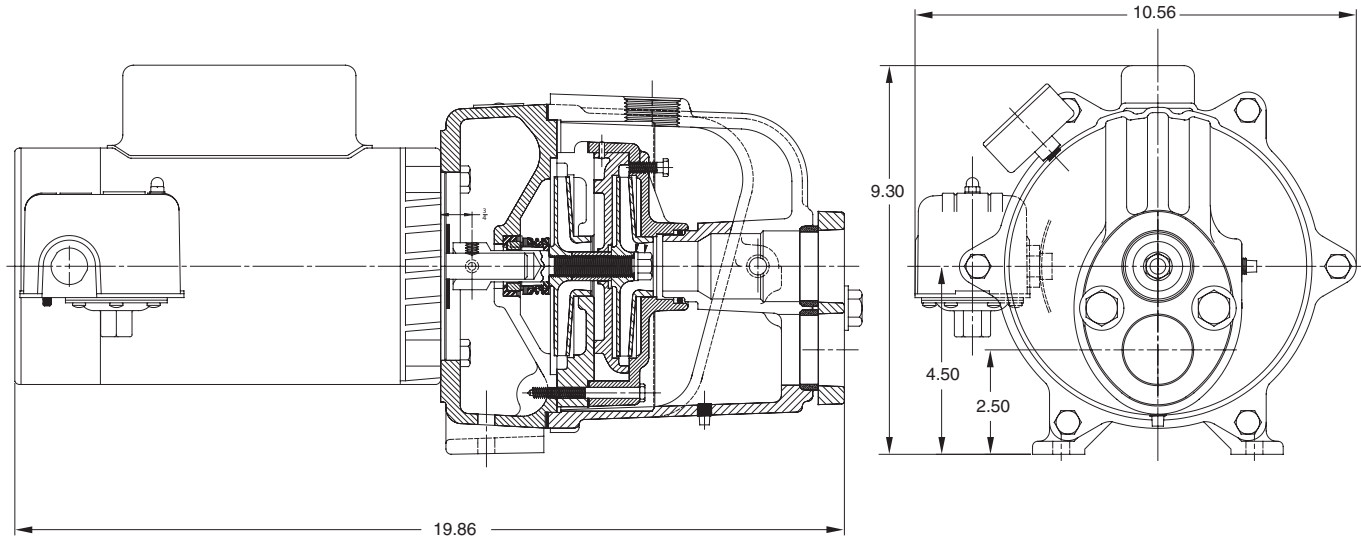
HC AND HCM SERIES CONVERTABLE JET PUMPS

PUMP PERFORMANCE



OUTLINE DIMENSIONS

HCM100 AND HCM150



Dimensions (in inches) are for estimating purposes only.

VERTICAL MULTI-STAGE DEEP WELL JET PUMPS

MVPH SERIES



The MVPH Series Vertical Jet Pumps are the industry standard deep well jet pumps for over-the-well "bolt-on" installations. The MVPH Series Jet Pumps include the pre-plumbed external automatic regulator, pressure gauge, pressure switch, and a complete line of casing adapters for 4" double pipe, 2" or 3" single pipe jet packages.

APPLICATIONS

Supply water systems and sprinkling systems for homes, farms, and cottages.

SPECIFICATIONS

- ◆ **Body:** Rugged cast iron.
- ◆ **Pump and Motor Shaft:** 416 Stainless Steel.
- ◆ **Impellers:** Noryl®.
- ◆ **Diffuser:** Close-grained cast iron.

FEATURES

- ◆ **Automatic Pressure Regulator:** Faster-acting and quieter, design eliminates "hunting" for correct drive pressure. Improved stem and guide are precisely molded to assure efficient, trouble-free performance on all deep wells.
- ◆ **Quality Construction:** Precisionmachined, 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.

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

VERTICAL MULTI-STAGE DEEP WELL JET PUMPS MVPH SERIES

ORDERING INFORMATION

PUMPS

CATALOG NUMBER	HP	DESCRIPTION	MAX. PRESS. REG. SETTING	PIPE TAPPING SIZES			MOTOR VOLTAGE	APPROX. WT. (LBS.)
				SUCT.	DRIVE	DISCH.		
MVPH-100	1	Base Mounted Pump	60 PSI	1-1/4"	1-1/4"	1"	115/230	73
MVPH-150	1-1/2	Base Mounted Pump	85 PSI	1-1/4"	1-1/4"	1"	230	120
MVPH-200	2	Base Mounted Pump	95 PSI	1-1/4"	1-1/4"	1"	230	125

ADAPTER FLANGE

CATALOG NUMBER	DESCRIPTION	USED WITH
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 (see table below) should be ordered with every Series MVPH Pump. All installations require an appropriate size adapter flange or casing adapter if bolt-on feature is desired.

JET PACKAGES (A jet package should be ordered with every convertible or deep well jet pump.)

PACKAGE NUMBER	DESCRIPTION
PKG 1-23SD	For shallow well and deep well applications and for all 4" double pipe applications
PKG 2A-23SD	For shallow well applications and for all 4" double pipe applications with three (3) venturis
PKG 1-12AP* and PKG 1-12APB*	Jet with built-in check valve; for all 2" single pipe deep well applications
PKG 1-18AP* and PKG 1-18APB*	Jet with built-in check valve; for all 2" single pipe deep well applications
PKG 1-23CP*, PKG 1-22CP*, PKG 1-17CP*, PKG 1-16CP*	Jet with built-in check valve; for all 3" single pipe deep well applications

*Suction Tapping: 1-1/4" Male and 1" Female



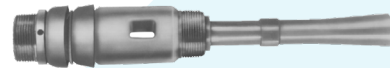
Pkg 1- 23SD Shallow Well and Deep Well



Pkg 2A - Accessory Package



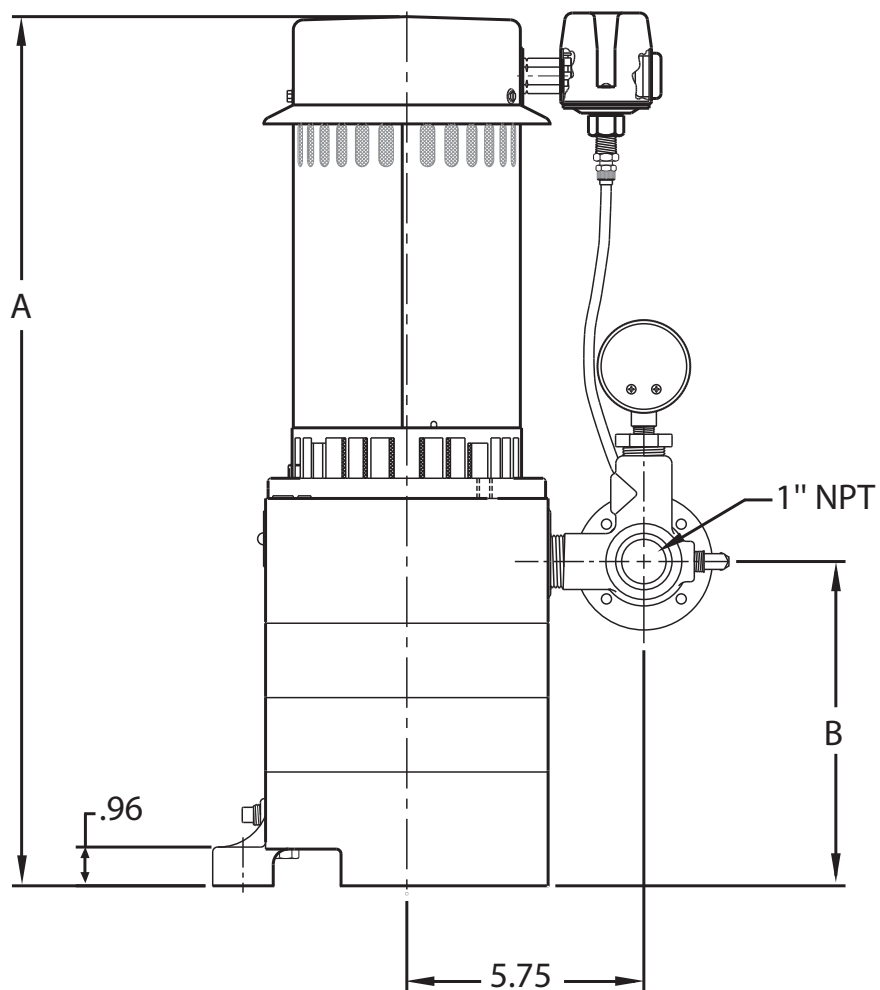
Pkg 2A- 23SD - Double Pipe



**Pkg 1- ☐ ☐ AP
2" Single Pipe Cast Iron
or
Pkg 1- ☐ ☐ APB
2" Single Pipe Brass
or
Pkg 1- ☐ ☐ CP
3" Single Pipe**

VERTICAL MULTI-STAGE DEEP WELL JET PUMPS MVPH SERIES

OUTLINE DIMENSIONS



CAT. NO.	A	B
MVPH-100	18-3/8	5-5/8
MVPH-150	20-7/16	7-1/2
MVPH-200	20-15/16	7-1/2

Dimensions (in inches) are for estimating purposes only.

VERTICAL MULTI-STAGE DEEP WELL JET PUMPS MVPH SERIES

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)	
					30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	JET AT MIN. DEPTH	JET AT MAX. DEPTH
4" DOUBLE PIPE - 40 PSI																
MVPH-100	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	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	200	97
MVPH-150	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	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	314	172
MVPH-200	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	195	110
		23SD	J32P-18	J34P-42	5.5	5.5	5.5	5.5	5.5	5.5	5.3	5.3	5.2	5.1	314	172
2" SINGLE PIPE - 40 PSI																
MVPH-100	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	6.3	5.3	5.2	5.1	5.0	5.0	5.0	5.0	198	126
MVPH-150	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	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	266	158
MVPH-200	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	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	312	192
3" SINGLE PIPE - 40 PSI																
MVPH-100	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	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	200	97
MVPH-150	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	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	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	2668	132
MVPH-200	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	1195	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	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	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 MVPH SERIES

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)	
					130'	140'	180'	200'	220'	240'	260'	280'	300'	320'	JET AT MIN. DEPTH	JET AT MAX. DEPTH
4" DOUBLE PIPE - 40 PSI																
MVPH-100	1	23SD	J32P-24	J34P-42	3.0										120	76
		15SD	J32P-18	J34P-42	4.8	4.5	3.3	2.7	2.0	1.3	1.0				200	97
MVPH-150	1-1/2	23SD	J32P-24	J34P-42	7.0	4.0	1.3								164	95
		15SD	J32P-18	J34P-42	5.1	5.0	4.8	4.7	4.5	4.3	4.0	3.3	2.7		314	172
MVPH-200	2	23SD	J32P-24	J34P-42	8.7	7.0	4.0	2.0							195	110
		23SD	J32P-18	J34P-42	5.1	5.0	5.0	4.8	4.8	4.5	4.3	4.0	3.3	2.7	314	172
2" SINGLE PIPE - 40 PSI																
MVPH-100	1	12AP	J32P-24	J34P-42											118	80
		8AP	J32P-18	J34P-42	4.5	4.2	2.0								198	126
MVPH-150	1-1/2	12AP	J32P-24	J34P-42	4.2	3.3									162	110
		8AP	J32P-18	J34P-42	5.0	4.8	4.3	3.5	2.7	1.7					266	158
MVPH-200	2	12AP	J32P-24	J34P-42	6.3	5.3									193	139
		8AP	J32P-18	J34P-42	5.0	4.8	4.7	4.3	3.7	3.2	2.5				312	192
3" SINGLE PIPE - 40 PSI																
MVPH-100	1	23CP	J32P-24	J34P-42	3.0										120	76
		16CP	J32P-18	J34P-42	4.8	4.5	3.3	2.7	2.0	1.3	1.0				200	97
MVPH-150	1-1/2	23CP	J32P-24	J34P-42	7.0	4.0	1.3								164	95
		22CP	J32P-20	J34P-42	7.0	7.0	4.3	4.0	3.2	2.2					210	110
		16CP	J32P-18	J34P-42	5.0	5.0	4.9	4.7	4.0	3.8	3.0	2.3	1.7		2668	132
MVPH-200	2	23CP	J32P-24	J34P-42	8.7	7.0	4.0	2.0							1195	110
		22CP	J32P-20	J34P-42	7.0	7.0	5.3	5.0	4.7	4.0	3.0	2.2			250	128
		16CP	J32P-18	J34P-42	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.

COMPOSITE PRESSURE TANKS

FIBREWOUND PRESSURE

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 overlapping, 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: 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.

APPLICATIONS

Use wherever pressurized tanks are needed in water systems applications.

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 ultraviolet rays (no paint to scratch and touch up).
- ◆ **Air Cell:** Seamless, durable PEU air cell is full replaceable and constructed of heavy gauge engineered polymer. Meets Water Quality Association standards.
- ◆ **Tank Base:** Rigid molded Polypropylene is the sturdiest composite base on the market. Corrosion and impact resistant.
- ◆ **Replaceable Air Cell:** Removable air cell for replacement through bottom drain fitting.
- ◆ **Stainless Steel Service Connection:** 300 grade, the professional's choice.



Tested and certified by WQA to NSF/ANSI Std. 61 Section 8 and ORD092 for "lead free" compliance.

COMPOSITE PRESSURE TANKS PRO-SOURCE FIBREWOUND PRESSURE

SPECIFICATIONS

INNER LINER	One-piece high-density polyethylene.
OUTER SHELL	Fiberglass-wound, oven-cured, and epoxy resin sealed.
EXCLUSIVE AIR CELL	Heavy gauged PEU, meets Water Quality Association standards.
BASE	Polypropylene base corrosion and impact resistant.
SERVICE CONNECTION	Stainless steel, 300 grade.

ORDERING INFORMATION

CATALOG NUMBER	TANK CAPACITY GAL./LITER	TANK DIAMETER INCH / CM	TANK HEIGHT INCH / CM	SYSTEM CONNECTION	WATER YIELD PER PUMP CYCLE PRESSURE SWITCH SETTING		
					20-40 GAL./LITER	30-50 GAL./LITER	40-60 GAL./LITER
PSC-14-4-02	14.5 / 55	16 / 41	26.8 / 68.1	1" FNPT	4.9 / 18.7	4.4 / 16.5	3.8 / 14.3
PSC-20-6-02	19.8 / 75	16 / 41	32.7 / 83.1	1" FNPT	6.7 / 25.5	5.9 / 22.5	5.1 / 19.5
PSC-30-9-02	29.5 / 112	16 / 41	44.7 / 113.5	1" FNPT	10.0 / 38.1	8.9 / 33.5	7.7 / 29.1
PSC-40-12-02	40.3 / 153	16 / 41	57.4 / 145.8	1" FNPT	13.7 / 52.0	12.1 / 45.8	10.5 / 39.8
PSC-48-14-02	47.1 / 178	21 / 53	42.1 / 106.9	1-1/4" FNPT	16.0 / 60.5	14.1 / 53.5	12.2 / 46.3
PSC-60-20-02	60 / 227	24 / 61	42.3 / 107.4	1-1/4" FNPT	20.4 / 77.2	18.0 / 68.1	15.6 / 59.0
PSC-80-23-02	79.6 / 301	21 / 53	62.8 / 159.5	1-1/4" FNPT	27.1 / 102.3	23.8 / 90.4	20.7 / 78.3
PSC-85-25-02	86.7 / 328	24 / 61	56.1 / 142.5	1-1/4" FNPT	29.5 / 111.5	26.0 / 98.5	22.5 / 85.3
PSC-119-35-02	119.7 / 453	24 / 61	75.1 / 190.8	1-1/4" FNPT	40.7 / 154	35.9 / 135.9	31.1 / 117.8

Maximum Operating Pressure = 125 PSI, PSC - 80-23 has a maximum operations pressure of 100 PSI.
 Maximum Internal Water Temperature: 120°F(49°C). Maximum Ambient Air Temperature: 120°F(49°C)
 Distance from base to center line of connection is 2-1/4"(5.7 cm)*. *1-3/4"(4.4 cm) for 16" diameter tanks
 Allow 12"(30.5 cm) for service clearance.

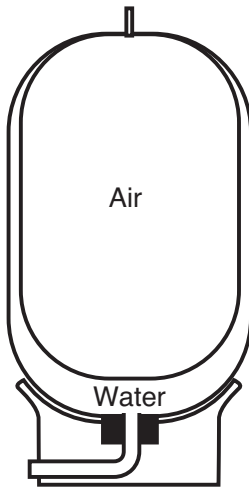
TANK SIZING RULE

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

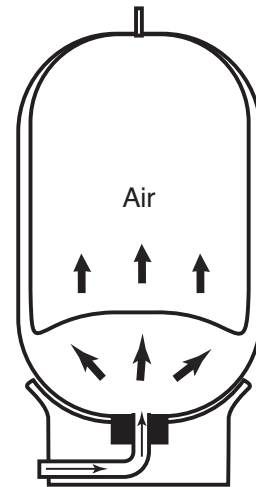
Example: For a 1 HP, 20 GPM unit pumping 20 gallons per minute on a 30-50 pressure switch setting, the properly sized Pro-Source composite tank is a PSC-80-23, which has a 23.8 gallon drawdown.

OPERATING CYCLE

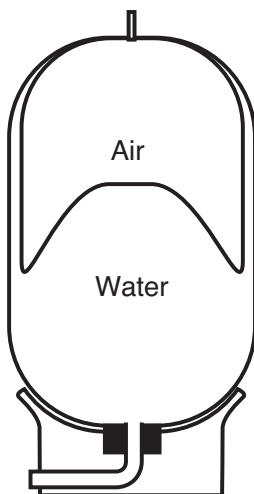
1. **Pro-Source Composite tank is nearly empty:** Air cell is fully expanded.



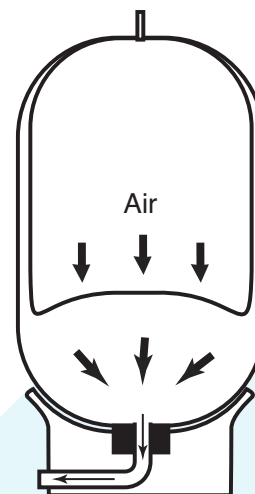
2. **Water is pumped into tank:** Air in cell is compressed.



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.



COMPOSITE PRESSURE TANKS PRO-SOURCE FIBREWOUND PRESSURE

CHART A TANK SELECTION CHART

PUMP GPM	SYSTEM PRESSURE SWITCH SETTING – PSI					
	20-40		30-50		40-60	
	RUNTIMES					
	1 MINUTE	2 MINUTE	1 MINUTE	2 MINUTE	1 MINUTE	2 MINUTE
5	PSC-20-6	PSC-30-9	PSC-20-6	PSC-40-12	"PSC-20-6	PSC-40-12
7.5	PSC-30-9	PSC-48-14	PSC-30-9	PSC-60-2	PSC-30-9	PSC-60-20
12.5	PSC-40-12	PSC-80-23	PSC-48-14	PSC-85-25	PSC-60-20	PSC-119-3
15	PSC-48-14	PSC-119-35	PSC-60-20	PSC-119-35	PSC-60-20	PSC-119-35
20	PSC-60-20	PSC-119-35	PSC-80-23	PSC-80-23	PSC-80-23	PSC-80-23
30	PSC-85-25	PSC-85-25	PSC-119-35	PSC-119-35	PSC-119-35	PSC-119-35
50	PSC-80-23	PSC-119-35	PSC-85-25	PSC-119-35	PSC-119-35	PSC-119-35

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:

$$\frac{\text{Pump GPM} \times \text{Min Runtime}}{\text{Multiplier (X)}} = \frac{\text{Minimum Tank Capacity Required}}{\text{Capacity Required}}$$
3. Refer to "Ordering Information" Table - Max. Capacity Gals.

FIBREWOUND CONTACT TANKS

FCT AND SP SERIES

FCT Series
Contact Tanks



SP Series SidePort
Contact Tanks



Tested and certified by WQA to NSF/ANSI Std. 61 Section 8 and ORDO92 for "lead free" compliance.

APPLICATIONS

Residential Water Systems Industrial, Commercial and Agricultural.

FEATURES

- ◆ **Built Tough for Quality:** Professional grade composite construction means longer lasting tanks that will not rust, corrode, dent or scratch.
- ◆ **Built Tough for Easy Installation:** Composite construction is lightweight—as little as half the weight of steel tanks. Installation is faster, easier and can be handled by one person.
- ◆ **Built Tough for Durability:** A rugged one piece molded inner liner constructed of premium high-density polyethylene. Each tank is wrapped with miles of over lapping, continuous fiberglass strands, sealed with high grade epoxy resin, which is then oven cured, making the outer shell impervious to rust, dents, and ultraviolet rays.
- ◆ **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.

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.

PRO-SOURCE FIBREWOUND CONTACT TANKS FCT AND SP SERIES

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	57.25/145	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	62.75/159	2/5.1	1-1/4" Socket	1-1/4" Socket	43/19.5
FCT-120	120/454	75/500/5.0	24/61	73.25/186	2/5.1	1-1/4" Socket	1-1/4" Socket	63/28.6

Maximum external operating temperature 120°F (49°C). Maximum internal operating temperature 100°F (38°C). Minimum operating temperature 40°F (4°C).

Tested and certified by WQA to NSF/ANSI Std. 61 Section 8 and ORD092 for "lead free" compliance. In order to provide the best products possible, specifications are subject to change.

SP SERIES SIDEPORT CONTACT TANKS

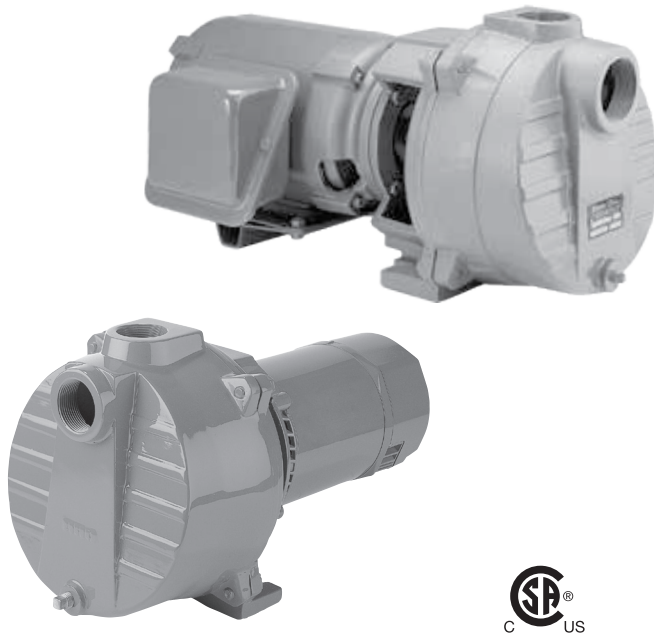
CATALOG NUMBER	MAXIMUM CAPACITY GAL./LITER	DRAWDOWN 30-50 SETTING GALLONS/LITERS	DIAMETER INCH/CM	OVERALL HEIGHT INCH/CM	HEIGHT INLET/ OUTLET to FLOOR INCH/CM	HEIGHT SIDEPORT to FLOOR INCH/CM	UNIT SHIP WEIGHT LBS./KG
SP-7	30/114	7/26	16/41	43.75/111	1.5/3.8	14/35.6	26/11.8
SP-9	40/151	9/34	16/41	56.5/144	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.

CENTRIFUGAL PUMPS

QUICK PRIME SELF-PRIMING



The Quick Prime self-priming centrifugal pump delivers strong dependable performance for demanding jobs where a lot of water is required over a long period of time. The heavy duty 184JM motor, brass impeller, and large capacity rugged cast iron pump end deliver reliable and continuous high performance service. Not for use with corrosive chemicals or flammable liquids.

APPLICATIONS

Commercial and residential application that require large flow rates. These include sprinkler systems, irrigation systems, booster service, water transfer, dewatering, fire protection, car washing, and other large cleaning and maintenance jobs.

SPECIFICATIONS

- ◆ High tensile cast iron pump case and motor bracket.
- ◆ Brass impeller (optional engineered composite impeller available for certain models).
- ◆ Ceramic/glass thermoset diffuser, with stainless steel wear ring.
- ◆ Square rubber sealing rings.
- ◆ Carbon/ceramic shaft seal.

FEATURES

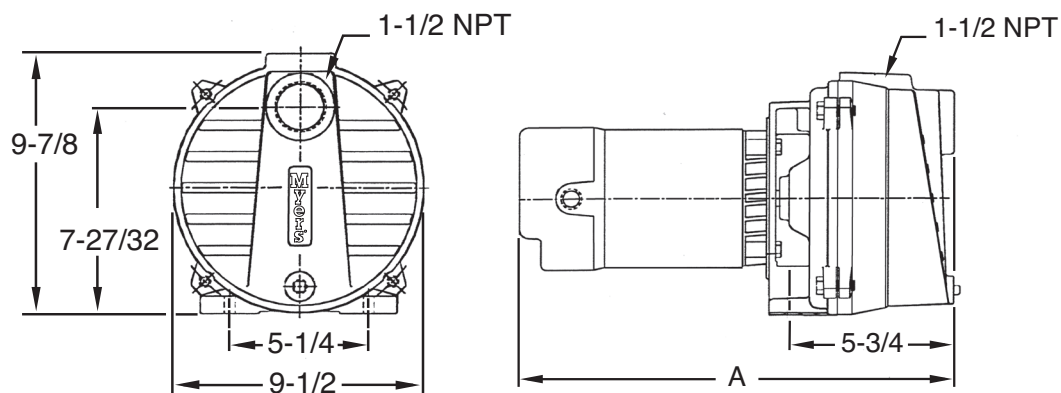
- ◆ **Powerful Performance:** Maximum head of 178 feet (77 psi) and flow capabilities to 135 gpm.
- ◆ **Ruggedly Built:** To meet the demands for long, hard continuous service without over-working or overloading the motor.
- ◆ **Simple Design:** Powerful, efficient operation and easy servicing. Convenient back pull-out design.
- ◆ **Heavy Duty Motor:** Full frame 184JM design, extra-large, double-ball bearings, non-overloading, continuous duty rating, strong capacitor start, single or three phase options.
- ◆ **Brass Impellers:** Precision machines and balanced for smooth, quiet operation. Corrosion resistant for long life.
- ◆ **Quick Priming:** Large case for maximum water retention to insure quick and easy priming, true self-priming design with top suction inlet retains water in case and maintains the prime, exclusive diffuser plate with stainless steel impeller wear ring for fast priming.
- ◆ **Mechanical Shaft Seal:** Precision lapped and polished carbon/ ceramic faces, Buna elastomers, and stainless steel metal components, top suction pump design prevents the seal from running dry.

CATALOG NUMBER		HP	PIPE SIZES		MAXIMUM TOTAL SHUT-OFF HD.		APPROX. WT. LBS.
1 PHASE	3 PHASE		SUCT.	DISCH.	FEET	PSI	
QP7	QP7-3	3/4	1-1/2"	1-1/2"	105	45.5	58
QP10	QP10-3	1	1-1/2"	1-1/2"	108	47	61
QP15	QP15-3	1-1/2	1-1/2"	1-1/2"	111	48	68
QP20	QP20-3	2	1-1/2"	1-1/2"	116	50	74
QP30	QP30-3	3	1-1/2"	1-1/2"	121	52	87
QP50B	QP50B-3	5	2-1/2"	2"	178	77	58/61

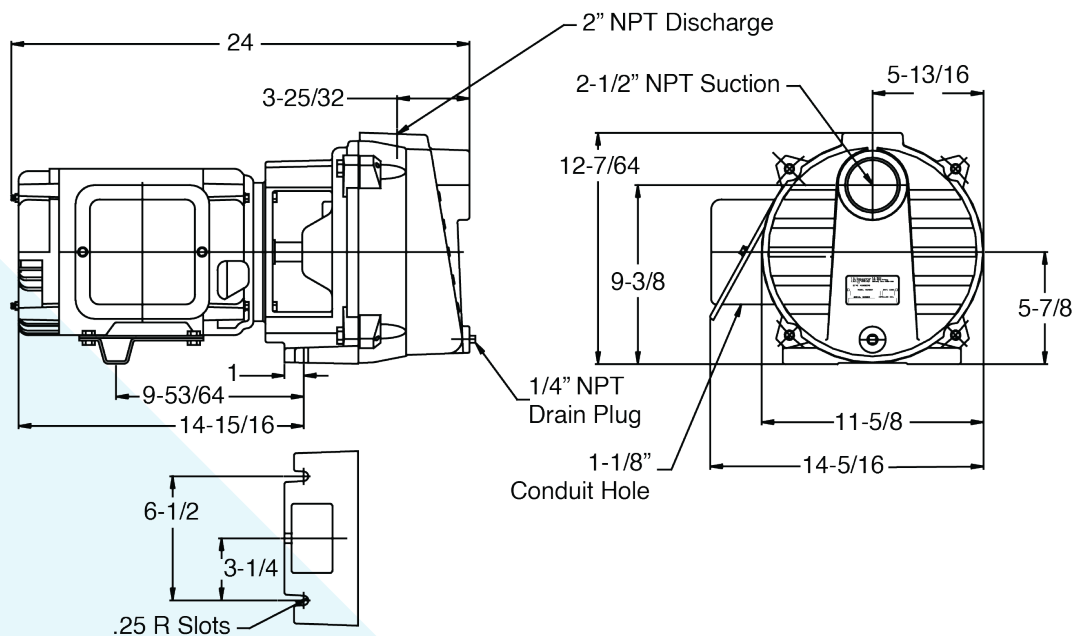
CENTRIFUGAL PUMPS QUICK PRIME SELF-PRIMING

OUTLINE DIMENSIONS

QP7, QP10, QP15, QP20, & QP30 MODELS



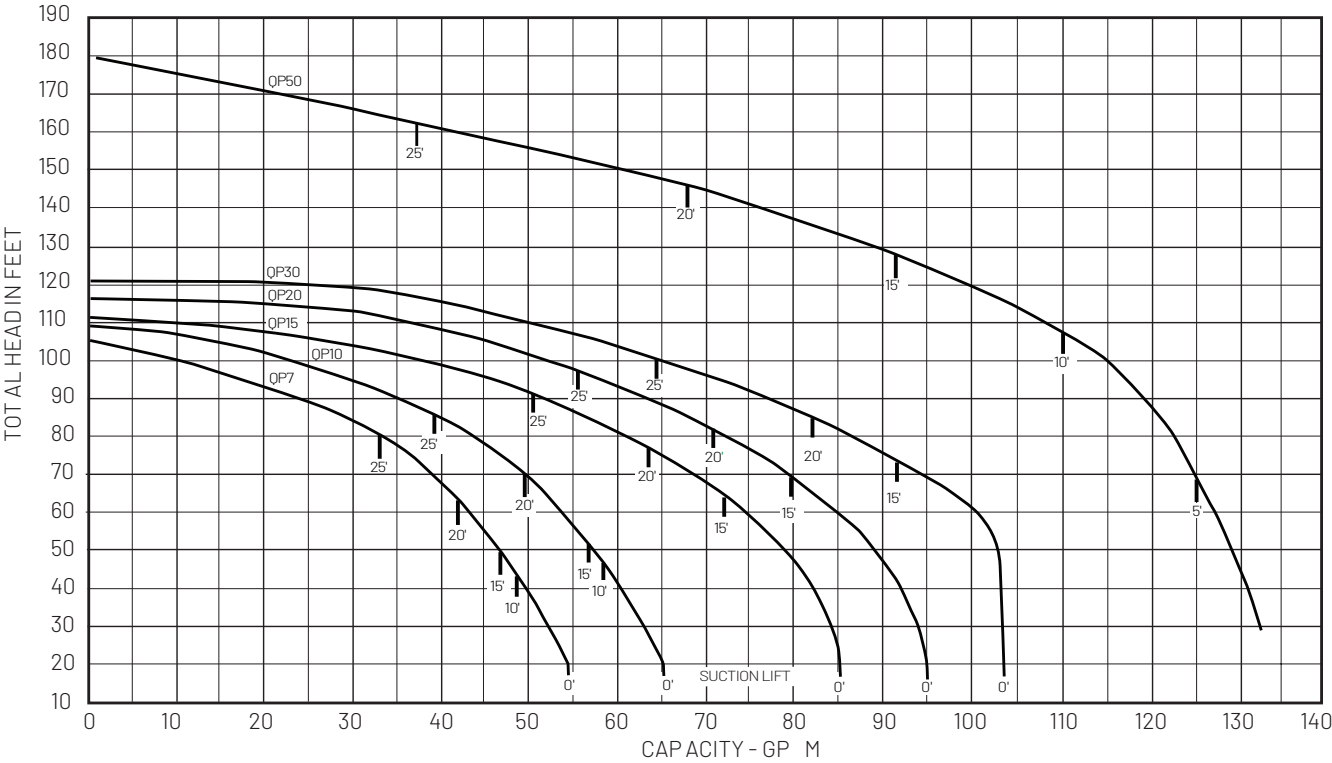
QP50B



Dimensions (in inches) are for estimating purposes only.

SPECIFICATIONS & PERFORMANCE

PUMP PERFORMANCE



CABLE SELECTION

MOTOR RATING		COPPER WIRE SIZE							
VOLTAGE	PHASE	14	12	10	8	6	4	2	0
230	1				150	250			
208	3			160	250	400	640	1020	1630
230	3		130	210	340	540	850	1360	2160
460	3	330	530	850	1350	2150	3422	5440	8650

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

CENTRIFUGAL PUMPS QUICK PRIME SELF-PRIMING

PUMP PERFORMANCE

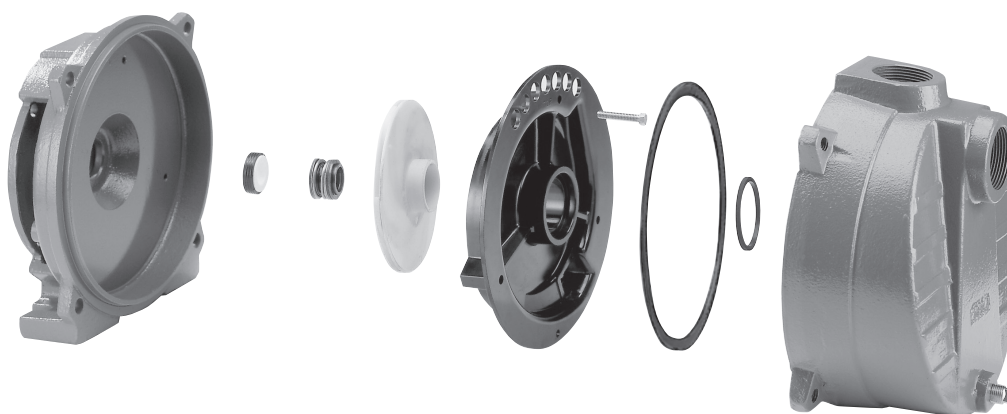
CATALOG NUMBER		HP	DISCH. PRESSURE PSI	CAPACITY IN GPM FOR DISCHARGE PRESSURE AND TOTAL SUCTION LIFT INDICATED			
1 PHASE	3 PHASE			10 FT.	15 FT.	20 FT.	25 FT.
QP7	QP7-3	3/4	20	40.75	38.1	36.1	33.2
			25	35.75	33.5	30.9	27.5
			30	30.75	27.25	23.1	18
			35	21.5	15.1	8.5	-
			40	6.5	-	-	-
QP10	QP10-3	1	20	51.2	48.9	46.4	39.25
			25	46.2	43.5	40.6	37.4
			30	40.5	37.5	33.6	29.2
			35	33	27.6	20.6	10
			40	19	5	-	-
QP15	QP15-3	1-1/2	20	71.6	69.4	63.4	50.25
			25	66.5	62.5	58.75	50.25
			30	59.5	55	50.5	45
			35	50.5	43.6	37	24.9
			40	36.8	25.9	-	-
QP20	QP20-3	2	20	78.9	76.6	70.5	55.5
			25	74.6	71.5	67	55.5
			30	68.5	63.5	58.4	53
			35	58.5	52.9	47	40
			40	47.5	40.5	32.5	-
QP30	QP30-3	3	20	93	91	82	64
			25	92.9	91	82	64
			30	89.8	85.5	78.6	64
			35	81	73.3	65.6	57
			40	67.9	59.1	48.5	37.5
			45	47.9	30	-	-
QP50B	QP50B-3	5	10	110	91	67	-
			20	108	90	65	-
			30	107	88	63	-
			40	103	84	62	-
			50	88	80	40	-

NOTE: Single phase units are dual voltage(115/230 volt)2 and 3 HP are 230 volt only.

NOTE: All units are loaded within the motor service factor and are rated for continuous operation.

CENTRIFUGAL PUMPS

QP SERIES FIELD ASSEMBLY KITS



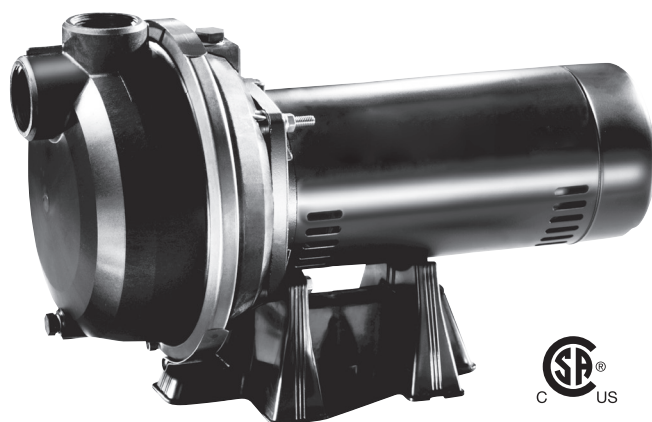
These kits provide many quality features and capabilities to meet a wide range of application with 1 - 5 HP, heads to 180 Feet and capacities to 135 GPM.

ORDERING INFORMATION

CAT. NO.	A	IMPELLER
QP10KIT	1	Composite
QP15KIT	1-1/2	
QP20KIT	2	Brass
QP30KIT	3	
QP50KIT	5	

CENTRIFUGAL PUMPS

PQP SERIES



Quick priming PQP 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

Turf sprinkling and water transfer for residential and light commercial.

SPECIFICATIONS

- ◆ **Pump Body:** Fiberglass-reinforced engineered composite.
- ◆ **Base:** High-impact composite.
- ◆ **Seal Plate:** Fiberglass-reinforced engineered composite.
- ◆ **Impeller:** Polycarbonate.
- ◆ **Diffuser:** Polycarbonate.
- ◆ **Shaft:** Stainless steel.
- ◆ **Clamp:** Stainless steel.

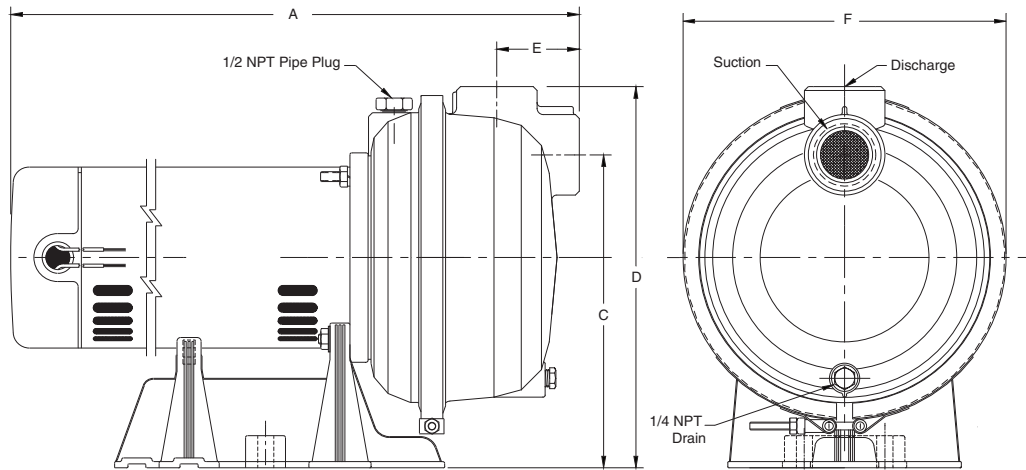
FEATURES

- ◆ **1, 1-1/2, 2 and 2-1/2 HP.**
- ◆ **Single Phase:** 115/230V dual voltage, 60 Hz; ODP.
- ◆ **Pump Body:** Fiberglass reinforced, polypropylene pump body and seal plate that is lightweight and corrosion resistant while being exceptionally strong.
- ◆ **Drain Port:** Provided for easy winterization.
- ◆ **Pump Base:** Corrosion resistant composite.
- ◆ **Easy Service:** Easy serviceable back with pullout design.
- ◆ **Motor:** 2 compartment, square flange motor with thermal overload protection.
- ◆ **Rapid Priming:** Once pump body is filled with water.

ORDERING INFORMATION

CATALOG NUMBER	HP	PIPE SIZES		MOTOR VOLTAGE	APPROX. WT. LBS.
		SUCTION	DISCHARGE		
PQP10	1	1-1/2"	1-1/2"	115/230	38
PQP15	1-1/2	1-1/2"	1-1/2"	115/230	41
PQP20	2	2"	2"	230	52
PQP25	2-1/2	2"	2"	230	54

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

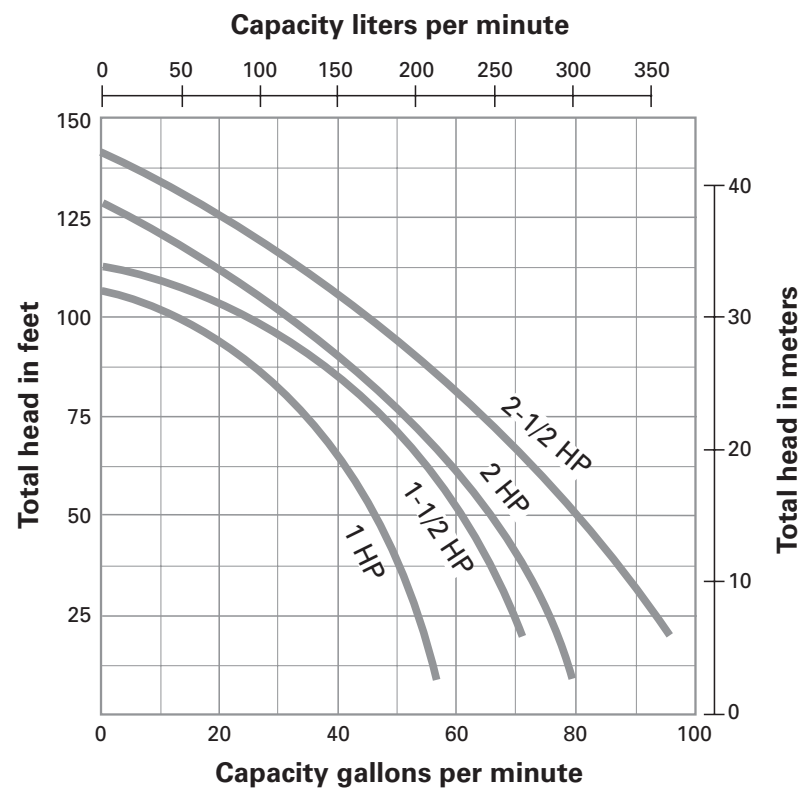
CAT. NO.	A	C	D	E	F
PQP10	17.58	9.71	11.82	2.52	10.18
PQP15	18.46	9.71	11.82	2.52	10.18
PQP20	20.0	8.88	12.38	3.81	11.18
PQP25	20.5	8.88	12.38	3.81	11.18

PUMP PERFORMANCE

CAPACITY IN GALLONS PER MINUTE

DISCH PRESS. PSI	0.2531					PQP15					PQP20					PQP25				
	DISTANCE ABOVE WATER																			
	5'	10'	15'	20'	25'	5'	10'	15'	20'	25'	5'	10'	15'	20'	25'	5'	10'	15'	20'	25'
	CAPACITY – GALLONS PER MINUTE																			
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



CENTRIFUGAL PUMPS

CTJ SERIES

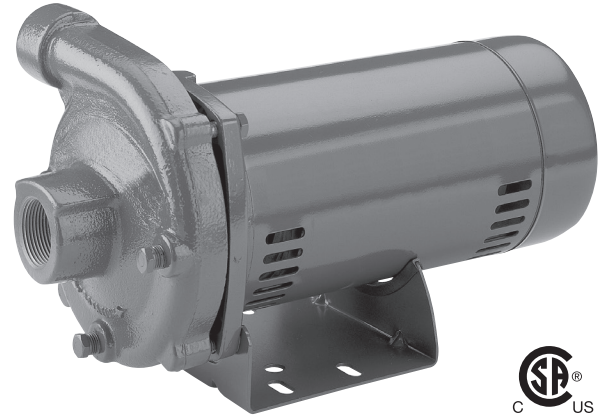
The CTJ series pumps feature heavy duty cast iron construction and are offered in high head models, with Noryl or silicon bronze impellers.

APPLICATIONS

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

FEATURES

- ◆ **1/2 HP through 2-1/2 HP:** High head models, heavy-duty motors, easy serviceability, and four-position discharge.
- ◆ **Drain Port:** Provided for easy winterizing.
- ◆ **Performance Range:** Up to 150' of head, with capacities to over 100 gpm.
- ◆ **Easy Serviceability:** All models feature a replaceable wear ring, and a back pull-out design.
- ◆ **CTJ Series – Noryl Impellers:** Abrasion resistant for normal applications and working temperatures to 140 F.
- ◆ **CTB Series – Silicon Bronze Impellers:** Include shaft seals rated for working temperatures to 225 F.



SPECIFICATIONS

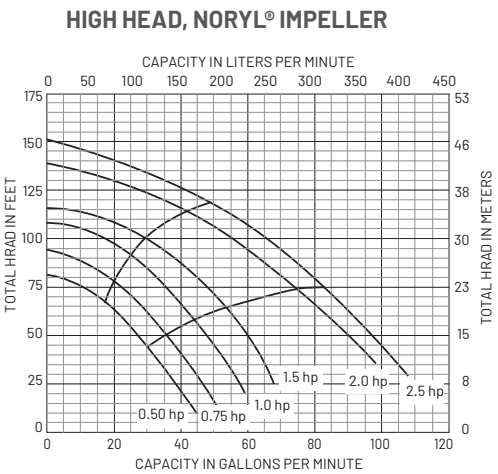
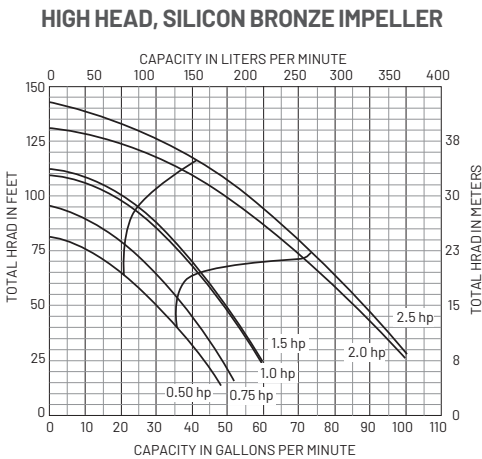
- ◆ **Volute and Seal Plate:** Close-grained cast iron.
- ◆ **Impellers:** CTJ Series = Noryl®; CTB Series = silicon bronze.
- ◆ **Base Plate:** 12 gauge stamped steel.
- ◆ **Motor Shaft:** 300 series stainless steel.
- ◆ **Mechanical Seal:** Carbon ceramic faces, BUNA N® cup and bellows.

ORDERING INFORMATION

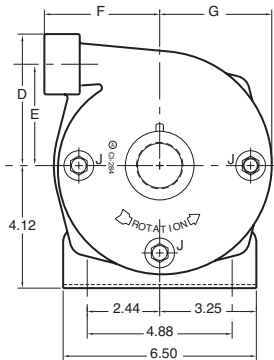
CATALOG NUMBER	HP	SUCTION	DISCHARGE	IMPELLER MATERIAL	PHASE
CTJ05	1/2	1-1/4"	1"	Composite	1
CTJ053		1-1/4"	1"	Composite	3
CTJ05B		1-1/4"	1"	Silicon Bronze	1
CTJ05B3		1-1/4"	1"	Silicon Bronze	3
CTJ07	3/4	1-1/4"	1"	Composite	1
CTJ073		1-1/4"	1"	Composite	3
CTJ07B		1-1/4"	1"	Silicon Bronze	1
CTJ07B3		1-1/4"	1"	Silicon Bronze	3
CTJ10	1	1-1/4"	1"	Composite	1
CTJ103		1-1/4"	1"	Composite	3
CTJ10B		1-1/4"	1"	Silicon Bronze	1
CTJ10B3		1-1/4"	1"	Silicon Bronze	3
CTJ15	1-1/2	1-1/4"	1"	Composite	1
CTJ153		1-1/4"	1"	Composite	3
CTJ15B		1-1/4"	1"	Silicon Bronze	1
CTJ15B3		1-1/4"	1"	Silicon Bronze	3
CTJ20	2	1-1/2"	1-1/2"	Composite	1
CTJ203		1-1/2"	1-1/2"	Composite	3
CTJ20B		1-1/2"	1-1/2"	Silicon Bronze	1
CTJ20B3		1-1/2"	1-1/2"	Silicon Bronze	3
CTJ25	2-1/2	2"	1-1/2"	Composite	1
CTJ253		2"	1-1/2"	Composite	3
CTJ25B		2"	1-1/2"	Silicon Bronze	1
CTJ25B3		2"	1-1/2"	Silicon Bronze	3

CENTRIFUGAL PUMPS CT SERIES

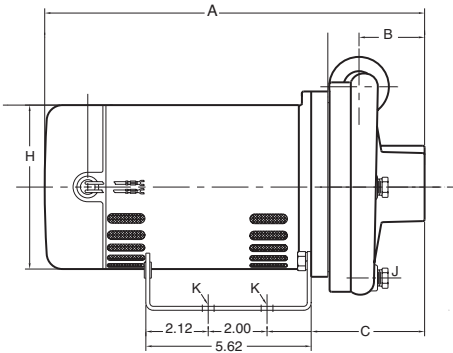
PUMP PERFORMANCE



OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.



DIMENSIONS (IN INCHES)

HP	NPT SUCT.	NPT DISCH.	A		B	C	D	E	F	G	H	NPT J	K
			(1 PHASE)	(3 PHASE)									
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.

Tested and rated in accordance with Water Systems Council Standards.
Note: Pumps installed with a Pro-Source tank required 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.

CENTRIFUGAL PUMPS

CENTRI-THRIFT PUMPS

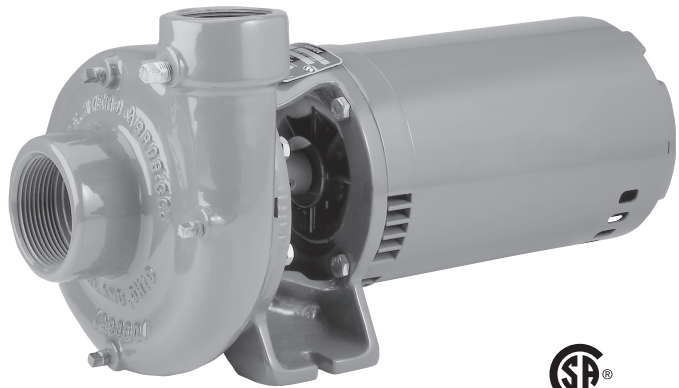
The Myers® Centri-Thrift centrifugal pumps are designed for continuous service under demanding conditions. Centri-Thrift pumps have earned a reputation for reliability.

APPLICATIONS

Booster service, irrigation, cooling towers, air conditioning, liquid transfer, sprinkling systems, general industrial service, refrigeration, cold and hot water circulation, laundry equipment, building services, and spray equipment.

FEATURES

- ◆ **2 to 7-1/2 HP Models.**
- ◆ **High Head Capabilities to 140 Feet.**
- ◆ **Flow Capacities to 240 GPM.**
- ◆ **Available with 1-1/4", 1-1/2" and 2" Discharge Sizes.**
- ◆ **Close coupled or Belt-driven.**
- ◆ **Choice of Complete Unit or Pump End Assembly.**



SPECIFICATIONS

- ◆ **Impeller:** Bronze.
- ◆ **Shaft Seal:** Ceramic seat, carbon washer, stainless steel springs, brass metal parts.
- ◆ **Volute Case:** High tensile gray iron.
- ◆ **Bracket:** High tensile gray iron.

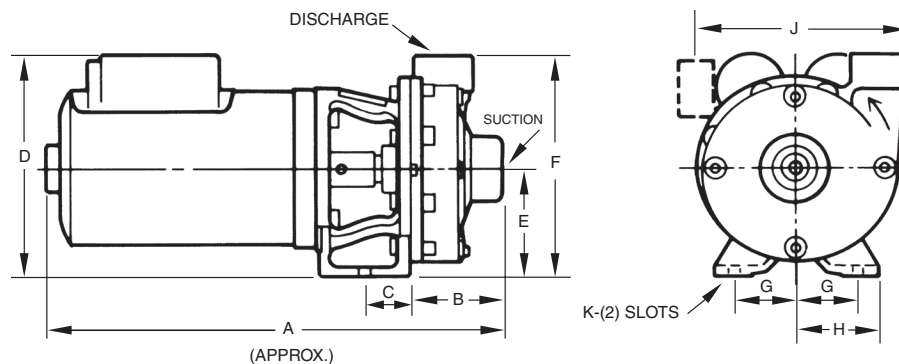
ORDERING INFORMATION

CATALOG NUMBER	HP	PHASE	PIPE TAPPING SIZES		PHASE APPROX. WT. LBS.
			SUCTION	DISCHARGE	
125M-2-1	2	1	1-1/2"	1-1/4"	65
125M-2-3	2	3	1-1/2"	1-1/4"	65
125M-3-1	3	1	1-1/2"	1-1/4"	80
125M-3-3	3	3	1-1/2"	1-1/4"	80
150M-2-1	2	1	2"	1-1/2"	80
150M-2-3	2	3	2"	1-1/2"	80
150M-3-1	3	1	2"	1-1/2"	90
150M-3-3	3	3	2"	1-1/2"	90
150M-5-1	5	1	2"	1-1/2"	130
150M-5-3	5	3	2"	1-1/2"	130
200M-3-1	3	1	2-1/2"	2"	80
200M-3-3	3	3	2-1/2"	2"	80
200M-5-1	5	1	2-1/2"	2"	130
200M-5-3	5	3	2-1/2"	2"	130
200M-7 1/2-3	7-1/2	3	2-1/2"	2"	130

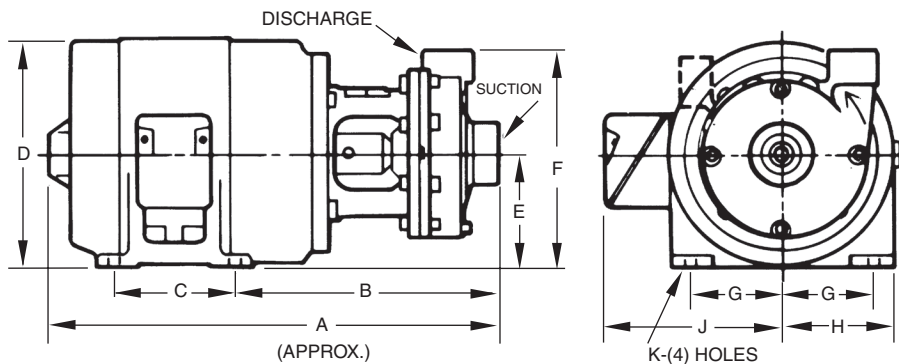
CENTRI-THRIFT CENTRIFUGAL PUMPS

OUTLINE DIMENSIONS

125M-150M-200M Series 2 and 3 HP



150M-200M Series 5 and 7-1/2 HP

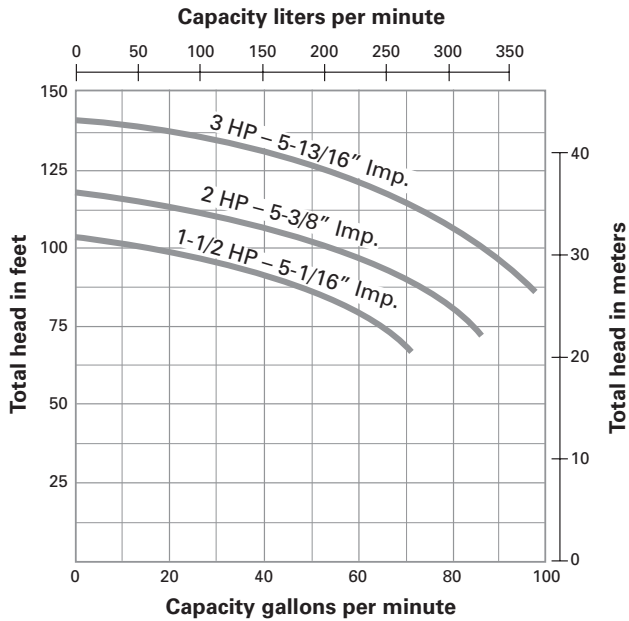


Dimensions (in inches) are for estimating purposes only.

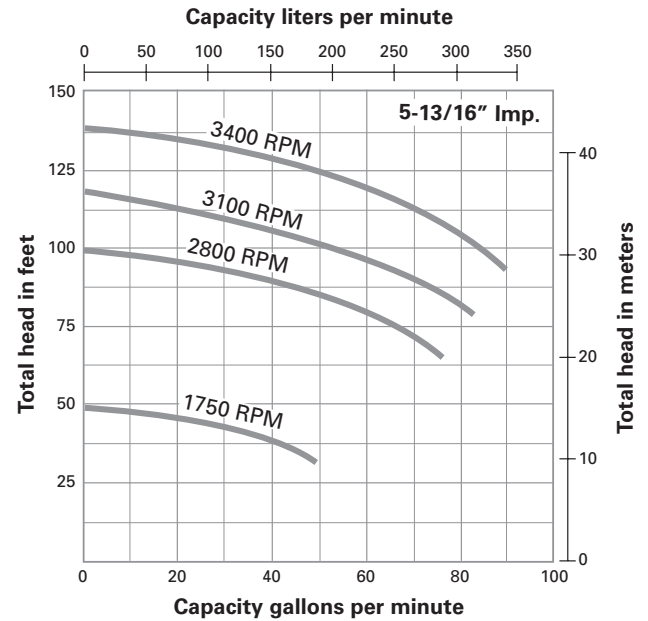
CATALOG NUMBER	HP	PHASE	A	B	C	D	E	F	G	H	J	K
125M	2	1	18-5/8	3-13/16	1-13/16	9-3/4	4-1/2	9-3/16	2-1/2	3-5/16	8-1/4	1/2
	2	3	18-1/16	3-13/16	1-13/16	7-3/4	4-1/2	9-3/16	2-1/2	3-5/16	8-1/4	1/2
	3	1	19-15/16	3-13/16	1-13/16	9-3/4	4-1/2	9-3/16	2-1/2	3-5/16	8-1/4	1/2
	3	3	18-11/16	3-13/16	1-13/16	7-3/4	4-1/2	9-3/16	2-1/2	3-5/16	8-1/4	1/2
150M	2	1	18-15/16	4-1/8	1-13/16	9-3/4	4-1/2	9-3/4	2-1/2	3-5/16	8-7/16	1/2
	2	3	18-3/8	4-1/8	1-13/16	7-3/4	4-1/2	9-3/4	2-1/2	3-5/16	8-7/16	1/2
	3	1	20-1/4	4-1/8	1-13/16	9-3/4	4-1/2	9-3/4	2-1/2	3-5/16	8-7/16	1/2
	3	3	19	4-1/8	1-13/16	7-3/4	4-1/2	9-3/4	2-1/2	3-5/16	8-7/16	1/2
	5	1	21-13/16	11-11/16	5-1/2	9-3/16	4-1/2	9-3/4	3-3/4	4-1/2	8-1/2	13/32
	5	3	19-15/16	11-11/16	4-1/2	9-3/16	4-1/2	9-3/4	3-3/4	4-1/2	7	13/32
200M	3	1	20-3/4	4-5/8	1-13/16	9-3/4	4-1/2	9-7/16	2-1/2	3-5/16	9-3/16	1/2
	3	3	19-1/2	4-5/8	1-13/16	7-3/4	4-1/2	9-7/16	2-1/2	3-5/16	9-3/16	1/2
	5	1	22-5/16	12-13/16	5-1/2	9-3/16	4-1/2	9-7/16	3-3/4	4-1/2	8-1/2	13/32
	5	3	21-7/16	12-13/16	4-1/2	9-3/16	4-1/2	9-7/16	3-3/4	4-1/2	7	13/32
	7-1/2	3	22-1/16	12-13/16	5-1/2	9-3/16	4-1/2	9-7/16	3-3/4	4-1/2	7	13/32

PUMP PERFORMANCE

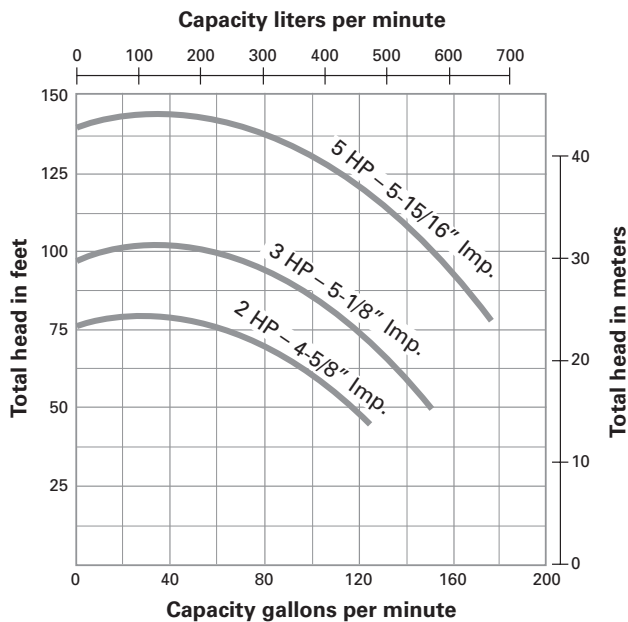
125M



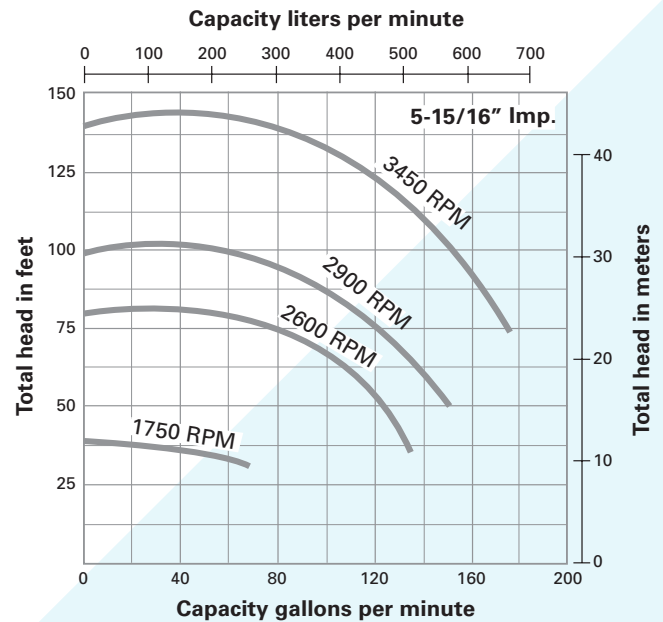
125B



150M

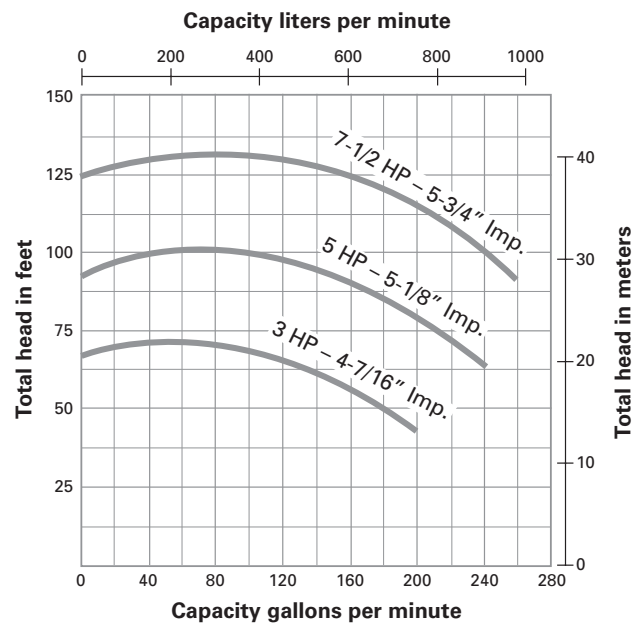


150B

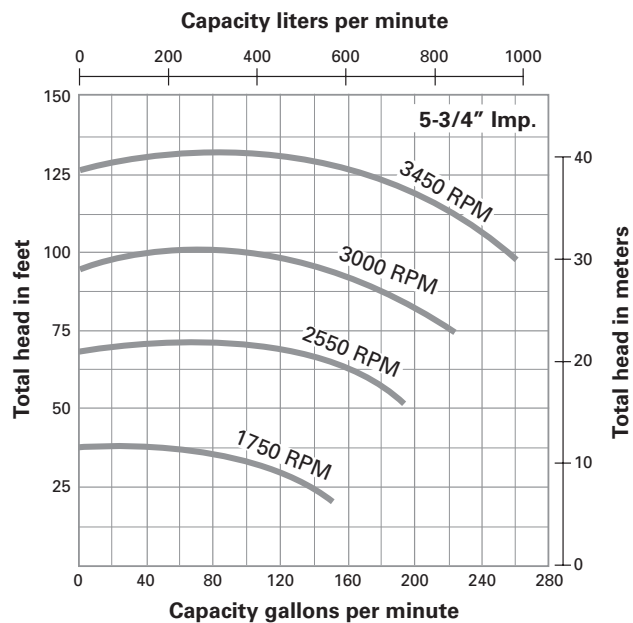


PUMP PERFORMANCE

200M



200B



SERVICEABLE HIGH PRESSURE BOOSTER PUMPS

MPB SERIES

The MPB 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

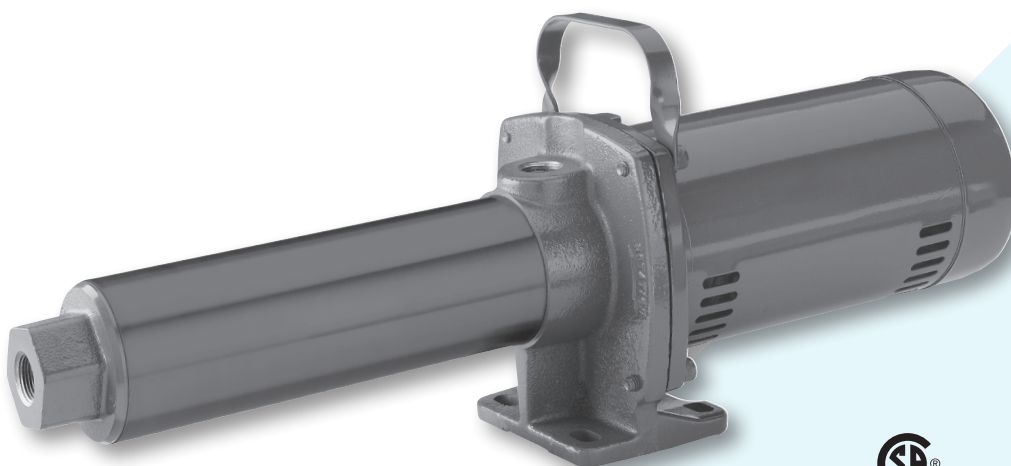
Car wash, filtration and reverse osmosis, residential, commercial or agricultural pressure washing, booster and spray systems, HVAC, general purpose pumping.

SPECIFICATIONS

- ◆ **Max. Inlet Pressure:** 80 PSI.
- ◆ **Max. Working Pressure:** 315 PSI.
- ◆ **Maximum Limits:** Prolonged use with liquids above 140° F is not recommended.
- ◆ **Discharge:** MPB Series: cast iron.
- ◆ **Motor Adapter and Base:** MPB Series: cast iron.
- ◆ **Shell:** 300 series stainless steel.
- ◆ **Impeller:** Acetal.
- ◆ **Diffuser:** Polycarbonate.
- ◆ **Shaft:** 300 series stainless steel.
- ◆ **O-Rings:** Buna N®.
- ◆ **Mechanical Seal:** Carbon/ceramic, Buna N®.

FEATURES

- ◆ **Pump and Motor Shaft:** Stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive.
- ◆ **Peak Performance at Every Stage:** Staging system uses independent floating impellers for superior sand handling.
- ◆ **Balanced Rotor:** Die cast under high pressures for uniform performance and greater efficiency; dynamically balanced.
- ◆ **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.
- ◆ **Heavy-duty Ball Bearings:** Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.
- ◆ **Myers: The Proven Leader:** The industry leader in booster pumps offers solutions in a broad range of commercial and OEM applications.



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

SERVICEABLE HIGH PRESSURE BOOSTER PUMPS MPB SERIES

ORDERING INFORMATION

CATALOG NUMBER	GPM	HP	PHASE	STAGES	PIPE TAPPING SIZES		MOTOR VOLTAGE	SHIPPING* WT. (LBS.)
					INLET	OUTLET		
7MPB50	7	1/2	1	9	3/4"	3/4"	115/230	48
7MPB75		3/4	1	12	3/4"	3/4"	115/230	48
7MPB100		1	1	16	3/4"	3/4"	115/230	51
10MPB50	10	1/2	1	6	3/4"	3/4"	115/230	45
10MPB75		3/4	1	8	3/4"	3/4"	115/230	46
10MPB100		1	1	10	3/4"	3/4"	115/230	50
10MPB150		1-1/2	1	14	3/4"	3/4"	115/230	58
10MPB200		2	1	16	3/4"	3/4"	115/230	63
20MPB100	20	1	1	7	1"	1"	115/230	49
20MPB150		1-1/2	1	9	1"	1"	115/230	57
20MPB200		2	1	11	1"	1"	115/230	62
20MPB300		3	1	15	1"	1"	208-230	59
30MPB100	30	1	1	5	1-1/4"	1-1/4"	115/230	47
30MPB150		1-1/2	1	6	1-1/4"	1-1/4"	115/230	54
30MPB200		2	1	7	1-1/4"	1-1/4"	115/230	57
30MPB300		3	1	11	1-1/4"	1-1/4"	208-230	59

*Length and weight are approximate.

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

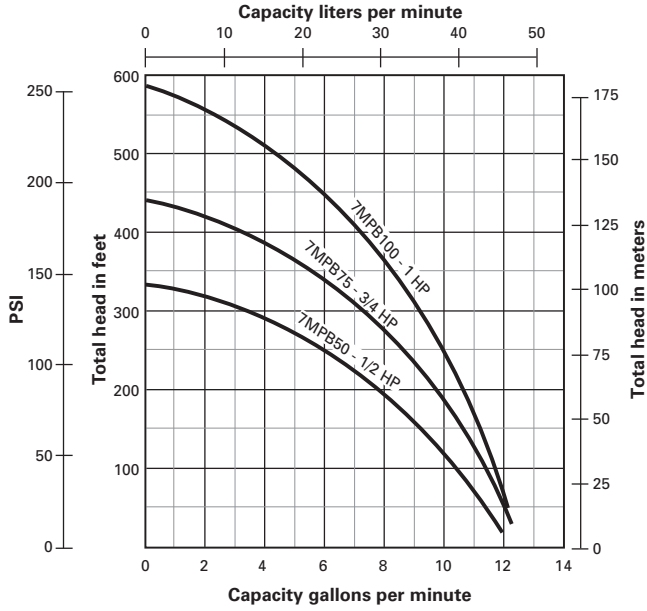
*To select proper discharge accessories for your pump, add incoming pressure to pump output pressure, to determine total discharge pressure.

Example: Incoming pressure 20 PSI + pump output pressure (HP7C at 0 GPM, 300')

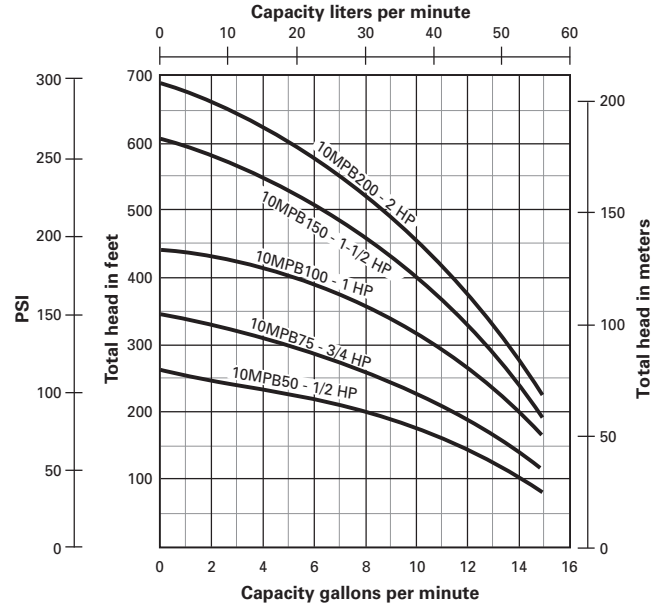
87 PSI = Total 150 PSI at discharge = 150 PSI rated discharge accessories

PUMP PERFORMANCE

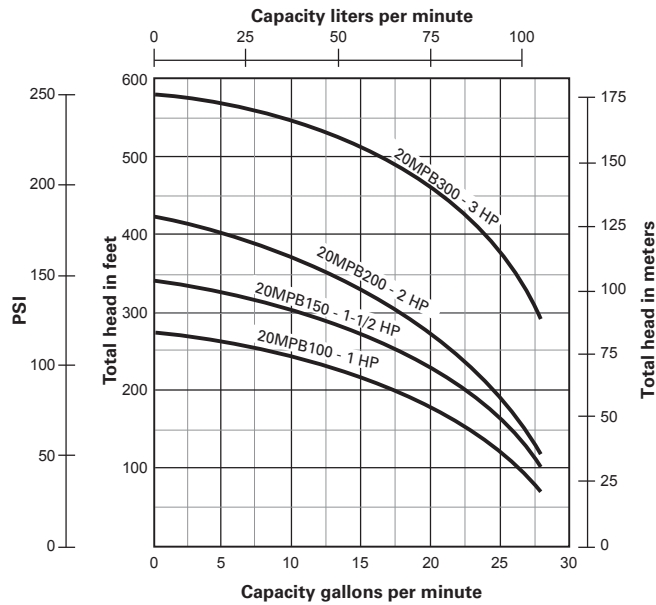
7 GPM



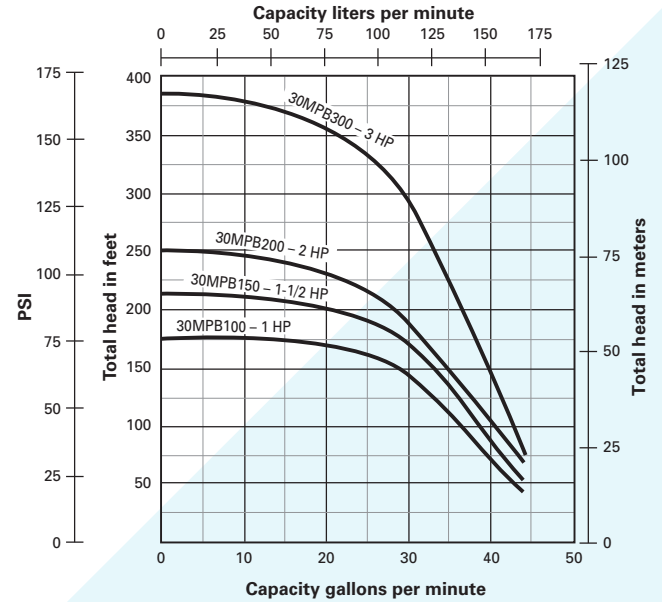
10 GPM



20 GPM

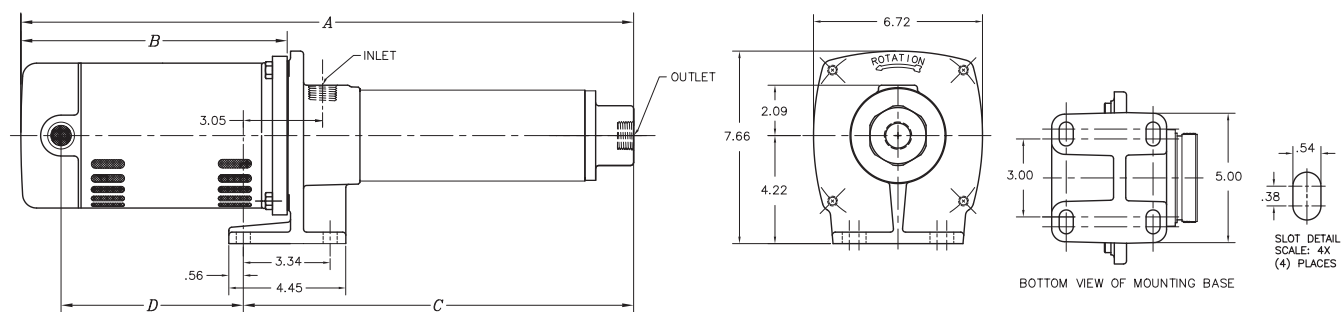


30 GPM



SERVICEABLE HIGH PRESSURE BOOSTER PUMPS MPB SERIES

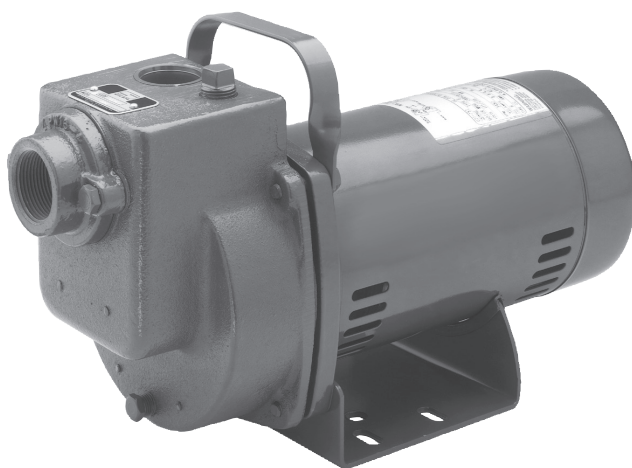
OUTLINE DIMENSIONS



CATALOG NUMBER	HP	DIMENSIONS IN INCHES			
		A	B	C	D
7MPB50	1/2	24.60	10.38	15.76	6.88
7MPB75	3/4	27.22	10.38	18.39	7.47
7MPB100	1	32.23	11.88	21.89	8.88
10MPB50	1/2	23.19	11.60	13.13	8.63
10MPB75	3/4	25.31	11.97	14.88	9.00
10MPB100	1	28.12	13.03	16.63	10.06
10MPB150	1-1/2	32.07	13.47	20.14	10.50
10MPB200	2	34.13	13.78	21.89	10.81
20MPB100	1	26.02	11.88	15.68	8.88
20MPB150	1-1/2	29.84	13.47	17.91	10.50
20MPB200	2	32.38	13.78	20.14	10.81
20MPB300	3	36.80	14.05	24.47	11.12
30MPB100	1	25.08	11.88	14.92	8.69
30MPB150	1-1/2	27.26	12.63	16.35	9.44
30MPB200	2	28.49	12.42	17.79	9.47
30MPB300	3	35.86	14.05	23.53	11.12

SELF-PRIMING CENTRIFUGAL PUMP

MDPC SERIES



The MDPC 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.

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', 115 volt.

SPECIFICATIONS

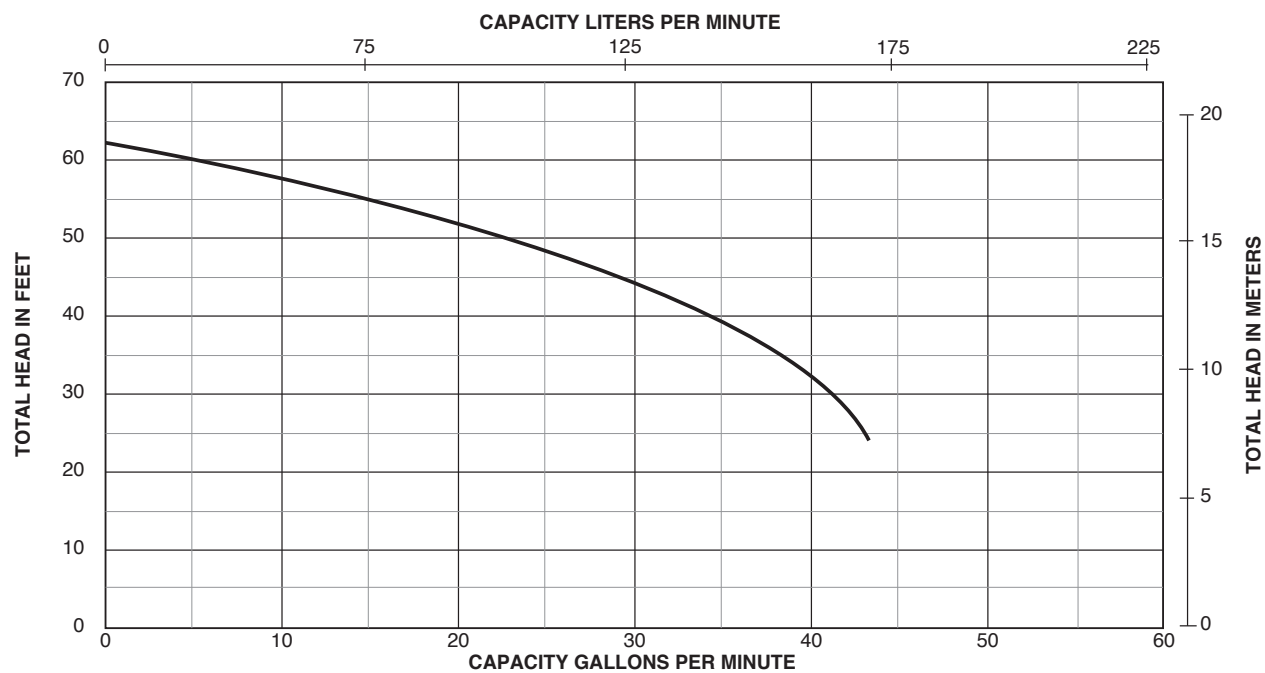
- ◆ **Volute:** Cast iron
- ◆ **Impeller:** Polycarbonate
- ◆ **Diffuser:** Thermoset
- ◆ **Shaft:** One-piece threaded stainless steel
- ◆ **Base:** Steel 12 gauge
- ◆ **Maximum Liquid Temperature Limits:** 130°F (55°C)

ORDERING INFORMATION

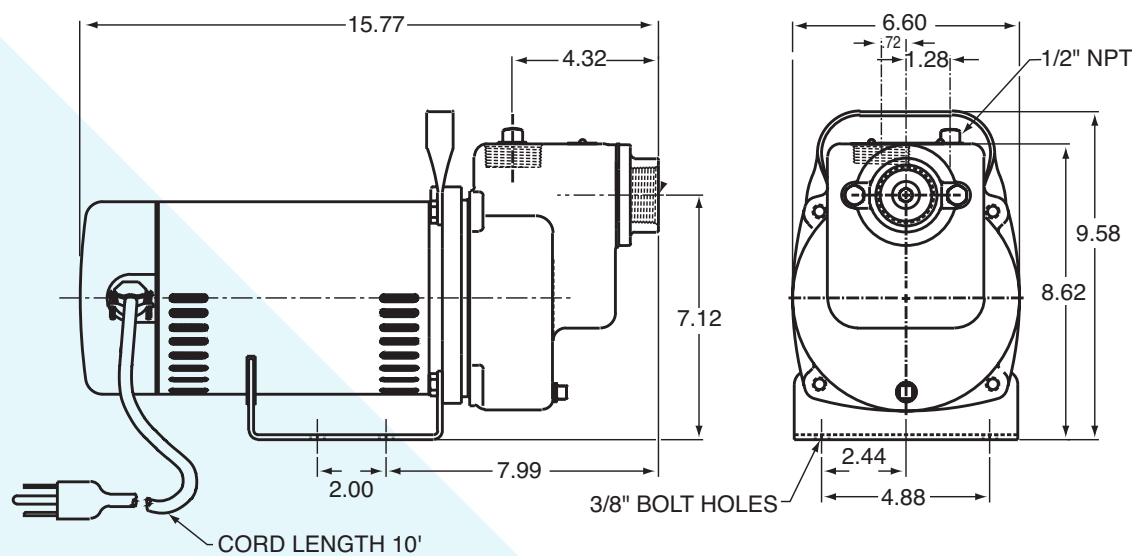
CATALOG NUMBER	HP	VOLTS	PHASE/CYCLES
MDPC	1/2	115	1/60

SELF-PRIMING CENTRIFUGAL PUMP MDPC SERIES

PUMP PERFORMANCE



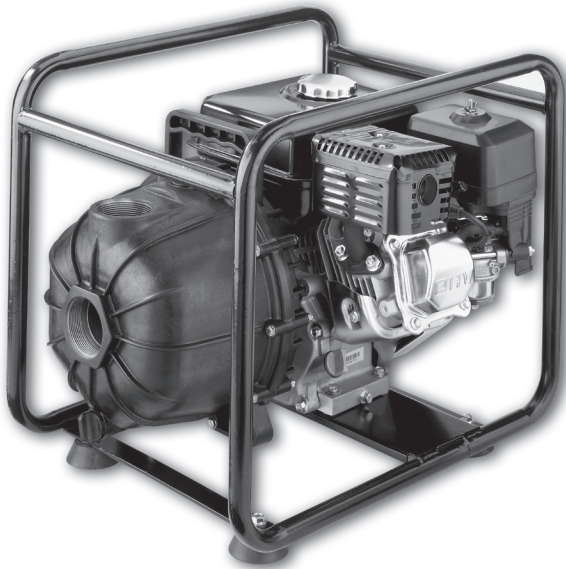
OUTLINE DIMENSIONS



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

Dimensions (in inches) are for estimating purposes only.

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 6-1/2 HP, PowerPro 4-cycle gasoline engine, rated for continuous-duty, equipped with professional-grade features like an automatic low-oil safety cut, 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.

FEATURES

- ◆ Rugged light-weight design.
- ◆ Corrosion resistant composite pump construction.
- ◆ Chemical resistant viton seals, O-rings with stainless steel fasteners.
- ◆ Built-in check valve.

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:** 6-1/2 HP.
- ◆ **Dimensions:** 21"H x 17"D x 21"L.
- ◆ **Fasteners:** 300 Grade stainless steel.

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.

COMPOSITE ENGINE-DRIVEN SELF-PRIMING PUMP

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



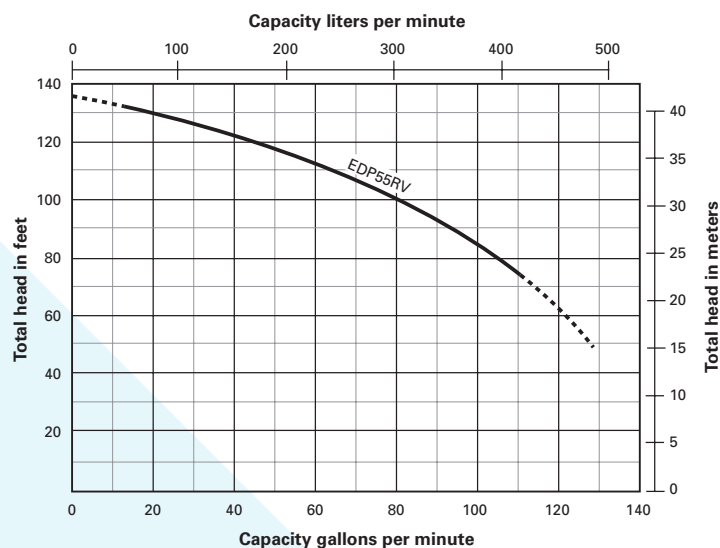
FP2735 Suction Hose Kit



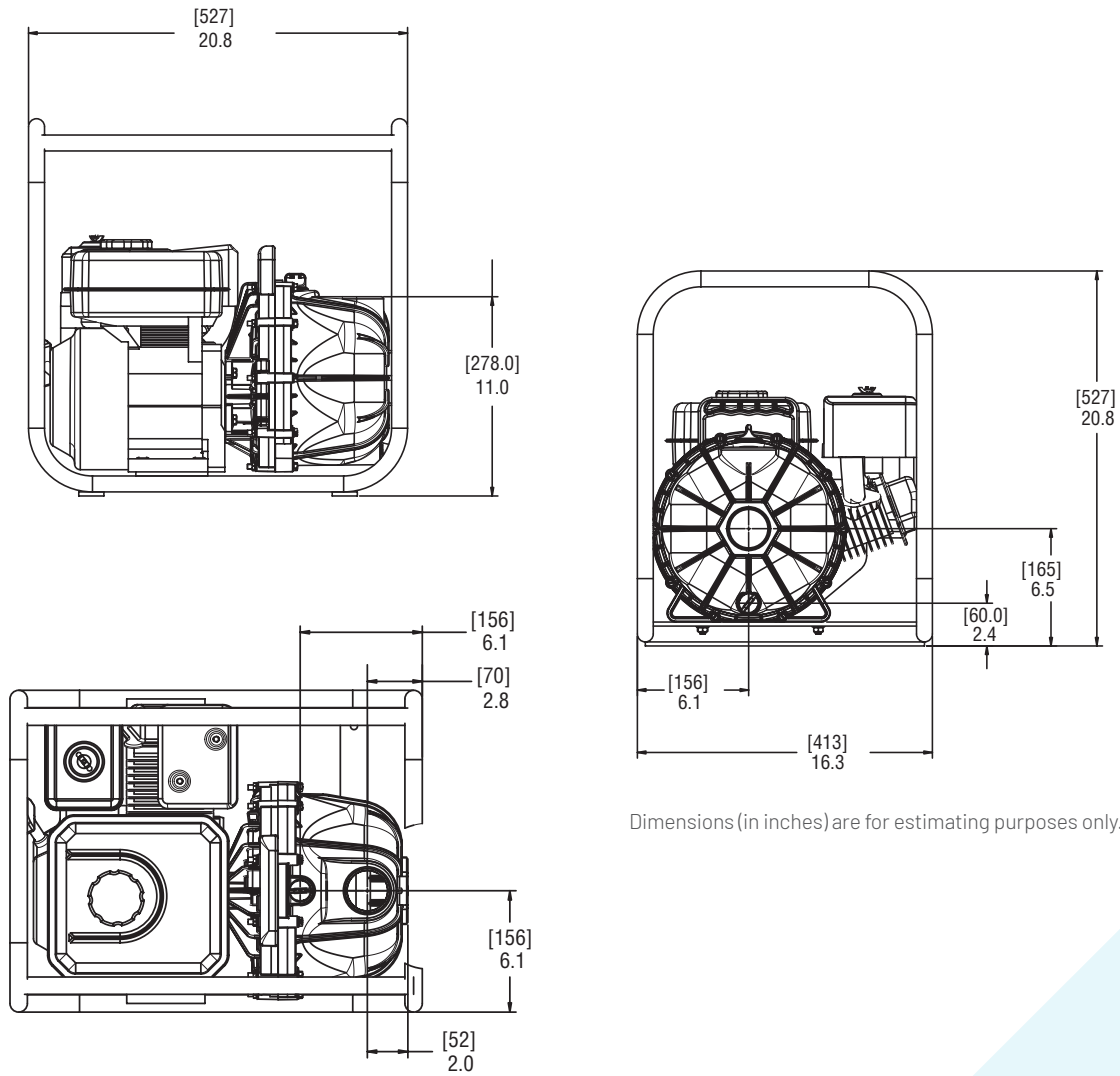
FP2731 Discharge Hose Kit

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

OUTLINE DIMENSIONS



PUMP PERFORMANCE



Dimensions (in inches) are for estimating purposes only.

UTILITY TRANSFER PUMP

MES106 MODEL



The MES106 pumping system solves water transfer needs by removing water from waterbeds, aquariums, non-draining sinks, and water standing on basement floors. Compact design provides easy hookup, application use, and storage when not in use.

APPLICATIONS

Ideal for transferring water, filling tanks, and draining shallow flooded areas.

FEATURES

- ◆ Up to 5 GPM with 10' Head.
- ◆ Connects to standard garden hose.
- ◆ 115VAC with 6' power cord.
- ◆ Removes standing water down to 1/8" depth.
- ◆ Weighs only 4 pounds.
- ◆ Built-in carrying handle.
- ◆ Includes 6' suction hose and floor drainer.
- ◆ To operate, just attach a standard hose to pump discharge and plug into any 115V Outlet.
- ◆ Air-cooled, high-torque, non-submersible motor with overload protection.

SPECIFICATIONS

- ◆ **Capacities:** 5 GPM, 18.9 LPM.
- ◆ **Shut-off Head:** 10', 3.1 m.
- ◆ **Weight:** 4 lbs.
- ◆ **Liquids Handling:** Drain water.
- ◆ **Intermittent Liquid Temp.:** 104°F, 40°C.
- ◆ **Motor:** Air-cooled brush motor.
- ◆ **Electrical Data:** 115V, 2A, 1Ø, 60Hz.
- ◆ **Discharge:** Standard garden hose.
- ◆ **Housing:** Cast aluminum.
- ◆ **Impeller:** Buna-N®.
- ◆ **Wear Ring:** 304 Stainless Steel.
- ◆ **Power Cord:** 6'.

ORDERING INFORMATION

CATALOG NUMBER	VOLTS	HZ	GPM	APPROX. WT. LBS.
MES106	115	60	5	4

ACCESSORIES

PRESSURE SWITCHES

ORDERING INFORMATION

CODE EXPLANATION FOR PRESSURE SWITCH CATALOG NUMBERS

ELECTRIC CONTROL SWITCHES

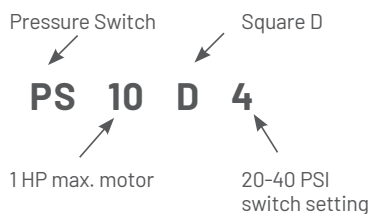
CATALOG NUMBER	PART NO.	FACTORY PRESSURE SETTING	CUT-OFF PRESSURE (RANGE)	DIFFERENTIAL PRESSURE	MINIMUM CUT-OFF PRESSURE	MANUFACTURER'S RATING MAX. MOTOR HP						PIPE CONNECTION NPTF
						1 PH AC		3 PH AC		DC		
						115V	230V	230V	460V	575V	115/575V	
PS10D4	15760A000K	20-40	20-65	10-30		1-1/2 HP	2 HP	3 HP			1/4 HP	1/4"
PS10D5	15760A001K	30-50										
PS10D6	15760A002K	40-60										
PS20D4	15761A000K	20-40	20-80	10-31		2 HP	3 HP	5 HP	5 HP	5 HP	1/2 HP	1/4"
PS20D5	15761A001	30-50										

ELECTRIC CONTROL SWITCHES WITH LOW PRESSURE CUT-OFF

PS10D4C	19180A000K	20-40	20-65	10-30	10*	1 HP	1 HP	1 HP			1/4 HP	1/4"
PS10D5C	19180A001K	30-50	20-65	10-30	20	1 HP	1 HP	1 HP			1/4 HP	1/4"
PS10D6C	19180A002K	40-60	20-65	10-30	30	1 HP	1 HP	1 HP			1/4 HP	1/4"

All switches are 2-pole.

CODE EXPLANATION FOR PRESSURE SWITCH CATALOG NUMBERS



PS stands for Pressure Switch

The number following stands for maximum HP to be used on

The next letter stands for the switch manufacturer

The next number stands for the highest pressure of the factory set switch setting

VALVES AND REGULATORS

EJECTOR PRESSURE REGULATORS

CATALOG NO.	PIPE SIZE IN.	USED ON
15495B000K	3/4"	HC33, HC50, HCM50, HCM75
15496B000K	1"	HC75, HC100, HCM100, HCM150, HJA75D, HJA100D, HJ75D, HJ100D
13980A001K	1"	HJA33D, HJA50D, HJ50D, HR50D

AUTOMATIC AIR VOLUME CONTROL - DEEP WELL

Vents excess air from tank on all systems which charge tank with air on each operating cycle. Set to prevent air below 30 lbs. tank pressure but adjustable 15 to 40 lbs. Used on deep well ejectors, deep well reciprocating and submersible systems.

CATALOG NUMBER	GAUGE TAPING	TANK CONNECTION	MAX. OPERATING PRESSURE	SHIP WT. OZ.
05857A002K	1/4"	1-1/4"	65 lbs.	6

ACCESSORIES PRESSURE SWITCHES

VALVES AND REGULATORS, CONTINUED

AUTOMATIC AIR CHARGING CONTROL

Charges air on each operating cycle. Air is not handed through pump. Copper tube and fitting not included with control for replacement but required in installation. Not recommended for reciprocating pumps.

CATALOG NUMBER	NPT	DESCRIPTION
13809A000K	3/8"	82 gallon tanks and smaller

AIR VALVES

Used with reciprocating, jet and submersible pumps to admit air into system.

CATALOG NUMBER	NPT	USED WITH
05000A000	1/8"	Water systems

CHECK VALVES - VERTICAL OR HORIZONTAL

CATALOG NUMBER	PART NUMBER	DESCRIPTION	PIPE SIZE	CAN BE USED IN PIPE SIZE	SHIP WT. LBS.
CVA-75	26370A001	3/4" No-Lead Brass Check Valve	3/4"	1-1/4"	1

VERTICAL FOOT VALVES

CATALOG NUMBER	PART NUMBER	DESCRIPTION	PIPE SIZE	CAN BE USED IN PIPE SIZE	SHIP WT. LBS.
FVP-10	26369A002K	1" No-Lead Brass Check Valve	1"	1"	1
FVP-15	26369A004	1-1/2" No-Lead Brass Check Valve	1-1/2"	3"	2
FVP-20	26369A005K	2" No-Lead Brass Check Valve	2"	3-1/2"	3

WELL ADAPTERS AND SEALS**UNIVERSAL WELL ADAPTERS**

For all packer installations. Designed for over-the-well installations with vertical pumps and concentric piping installations with horizontal pumps.

CATALOG NUMBER	PART NUMBER	WELL SIZE	NUMBER OF BOLTS	DROP PIPE	DELIVERY PIPE	PRESSURE PIPE
UA2-20	19251C010	2"	2	1"	1-1/4"	1-1/4"

90° TYPE WELL ADAPTERS

For offset packer installations with horizontal pumps and concentric piping installations with vertical pumps.

CATALOG NUMBER	PART NUMBER	WELL SIZE	NUMBER OF BOLTS	DROP PIPE	DELIVERY PIPE	PRESSURE PIPE
HA2-20	19253C010	2"	2	1"	1-1/4"	1-1/4"
HA2-20A	19253C011	2"	2	1-1/4"	1-1/4"	1-1/4"

*No bolts holes – inlet and outlet openings are threaded.

OPEN CENTER CUP LEATHERS

CATALOG NUMBER	O.D.	DIAMETER OF HOLE
05099A012K	1-13/16"	1-1/8"
05099A015K	2"	1-5/16"
05099A017K	2-1/2"	1-11/16"
05099A019K	3"	1-15/16"

SOLID CENTER CUP LEATHERS

CATALOG NUMBER	O.D.	DIAMETER OF HOLE
05064A019K	1-5/16"	9/16"
05064A023K	1-1/2"	9/16"

WATER PRESSURE GAUGE

CATALOG NUMBER	DESCRIPTION	CONNECTION 1/4" NPT	CASE CONSTRUCTION	FACE DIAMETER	SHIP WT. OZ.
05003A001K	100 PSI Pressure Gauge	1/4" Bottom Mount	Plastic	2"	4

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GENERAL INFORMATION

PIPE FRICTION LOSS CHARTS 1/2"-1-1/4" I.D.

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	.0304	0.564	0.364
1	1.1	1.14	2.1	1.26	2	1.2	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

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	PART NUMBER 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 are based on equivalent lengths of steel pipe.

GENERAL INFORMATION

PIPE FRICTION LOSS CHARTS 1-1/2"-2-1/2" I.D.

LOSS OF HEAD IN FEET DUE TO FRICTION PER 100 FEET OF PIPE

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 2.50"
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.

Note (1) Loss Figures are based on equivalent lengths of indicated pipe material.
 Note (2) Loss Figures for screwed valves based on equivalent lengths of steel pipe.

CABLE SELECTION GUIDE HITACHI® 6"-8" SUBMERSIBLE MOTORS

CABLE SELECTION

COPPER CABLE SIZE - FROM CONTROL BOX TO MOTOR (IN FEET)																				60° C			
MOTOR					AWG													MCM					
VOLTS / HZ	HP	KW	FUSE		14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500	
			STD	DUAL ELEMENT																			
THREE PHASE																							
230 V 60 Hz	5	4	45	25	149	237	378	598	931	1484	1865	2356	2967	3746	4726	5966	7516	8873					
	8	6	60	35	-	-	247	391	609	970	1220	1540	1940	2449	3090	3901	4914	5802	6965	8142	9308		
	10	8	80	45	-	-	-	308	479	764	961	1213	1529	1930	2434	3073	3872	4571	5488	6415	7334	9125	
	15	11	125	70	-	-	-	221	344	548	689	871	1097	1384	1746	2205	2778	3279	3937	4602	5261	6546	
	20	15	150	90	-	-	-	-	264	420	528	667	841	1061	1339	1690	2130	2514	3018	3528	4034	5019	
	25	19	200	100	-	-	-	-	-	332	417	527	664	838	1057	1334	1681	1985	2383	2785	3184	3962	
	30	22	225	125	-	-	-	-	-	-	337	426	537	677	855	1079	1359	1605	1926	2252	2575	3203	
	40*	30	300	175	-	-	-	-	-	-	-	328	413	522	659	831	1047	1236	1484	1735	1984	2468	
460 V 60 Hz	5	4	20	10	595	947	1511	2393	3723	5935	7461	9422											
	8	6	30	15	389	619	988	1564	2434	3880	4878	6161	7761	9797									
	10	8	40	20	307	488	778	1233	1918	3057	3844	4854	6115	7719	9738								
	15	11	60	30	-	350	558	884	1376	2193	2757	3482	4387	5537	6986	8819							
	20	15	80	45	-	-	428	678	1055	1682	2114	2670	3363	4245	5356	6761	8518						
	25	19	100	50	-	-	-	535	833	1328	1669	2108	2655	3351	4228	5338	6725	7939	9531				
	30	22	110	60	-	-	-	433	673	1073	1349	1704	2147	2710	3419	4316	5437	6419	7706	9008			
	40	30	150	80	-	-	-	-	519	827	1040	1313	1654	2088	2634	3325	4189	4946	5937	6940	7935	9873	
	40*	30	150	80	-	-	-	-	502	801	1007	1271	1601	2022	2550	3220	4056	4789	5749	6720	7683	9559	
	50	37	175	100	-	-	-	-	-	639	803	1014	1277	1612	2034	2568	3235	3819	4585	5359	6127	7623	
	50*	37	175	100	-	-	-	-	-	691	869	1097	1382	1745	2201	2779	3501	4133	4961	5799	6631	8250	
	60	45	225	125	-	-	-	-	-	-	675	852	1073	1355	1709	2158	2719	3210	3853	4504	5149	6407	
	60*	45	225	125	-	-	-	-	-	-	705	890	1121	1415	1785	2254	2839	3352	4024	4704	5378	6691	
	75	55	250	150	-	-	-	-	-	-	-	735	926	1168	1474	1861	2344	2768	3323	3884	4441	5525	
	100	75	350	200	-	-	-	-	-	-	-	-	-	-	878	1108	1399	1762	2081	2498	2920	3338	4153
	125	93	450	250	-	-	-	-	-	-	-	-	-	-	-	893	1127	1420	1676	2012	2352	2689	3346
	150	111	500	275	-	-	-	-	-	-	-	-	-	-	-	-	-	1162	1371	1646	1924	2200	2737

Lengths only meet the US National Electrical Code ampacity requirements for individual conductors rated 60° C in free air or water, NOT in magnetic enclosures, conduit or direct buried. Refer to NEC Table 310.15(B)(17) for more information.

* = motors are 8" diameter

GENERAL INFORMATION

CABLE SELECTION GUIDE HITACHI® 6"-8" SUBMERSIBLE MOTORS

CABLE SELECTION

COPPER CABLE SIZE - FROM CONTROL BOX TO MOTOR (IN FEET)																					75° C		
MOTOR					AWG														MCM				
VOLTS / HZ	HP	KW	FUSE		14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500	
			STD	DUAL ELEMENT																			
THREE PHASE																							
230 V 60 HZ	5	4	45	25	149	237	378	598	931	1484	1865	2356	2967	3746	4726	5966	7516	8873					
	8	6	60	35	-	155	247	391	609	970	1220	1540	1940	2449	3090	3901	4914	5802	6965	8142	9308		
	10	8	80	45	-	-	195	308	479	764	961	1213	1529	1930	2434	3073	3872	4571	5488	6415	7334	9125	
	15	11	125	70	-	-	-	221	344	548	689	871	1097	1384	1746	2205	2778	3279	3937	4602	5261	6546	
	20	15	150	90	-	-	-	-	264	420	528	667	841	1061	1339	1690	2130	2514	3018	3528	4034	5019	
	25	19	200	100	-	-	-	-	208	332	417	527	664	838	1057	1334	1681	1985	2383	2785	3184	3962	
	30	22	225	125	-	-	-	-	-	268	337	426	537	677	855	1079	1359	1605	1926	2252	2575	3203	
	40*	30	300	175	-	-	-	-	-	-	-	328	413	522	659	831	1047	1236	1484	1735	1984	2468	
460 V 60 HZ	5	4	20	10	595	947	1511	2393	3723	5935	7461	9422											
	8	6	30	15	389	619	988	1564	2434	3880	4878	6161	7761	9797									
	10	8	40	20	307	488	778	1233	1918	3057	3844	4854	6115	7719	9738								
	15	11	60	30	220	350	558	884	1376	2193	2757	3482	4387	5537	6986	8819							
	20	15	80	45	-	-	428	678	1055	1682	2114	2670	3363	4245	5356	6761	8518						
	25	19	100	50	-	-	338	535	833	1328	1669	2108	2655	3351	4228	5338	6725	7939	9531				
	30	22	110	60	-	-	-	433	673	1073	1349	1704	2147	2710	3419	4316	5437	6419	7706	9008			
	40	30	150	80	-	-	-	-	519	827	1040	1313	1654	2088	2634	3325	4189	4946	5937	6940	7935	9873	
	40*	30	150	80	-	-	-	-	502	801	1007	1271	1601	2022	2550	3220	4056	4789	5749	6720	7683	9559	
	50	37	175	100	-	-	-	-	-	639	803	1014	1277	1612	2034	2568	3235	3819	4585	5359	6127	7623	
	50*	37	175	100	-	-	-	-	433	691	869	1097	1382	1745	2201	2779	3501	4133	4961	5799	6631	8250	
	60	45	225	125	-	-	-	-	-	537	675	852	1073	1355	1709	2158	2719	3210	3853	4504	5149	6407	
	60*	45	225	125	-	-	-	-	-	561	705	890	1121	1415	1785	2254	2839	3352	4024	4704	5378	6691	
	75	55	250	150	-	-	-	-	-	-	582	735	926	1168	1474	1861	2344	2768	3323	3884	4441	5525	
	100	75	350	200	-	-	-	-	-	-	-	-	696	878	1108	1399	1762	2081	2498	2920	3338	4153	
	125	93	450	250	-	-	-	-	-	-	-	-	-	708	893	1127	1420	1676	2012	2352	2689	3346	
150	111	500	275	-	-	-	-	-	-	-	-	-	-	-	922	1162	1371	1646	1924	2200	2737		

Lengths only meet the US National Electrical Code ampacity requirements for individual conductors rated 75° C in free air or water, NOT in magnetic enclosures, conduit or direct buried. Refer to NEC Table 310.15(B)(17) for more information.

* = motors are 8" diameter

CABLE SELECTION GUIDE HITACHI® 6"-8" SUBMERSIBLE MOTORS

CABLE SELECTION

COPPER CABLE SIZE - FROM CONTROL BOX TO MOTOR (IN FEET)																					60° C		
MOTOR					AWG														MCM				
VOLTS / HZ	HP	KW	FUSE		14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500	
			STD	DUAL ELEMENT																			
THREE PHASE																							
230 V 60 Hz	5	4	45	25	-	-	378	598	931	1484	1865	2356	2967	3746	4726	5966	7516	8873					
	8	6	60	35	-	-	-	391	609	970	1220	1540	1940	2449	3090	3901	4914	5802	6965	8142	9308		
	10	8	80	45	-	-	-	-	479	764	961	1213	1529	1930	2434	3073	3872	4571	5488	6415	7334	9125	
	15	11	125	70	-	-	-	-	-	548	689	871	1097	1384	1746	2205	2778	3279	3937	4602	5261	6546	
	20	15	150	90	-	-	-	-	-	-	528	667	841	1061	1339	1690	2130	2514	3018	3528	4034	5019	
	25	19	200	100	-	-	-	-	-	-	-	527	664	838	1057	1334	1681	1985	2383	2785	3184	3962	
	30	22	225	125	-	-	-	-	-	-	-	-	-	-	677	855	1079	1359	1605	1926	2252	2575	3203
	40*	30	300	175	-	-	-	-	-	-	-	-	-	-	-	831	1047	1236	1484	1735	1984	2468	
460 V 60 Hz	5	4	20	10	595	947	1511	2393	3723	5935	7461	9422											
	8	6	30	15	-	619	988	1564	2434	3880	4878	6161	7761	9797									
	10	8	40	20	-	-	778	1233	1918	3057	3844	4854	6115	7719	9738								
	15	11	60	30	-	-	558	884	1376	2193	2757	3482	4387	5537	6986	8819							
	20	15	80	45	-	-	-	678	1055	1682	2114	2670	3363	4245	5356	6761	8518						
	25	19	100	50	-	-	-	-	833	1328	1669	2108	2655	3351	4228	5338	6725	7939	9531				
	30	22	110	60	-	-	-	-	-	1073	1349	1704	2147	2710	3419	4316	5437	6419	7706	9008			
	40	30	150	80	-	-	-	-	-	-	1040	1313	1654	2088	2634	3325	4189	4946	5937	6940	7935	9873	
	40*	30	150	80	-	-	-	-	-	-	1007	1271	1601	2022	2550	3220	4056	4789	5749	6720	7683	9559	
	50	37	175	100	-	-	-	-	-	-	-	-	1277	1612	2034	2568	3235	3819	4585	5359	6127	7623	
	50*	37	175	100	-	-	-	-	-	-	-	1097	1382	1745	2201	2779	3501	4133	4961	5799	6631	8250	
	60	45	225	125	-	-	-	-	-	-	-	-	-	1355	1709	2158	2719	3210	3853	4504	5149	6407	
	60*	45	225	125	-	-	-	-	-	-	-	-	-	1415	1785	2254	2839	3352	4024	4704	5378	6691	
	75	55	250	150	-	-	-	-	-	-	-	-	-	-	1474	1861	2344	2768	3323	3884	4441	5525	
	100	75	350	200	-	-	-	-	-	-	-	-	-	-	-	-	1762	2081	2498	2920	3338	4153	
	125	93	450	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2012	2352	2689	3346	
150	111	500	275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2737	

Lengths meet the US National Electrical Code ampacity requirements for either individual conductors or jacketed rated 60° C cable and can be in conduit or direct buried. Flat molded and web/ribbon cable are considered jacketed cable. Refer to NEC Table 310.15(B)(16) for more information.

* = motors are 8" diameter

GENERAL INFORMATION

CABLE SELECTION GUIDE HITACHI® 6"-8" SUBMERSIBLE MOTORS

CABLE SELECTION

COPPER CABLE SIZE - FROM CONTROL BOX TO MOTOR (IN FEET)																					75° C		
MOTOR					AWG														MCM				
VOLTS / HZ	HP	KW	FUSE		14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500	
			STD	DUAL ELEMENT																			
THREE PHASE																							
230 V 60 Hz	5	4	45	25	-	237	378	598	931	1484	1865	2356	2967	3746	4726	5966	7516	8873					
	8	6	60	35	-	-	247	391	609	970	1220	1540	1940	2449	3090	3901	4914	5802	6965	8142	9308		
	10	8	80	45	-	-	-	308	479	764	961	1213	1529	1930	2434	3073	3872	4571	5488	6415	7334	9125	
	15	11	125	70	-	-	-	-	344	548	689	871	1097	1384	1746	2205	2778	3279	3937	4602	5261	6546	
	20	15	150	90	-	-	-	-	-	420	528	667	841	1061	1339	1690	2130	2514	3018	3528	4034	5019	
	25	19	200	100	-	-	-	-	-	-	417	527	664	838	1057	1334	1681	1985	2383	2785	3184	3962	
	30	22	225	125	-	-	-	-	-	-	-	-	537	677	855	1079	1359	1605	1926	2252	2575	3203	
	40*	30	300	175	-	-	-	-	-	-	-	-	-	-	659	831	1047	1236	1484	1735	1984	2468	
460 V 60 Hz	5	4	20	10	595	947	1511	2393	3723	5935	7461	9422											
	8	6	30	15	389	619	988	1564	2434	3880	4878	6161	7761	9797									
	10	8	40	20	-	488	778	1233	1918	3057	3844	4854	6115	7719	9738								
	15	11	60	30	-	-	558	884	1376	2193	2757	3482	4387	5537	6986	8819							
	20	15	80	45	-	-	-	678	1055	1682	2114	2670	3363	4245	5356	6761	8518						
	25	19	100	50	-	-	-	535	833	1328	1669	2108	2655	3351	4228	5338	6725	7939	9531				
	30	22	110	60	-	-	-	-	673	1073	1349	1704	2147	2710	3419	4316	5437	6419	7706	9008			
	40	30	150	80	-	-	-	-	-	827	1040	1313	1654	2088	2634	3325	4189	4946	5937	6940	7935	9873	
	40*	30	150	80	-	-	-	-	-	801	1007	1271	1601	2022	2550	3220	4056	4789	5749	6720	7683	9559	
	50	37	175	100	-	-	-	-	-	-	803	1014	1277	1612	2034	2568	3235	3819	4585	5359	6127	7623	
	50*	37	175	100	-	-	-	-	-	-	869	1097	1382	1745	2201	2779	3501	4133	4961	5799	6631	8250	
	60	45	225	125	-	-	-	-	-	-	-	-	1073	1355	1709	2158	2719	3210	3853	4504	5149	6407	
	60*	45	225	125	-	-	-	-	-	-	-	890	1121	1415	1785	2254	2839	3352	4024	4704	5378	6691	
	75	55	250	150	-	-	-	-	-	-	-	-	-	1168	1474	1861	2344	2768	3323	3884	4441	5525	
	100	75	350	200	-	-	-	-	-	-	-	-	-	-	-	1399	1762	2081	2498	2920	3338	4153	
	125	93	450	250	-	-	-	-	-	-	-	-	-	-	-	-	1420	1676	2012	2352	2689	3346	
150	111	500	275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1646	1924	2200	2737		

Lengths meet the US National Electrical Code ampacity requirements for either individual conductors or jacketed rated 75° C cable and can be in conduit or direct buried. Flat molded and web/ribbon cable are considered jacketed cable. Refer to NEC Table 310.15(B)(16) for more information.

* = motors are 8" diameter

CABLE SELECTION GUIDE- PENTEK® 6" SUBMERSIBLE MOTORS

CABLE SELECTION

COPPER CABLE SIZE - FROM CONTROL BOX TO MOTOR (IN FEET)																					60° C		
MOTOR					AWG													MCM					
VOLTS / HZ	HP	KW	FUSE		14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500	
			STD	DUAL ELEMENT																			
THREE PHASE																							
230 V 60 Hz	5	3.7	45	25	154	245	391	620	965	1538	1933	2442	3076	3883	4899	6184	7791	9198					
	7.5	5.5	60	40	-	174	277	438	682	1087	1367	1726	2174	2745	3463	4372	5508	6502	7806	9124			
	10	7.5	90	50	-	-	-	308	479	764	961	1213	1529	1930	2434	3073	3872	4571	5488	6415	7334	9125	
	15	11	125	80	-	-	-	216	337	537	675	852	1073	1355	1709	2158	2719	3210	3853	4504	5149	6407	
	20	15	175	110	-	-	-	-	251	400	503	636	801	1011	1275	1610	2028	2394	2874	3360	3842	4780	
	25	18.5	225	125	-	-	-	-	-	332	417	527	664	838	1057	1334	1681	1985	2383	2785	3184	3962	
	30	22	250	125	-	-	-	-	-	-	373	471	593	749	945	1193	1503	1775	2130	2490	2847	3543	
460 V 60 Hz or 380 V 50 Hz	5	3.7	20	10	617	982	1566	2480	3859	6152	7734	9767											
	7.5	5.5	30	20	436	694	1107	1753	2728	4349	5467	6904	8698										
	10	7.5	45	25	307	488	778	1233	1918	3057	3844	4854	6115	7719	9738								
	15	11	70	40	-	343	546	865	1347	2147	2699	3408	4293	5419	6837	8631							
	20	15	90	50	-	-	408	646	1005	1601	2013	2543	3203	4043	5101	6439	8113	9578					
	25	18.5	110	60	-	-	-	535	833	1328	1669	2108	2655	3351	4228	5338	6725	7939	9531				
	30	22	125	70	-	-	-	479	745	1187	1492	1884	2374	2997	3781	4773	6013	7099	8522	9961			
	40	30	150	100	-	-	-	-	546	870	1093	1381	1740	2196	2770	3497	4406	5202	6244	7299	8345		

Lengths only meet the US National Electrical Code ampacity requirements for individual conductors rated 60° C in free air or water, NOT in magnetic enclosures, conduit or direct buried. Refer to NEC Table 310.15(B)(17) for more information.

CABLE SELECTION

COPPER CABLE SIZE - FROM CONTROL BOX TO MOTOR (IN FEET)																				75 °C			
MOTOR					AWG													MCM					
VOLTS / HZ	HP	KW	FUSE		14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500	
			STD	DUAL ELEMENT																			
THREE PHASE																							
230 V 60 Hz	5	3.7	45	25	-	245	391	620	965	1538	1933	2442	3076	3883	4899	6184	7791	9198					
	7.5	5.5	60	40	-	-	277	438	682	1087	1367	1726	2174	2745	3463	4372	5508	6502	7806	9124			
	10	7.5	90	50	-	-	-	308	479	764	961	1213	1529	1930	2434	3073	3872	4571	5488	6415	7334	9125	
	15	11	125	80	-	-	-	-	337	537	675	852	1073	1355	1709	2158	2719	3210	3853	4504	5149	6407	
	20	15	175	110	-	-	-	-	-	400	503	636	801	1011	1275	1610	2028	2394	2874	3360	3842	4780	
	25	18.5	225	125	-	-	-	-	-	-	417	527	664	838	1057	1334	1681	1985	2383	2785	3184	3962	
	30	22	250	125	-	-	-	-	-	-	-	471	593	749	945	1193	1503	1775	2130	2490	2847	3543	
460 V 60 Hz or 380 V 50 Hz	5	3.7	20	10	617	982	1566	2480	3859	6152	7734	9767											
	7.5	5.5	30	20	436	694	1107	1753	2728	4349	5467	6904	8698										
	10	7.5	45	25	-	488	778	1233	1918	3057	3844	4854	6115	7719	9738								
	15	11	70	40	-	-	546	865	1347	2147	2699	3408	4293	5419	6837	8631							
	20	15	90	50	-	-	-	646	1005	1601	2013	2543	3203	4043	5101	6439	8113	9578					
	25	18.5	110	60	-	-	-	535	833	1328	1669	2108	2655	3351	4228	5338	6725	7939	9531				
	30	22	125	70	-	-	-	-	745	1187	1492	1884	2374	2997	3781	4773	6013	7099	8522	9961			
	40	30	150	100	-	-	-	-	-	870	1093	1381	1740	2196	2770	3497	4406	5202	6244	7299	8345		

Lengths only meet the US National Electrical Code ampacity requirements for individual conductors rated 75° C in free air or water, NOT in magnetic enclosures, conduit or direct buried. Refer to NEC Table 310.15(B)(17) for more information.

GENERAL INFORMATION

CABLE SELECTION GUIDE PENTEK® 6" SUBMERSIBLE MOTORS

CABLE SELECTION

COPPER CABLE SIZE - FROM CONTROL BOX TO MOTOR (IN FEET)																					60° C		
MOTOR					AWG														MCM				
VOLTS / HZ	HP	KW	FUSE		14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500	
			STD	DUAL ELEMENT																			
THREE PHASE																							
230 V 60 Hz	5	3.7	45	25	-	-	391	620	965	1538	1933	2442	3076	3883	4899	6184	7791	9198					
	7.5	5.5	60	40	-	-	277	438	682	1087	1367	1726	2174	2745	3463	4372	5508	6502	7806	9124			
	10	7.5	90	50	-	-	-	-	479	764	961	1213	1529	1930	2434	3073	3872	4571	5488	6415	7334	9125	
	15	11	125	80	-	-	-	-	-	537	675	852	1073	1355	1709	2158	2719	3210	3853	4504	5149	6407	
	20	15	175	110	-	-	-	-	-	-	503	636	801	1011	1275	1610	2028	2394	2874	3360	3842	4780	
	25	18.5	225	125	-	-	-	-	-	-	-	527	664	838	1057	1334	1681	1985	2383	2785	3184	3962	
	30	22	250	125	-	-	-	-	-	-	-	-	593	749	945	1193	1503	1775	2130	2490	2847	3543	
460 V 60 Hz or 380 V 50 Hz	5	3.7	20	10	617	982	1566	2480	3859	6152	7734	9767											
	7.5	5.5	30	20	436	694	1107	1753	2728	4349	5467	6904	8698										
	10	7.5	45	25	-	-	778	1233	1918	3057	3844	4854	6115	7719	9738								
	15	11	70	40	-	-	546	865	1347	2147	2699	3408	4293	5419	6837	8631							
	20	15	90	50	-	-	-	646	1005	1601	2013	2543	3203	4043	5101	6439	8113	9578					
	25	18.5	110	60	-	-	-	-	833	1328	1669	2108	2655	3351	4228	5338	6725	7939	9531				
	30	22	125	70	-	-	-	-	745	1187	1492	1884	2374	2997	3781	4773	6013	7099	8522	9961			
	40	30	150	100	-	-	-	-	-	-	1093	1381	1740	2196	2770	3497	4406	5202	6244	7299	8345		

Lengths meet the US National Electrical Code ampacity requirements for either individual conductors or jacketed rated 60° C cable and can be in conduit or direct buried. Flat molded and web/ribbon cable are considered jacketed cable. Refer to NEC Table 310.15(B)(16) for more information.

* = motors are 8" diameter

CABLE SELECTION

COPPER CABLE SIZE - FROM CONTROL BOX TO MOTOR (IN FEET)																					75° C		
MOTOR					AWG													MCM					
VOLTS / HZ	HP	KW	FUSE		14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500	
			STD	DUAL ELEMENT																			
THREE PHASE																							
230 V 60 Hz	5	3.7	45	25	-	245	391	620	965	1538	1933	2442	3076	3883	4899	6184	7791	9198					
	7.5	5.5	60	40	-	-	277	438	682	1087	1367	1726	2174	2745	3463	4372	5508	6502	7806	9124			
	10	7.5	90	50	-	-	-	308	479	764	961	1213	1529	1930	2434	3073	3872	4571	5488	6415	7334	9125	
	15	11	125	80	-	-	-	-	337	537	675	852	1073	1355	1709	2158	2719	3210	3853	4504	5149	6407	
	20	15	175	110	-	-	-	-	-	400	503	636	801	1011	1275	1610	2028	2394	2874	3360	3842	4780	
	25	18.5	225	125	-	-	-	-	-	-	417	527	664	838	1057	1334	1681	1985	2383	2785	3184	3962	
	30	22	250	125	-	-	-	-	-	-	-	471	593	749	945	1193	1503	1775	2130	2490	2847	3543	
460 V 60 Hz or 380 V 50 Hz	5	3.7	20	10	617	982	1566	2480	3859	6152	7734	9767											
	7.5	5.5	30	20	436	694	1107	1753	2728	4349	5467	6904	8698										
	10	7.5	45	25	-	488	778	1233	1918	3057	3844	4854	6115	7719	9738								
	15	11	70	40	-	-	546	865	1347	2147	2699	3408	4293	5419	6837	8631							
	20	15	90	50	-	-	-	646	1005	1601	2013	2543	3203	4043	5101	6439	8113	9578					
	25	18.5	110	60	-	-	-	535	833	1328	1669	2108	2655	3351	4228	5338	6725	7939	9531				
	30	22	125	70	-	-	-	-	745	1187	1492	1884	2374	2997	3781	4773	6013	7099	8522	9961			
	40	30	150	100	-	-	-	-	-	870	1093	1381	1740	2196	2770	3497	4406	5202	6244	7299	8345		

Lengths meet the US National Electrical Code ampacity requirements for either individual conductors or jacketed rated 75° C cable and can be in conduit or direct buried. Flat molded and web/ribbon cable are considered jacketed cable. Refer to NEC Table 310.15(B)(16) for more information.

WARRANTY

Limited Warranty

Myers warrants to the original consumer purchaser ("Purchaser" or "You") of the products listed below, that they will be free from defects in material and workmanship for the Warranty Period shown below.

Product	Warranty Period whichever occurs first:
Jet pumps, small centrifugal pumps, submersible pumps and related accessories	12 months from date of original installation, or 18 months from date of manufacture
Fibrewound Tanks	5 years from date of original installation
Steel Pressure Tanks	5 years from date of original installation
Sump/Sewage/Effluent/Utility/Battery Backup Products	36 months from date of manufacture
Wastewater Solids Handling Pumps	12 months from date of shipment from factory or 18 months from date of manufacture

Our warranty applies only where such products are used in compliance with the requirements of the applicable product catalog and/or manuals. For additional information, please refer to the applicable standard limited warranty featured in the product manual.

Our warranty will not apply to any product that, in our sole judgement, has been subject to negligence, misapplication, improper installation, or improper maintenance. Without limiting the foregoing, operating a three phase motor with single phase power through a phase converter will void the warranty. Note also that three phase motors must be protected by three-leg, ambient compensated, extra-quick trip overload relays of the recommended size or the warranty is void.

Your only remedy, and MYERS's only duty, is that MYERS repair or replace defective products (at MYERS's choice). You must pay all labor and shipping charges associated with this warranty and must request warranty service through the installing dealer as soon as a problem is discovered. No request for service will be accepted if received after the Warranty Period has expired. This warranty is not transferable.

MYERS SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, OR CONTINGENT DAMAGES WHATSOEVER.

THE FOREGOING LIMITED WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE FOREGOING LIMITED WARRANTIES SHALL NOT EXTEND BEYOND THE DURATION PROVIDED HEREIN.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on the duration of an implied warranty, so the above limitations or exclusions may not apply to You. This warranty gives You specific legal rights and You may also have other rights which vary from state to state.

This Limited Warranty is effective January 1, 2021 and replaces all undated warranties and warranties dated before January 1, 2021.



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