PRODUCT CATALOG

Schaefer

SUBMERSIBLE PUMPS

RESIDENTIAL & LIGHT COMMERCIAL





franklinwater.com

Franklin Electric

Schaefer

SUBMERSIBLE PUMPS

Model Number Nomenclature 2

4" 3200 Series Pumps 4

Ordering Information 5
5 gpm 6
7 gpm 8
10 gpm 10
Dimensions 12

4" Tri-Seal Pumps 13

Ordering Information 14
10 gpm 16
15 gpm 18
20 gpm 20
25 gpm 22
Dimensions 24

4" Series V Pumps 26

Ordering Information 27
5 gpm 29
7 gpm 31
10 gpm 33
15 gpm 35
20 gpm 37
25 gpm 39
Dimensions 41

4" Tri-Seal High Capacity Pumps 42

Ordering Information 43
35 gpm 45
45 gpm 47
60 gpm 49
90 gpm 51

6" Tri-Seal High Capacity Pumps 53

Ordering Information 54
50 gpm 55
75 gpm 57
100 gpm 59
125 gpm 61

E Series Effluent Pumps 64

Ordering Information 65
10 gpm 66
20 gpm 68
35 gpm 70
45 gpm 72
60 gpm 74
90 gpm 76
Dimensions 78

C1 Series Cistern Pumps 79

Ordering Information 80

Submersible Pump Accessories 81

References 82

Friction Loss 82
Pipe Fittings 85
Pressure Loss 86
Pressure Tank Sizing 88
Reference Tables 89
Conversions 90
2- or 3-Wire Cable, 60 Hz 91

Warranty Information 92

For the most up-to-date product information, visit **franklinwater.com**.

MODEL NUMBER NOMENCLATURE

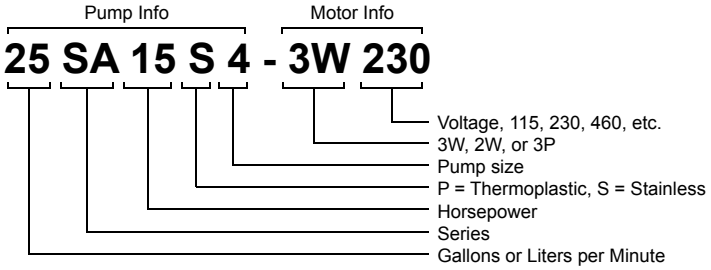
PUMP AND MOTOR BRAND/SERIES CODES

SR = Schaefer 3200 Series
SA = Schaefer Tri-Seal
SV = Schaefer Series V
SE = Schaefer Effluent
FH = Tri-Seal High Capacity

HORSEPOWER CODES

HP	1/3	1/2	3/4	1	1.5	2	3	5	7.5	10	15	20	25	30	35	40	50	60	75	100	125	150	175	200
Code	03	05	07	1	15	2	3	5	7	10	15	20	25	30	35	40	50	60	75	100	125	150	175	200

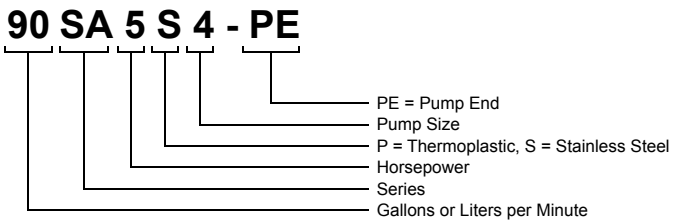
4" 5-25 GPM SUBMERSIBLE PUMPS/MOTORS



Examples:

15SA1S4-2W115 = 15 gpm, Schaefer 4400 Tri-Seal, Stainless Steel, 1 hp, 115 V, 2-wire Motor
10SA15SA-3W230 = 10 gpm, Schaefer 4400 Tri-Seal, Stainless Steel, 1.5 hp, 230 V, 3-wire Motor

PUMP END



Examples:

45SA3S4-PE = 45 gpm, Schaefer 4400, 3 hp, Stainless Steel, Pump End
25SE1P4-PE = 25 lpm, Schaefer E Series, 1 hp, Thermoplastic, Pump End

Schaefer

YOUR SUBMERSIBLE PUMP TEAM

Franklin's technical service hotline is made up of real people, offering real answers, in real time. Serving professional water systems distributors and contractors, our hotline boasts decades of collective industry experience. For answers to your water systems questions, contact our hotline by phone or email.

CUSTOMER RELATIONS

Please contact us at:
Toll Free: 800-269-0063
Fax: 260-827-5800
Email: cleanwater@fele.com

TECHNICAL SERVICE HOTLINE

Please contact us at:
Toll Free: 800-348-2420
Email: hotline@fele.com

ON THE WEB

Franklin Electric Website: www.franklinwater.com

FE DIRECT: https://next.fe-direct.com/

Connect with Us!



4" 3200 SERIES PUMPS

The 3200 Series submersible pumps are designed so that all parts of the pump end, including the cable guard, fall within the diameter of Franklin Electric's industry leading submersible 4" motor. This reduced diameter pump end makes it ideal for installations where the well is considered encrusted or tight in comparison to a standard 4" well. The 3200 Series also offers a hydraulic stage design optimized for greater water and pressure output when installed at deeper well depths. For details on how to become a registered dealer and receive a 5-year warranty, contact your local distributor.



C SP US
UL 778
CSA 108
NSF/ANSI 372
NSF/ANSI 61 (Pump end only)

FEATURES

- Pump diameter is smaller than a standard 4" submersible for easier installation in reduced diameter 4" wells
- Hex rubber bearing and ceramic shaft sleeve allows sand and abrasives to pass through, virtually eliminating shaft wear and upper bearing failures
- Improved hydraulic performance for deeper set depths at all horsepower and flow ratings
  - Floating stage design allows for maximum efficiency while minimizing the downthrust load that is transferred to the motor
  - Advanced thermoplastic diffuser and disc with 300 Series stainless steel thrust and eye seal protection for durability and abrasion resistance
  - Scalloped impellers provide high performance to increase pressure output while reducing system losses from friction
- Removable spring-loaded check valve
- Stainless steel pump intake screen and stainless steel cable guard
- Maximum water temperature: 120 °F/49 °C
- Powered by corrosion-resistant Franklin Electric submersible 4" motor with lightning protection

4" 3200 SERIES PUMPS - ORDERING INFORMATION

THERMOPLASTIC ORDERING INFORMATION

GPM	HP	Stages	Volts	2-Wire		3-Wire		
				Model	Order	Model	Order	Control Box
5	1/2	13	115	5SR05P4-2W115	96250505	5SR05P4-3W115	96250530	2801044915
	1/2	13	230	5SR05P4-2W230	96250510	5SR05P4-3W230	96250535	2801054915
	3/4	18	230	5SR07P4-2W230	96250515	5SR07P4-3W230	96250540	2801074915
	1	22	230	5SR1P4-2W230	96250520	5SR1P4-3W230	96250545	2801084915
7	1/2	10	115	7SR05P4-2W115	96250705	7SR05P4-3W115	96250730	2801044915
	1/2	10	230	7SR05P4-2W230	96250710	7SR05P4-3W230	96250735	2801054915
	3/4	13	230	7SR07P4-2W230	96250715	7SR07P4-3W230	96250740	2801074915
	1	18	230	7SR1P4-2W230	96250720	7SR1P4-3W230	96250745	2801084915
10	1/2	11	115	10SRD05P4-2W115	96251005	10SRD05P4-3W115	96251030	2801044915
	1/2	11	230	10SRD05P4-2W230	96251010	10SRD05P4-3W230	96251035	2801054915
	3/4	14	230	10SRD07P4-2W230	96251015	10SRD07P4-3W230	96251040	2801074915
	1	19	230	10SRD1P4-2W230	96251020	10SRD1P4-3W230	96251045	2801084915

NOTES: Discharge is 1-1/4" NPT. Maximum diameter across cable guard on all models is 3.75".

STAINLESS STEEL ORDERING INFORMATION

GPM	HP	Stages	Volts	2-Wire		3-Wire		
				Model	Order	Model	Order	Control Box
5	1/2	13	115	5SR05S4-2W115	96350505	5SR05S4-3W115	96350530	2801044915
	1/2	13	230	5SR05S4-2W230	96350510	5SR05S4-3W230	96350535	2801054915
	3/4	18	230	5SR07S4-2W230	96350515	5SR07S4-3W230	96350540	2801074915
	1	22	230	5SR1S4-2W230	96350520	5SR1S4-3W230	96350545	2801084915
	1.5	30	230	5SR15S4-2W230	96350525	5SR15S4-3W230	96350550	2823008610
7	1/2	10	115	7SR05S4-2W115	96350705	7SR05S4-3W115	96350730	2801044915
	1/2	10	230	7SR05S4-2W230	96350710	7SR05S4-3W230	96350735	2801054915
	3/4	13	230	7SR07S4-2W230	96350715	7SR07S4-3W230	96350740	2801074915
	1	18	230	7SR1S4-2W230	96350720	7SR1S4-3W230	96350745	2801084915
	1.5	23	230	7SR15S4-2W230	96350725	7SR15S4-3W230	96350750	2823008610
10	1/2	11	115	10SRD05S4-2W115	96351005	10SRD05S4-3W115	96351030	2801044915
	1/2	11	230	10SRD05S4-2W230	96351010	10SRD05S4-3W230	96351035	2801054915
	3/4	14	230	10SRD07S4-2W230	96351015	10SRD07S4-3W230	96351040	2801074915
	1	19	230	10SRD1S4-2W230	96351020	10SRD1S4-3W230	96351045	2801084915
	1.5	24	230	10SRD15S4-2W230	96351025	10SRD15S4-3W230	96351050	2823008610

NOTES: Discharge is 1-1/4" NPT. Maximum diameter across cable guard on all models is 3.75".

THERMOPLASTIC PUMP ENDS

GPM	HP	Stages	Model	Order
5	1/2	13	5SR05P4-PE	96260500
	3/4	18	5SR07P4-PE	96260501
	1	22	5SR1P4-PE	96260502
7	1/2	10	7SR05P4-PE	96260700
	3/4	13	7SR07P4-PE	96260701
	1	18	7SR1P4-PE	96260702
10	1/2	11	10SRD05P4-PE	96261000
	3/4	14	10SRD07P4-PE	96261001
	1	19	10SRD1P4-PE	96261002

NOTES: Discharge is 1-1/4" NPT. Maximum diameter across cable guard on all models is 3.75".

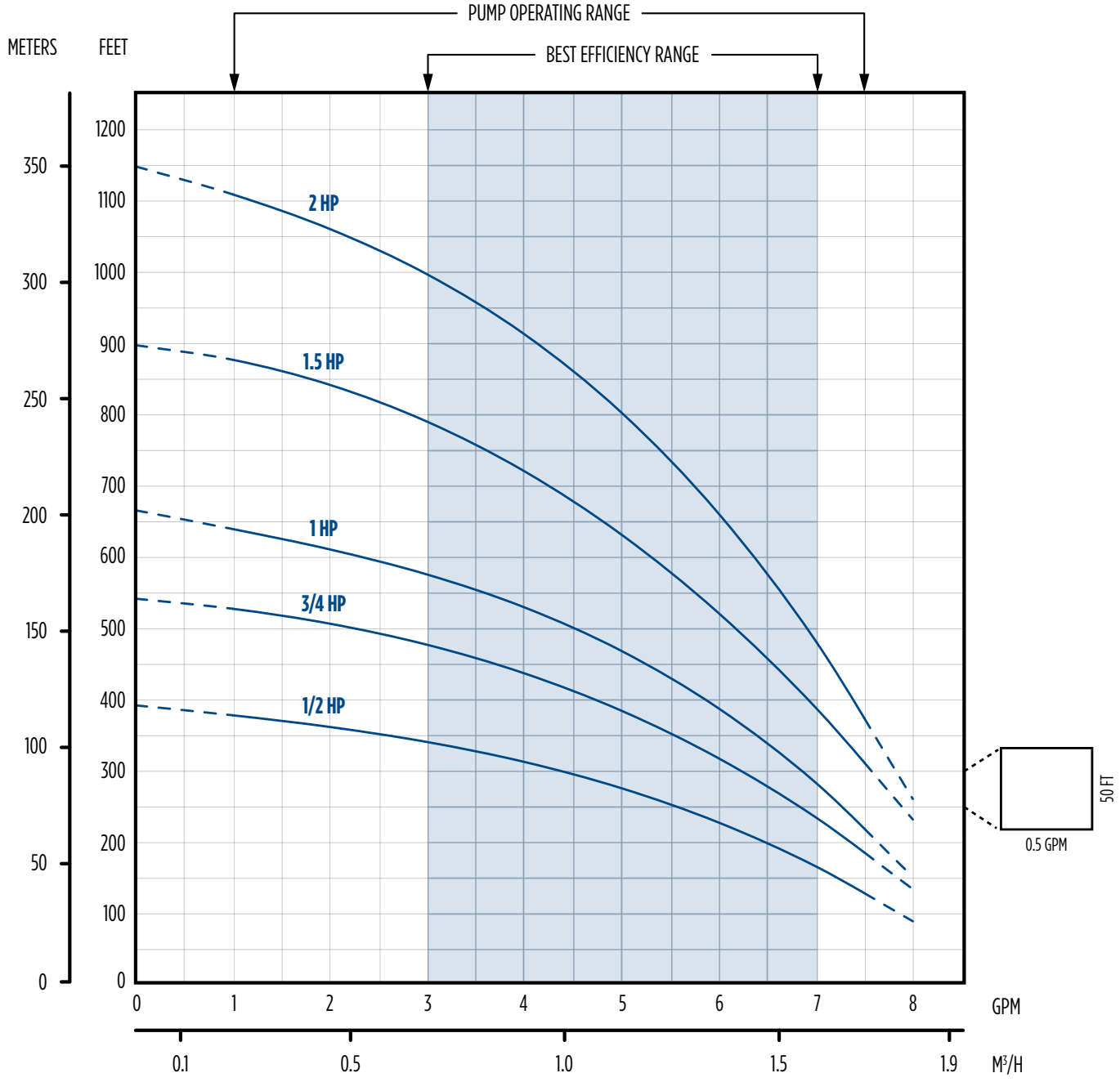
STAINLESS STEEL PUMP ENDS

GPM	HP	Stages	Model	Order
5	1/2	13	5SR05S4-PE	96360500
	3/4	18	5SR07S4-PE	96360501
	1	22	5SR1S4-PE	96360502
	1.5	30	5SR15S4-PE	96360503
	2	38	5SR2S4-PE	96360504
7	1/2	10	7SR05S4-PE	96360700
	3/4	13	7SR07S4-PE	96360701
	1	18	7SR1S4-PE	96360702
	1.5	23	7SR15S4-PE	96360703
	2	30	7SR2S4-PE	96360704
	3	38	7SR3S4-PE	96360705
10	1/2	11	10SRD05S4-PE	96361000
	3/4	14	10SRD07S4-PE	96361001
	1	19	10SRD1S4-PE	96361002
	1.5	24	10SRD15S4-PE	96361003

NOTES: Discharge is 1-1/4" NPT. Maximum diameter across cable guard on all models is 3.75".

4" 3200 SERIES PUMPS - 5 GPM

PERFORMANCE



Schaefer

4" 3200 SERIES PUMPS - 5 GPM

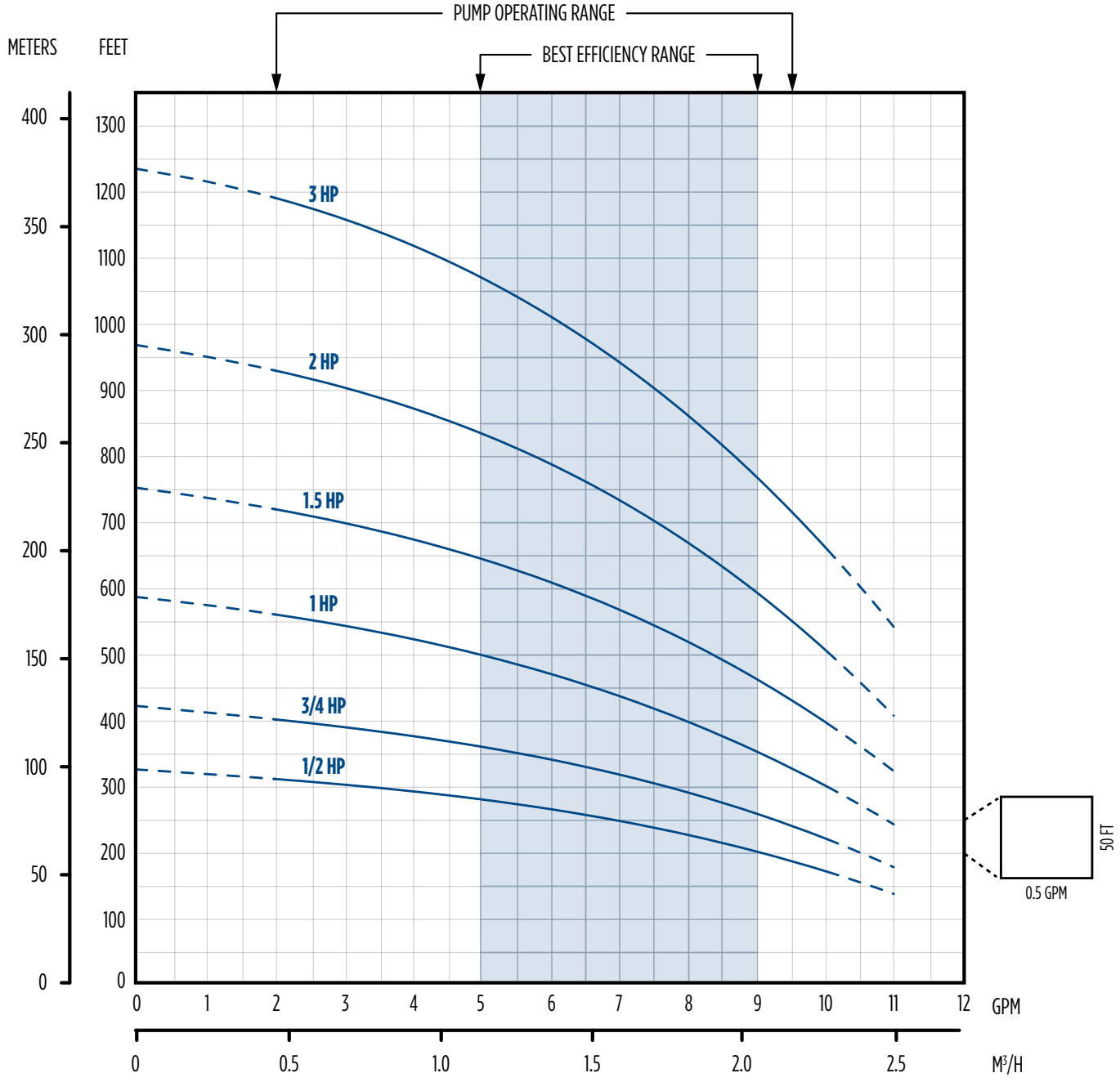
PERFORMANCE

HP	PSI	Depth To Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance																					
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	600	700	800	900	1000	Shut-Off (ft)
1/2	0				8	8	8	7	7	7	6	5	4	3									390
	20		8	8	8	7	7	7	6	6	6	4	3										
	30	8	8	7	7	7	7	6	6	6	5	4	1										
	40	8	7	7	7	7	6	6	6	5	5	3											
	50	7	7	7	7	6	6	5	5	4	4	2											
	60	7	7	6	6	6	5	5	4	4	3												
	80	6	6	6	5	5	4	4	3	2													
Shut-off PSI		161	152	143	135	126	117	109	100	91	83	61	39	18									
3/4	0						8	8	8	8	7	7	6	6	5	4	2						541
	20				8	8	8	7	7	7	7	6	6	5	4	2							
	30			8	8	8	7	7	7	7	7	6	5	4	3	1							
	40		8	8	8	7	7	7	7	7	6	6	5	4	3								
	50	8	8	8	7	7	7	7	7	6	6	5	4	3	2								
	60	8	8	7	7	7	7	6	6	6	6	5	4	3									
	80	7	7	7	7	6	6	6	6	5	5	4	3	1									
Shut-off PSI		226	217	209	200	191	183	174	165	157	148	126	105	83	61	39	18						
1	0							8	8	8	8	7	7	6	6	5	5	2					666
	20					8	8	8	8	7	7	7	6	6	5	5	4	1					
	30				8	8	8	8	7	7	7	7	6	6	5	4	3						
	40			8	8	8	8	7	7	7	7	6	6	5	5	4	3						
	50		8	8	8	8	7	7	7	7	7	6	6	5	4	3	2						
	60	8	8	8	7	7	7	7	7	7	6	6	5	5	4	3	1						
	80	8	7	7	7	7	7	7	6	6	6	5	5	4	3	1							
Shut-off PSI		280	271	263	254	245	237	228	219	211	202	180	159	137	115	94	72	29					
1.5	0										8	8	8	7	7	7	6	5	4	3			899
	20									8	8	8	7	7	7	6	6	5	4	2			
	30								8	8	8	7	7	7	6	6	6	5	3	1			
	40							8	8	8	8	7	7	7	6	6	5	4	3				
	50						8	8	8	8	7	7	7	6	6	6	5	4	3				
	60				8	8	8	8	8	7	7	7	7	6	6	5	5	4	2				
	80		8	8	8	8	8	7	7	7	7	7	6	6	5	5	4	3	1				
Shut-off PSI		381	372	364	355	346	338	329	320	312	303	281	260	238	216	195	173	130	86	43			
2	0											8	8	8	7	7	7	6	6	5	4	3	1152
	20										8	8	8	7	7	7	7	6	5	5	4	2	
	30									8	8	8	8	7	7	7	7	6	5	4	3	2	
	40								8	8	8	8	7	7	7	7	6	6	5	4	3	1	
	50							8	8	8	8	8	7	7	7	7	6	6	5	4	3	1	
	60						8	8	8	8	8	7	7	7	7	6	6	5	5	4	2		
	80				8	8	8	8	8	8	7	7	7	7	6	6	6	5	4	3	2		
Shut-off PSI		491	482	473	465	456	447	439	430	421	413	391	369	348	326	304	282	239	195	152	109	66	

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

4" 3200 SERIES PUMPS - 7 GPM

PERFORMANCE



Schaefer

4" 3200 SERIES PUMPS - 7 GPM

PERFORMANCE

HP	PSI	Depth To Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance																						
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	600	700	800	900	1000	Shut-Off (ft)
1/2	0				12	12	11	11	10	10	9	7	3										324
	20		12	12	11	11	10	9	9	8	7	4											
	30	12	12	11	11	10	9	9	8	7	6	1											
	40	12	11	11	10	9	9	8	7	5	4												
	50	11	10	10	9	8	8	7	5	4	1												
	60	10	10	9	8	7	6	5	3	1													
	80	9	8	7	6	5	3																
Shut-off PSI		132	123	115	106	97	89	80	71	63	54	32	10										
3/4	0						12	12	11	11	10	9	8	5	2								421
	20				12	12	11	11	10	10	9	8	6	2									
	30			12	12	11	11	10	10	9	9	7	4										
	40		12	11	11	11	10	10	9	9	8	6	3										
	50	12	11	11	11	10	10	9	8	8	7	5	1										
	60	11	11	10	10	10	9	8	8	7	6	3											
	80	10	10	9	9	8	7	7	6	5	3												
Shut-off PSI		174	165	156	148	139	130	122	113	104	96	74	52	31	9								
1	0								12	12	12	11	10	9	8	7	5						586
	20						12	12	11	11	11	10	9	8	7	5	3						
	30					12	12	11	11	11	11	10	9	7	6	4	1						
	40				12	12	11	11	11	10	10	9	8	7	5	3							
	50			12	12	11	11	11	10	10	10	9	8	6	5	2							
	60		12	12	11	11	11	10	10	10	9	8	7	5	3								
	80	12	11	11	11	10	10	10	9	9	8	7	6	3									
Shut-off PSI		245	237	228	219	211	202	193	185	176	167	146	124	102	81	59	37						
1.5	0										12	12	11	11	10	9	8	6	3				752
	20									12	12	11	11	10	9	8	7	5					
	30								12	12	12	11	10	10	9	8	7	4					
	40							12	12	12	11	11	10	9	8	8	6	3					
	50						12	12	12	11	11	10	10	9	8	7	6	2					
	60					12	12	11	11	11	11	10	9	9	8	7	5	1					
	80		12	12	12	11	11	11	11	10	10	9	9	8	7	5	4						
Shut-off PSI		317	309	300	291	283	274	265	257	248	139	218	196	174	153	131	109	66	23				
2	0												12	11	11	11	10	9	8	6	3		969
	20											12	12	11	11	10	10	8	7	5	1		
	30										12	12	11	11	10	10	9	8	6	4			
	40									12	12	12	11	11	10	10	9	8	6	3			
	50								12	12	12	11	11	10	10	9	9	7	5	3			
	60							12	12	12	12	11	11	10	10	9	8	7	5	2			
	80					12	12	12	12	11	11	11	10	10	9	8	8	6	4				
Shut-off PSI		411	403	394	385	376	368	359	350	342	333	312	290	268	247	225	203	160	117	73	30		

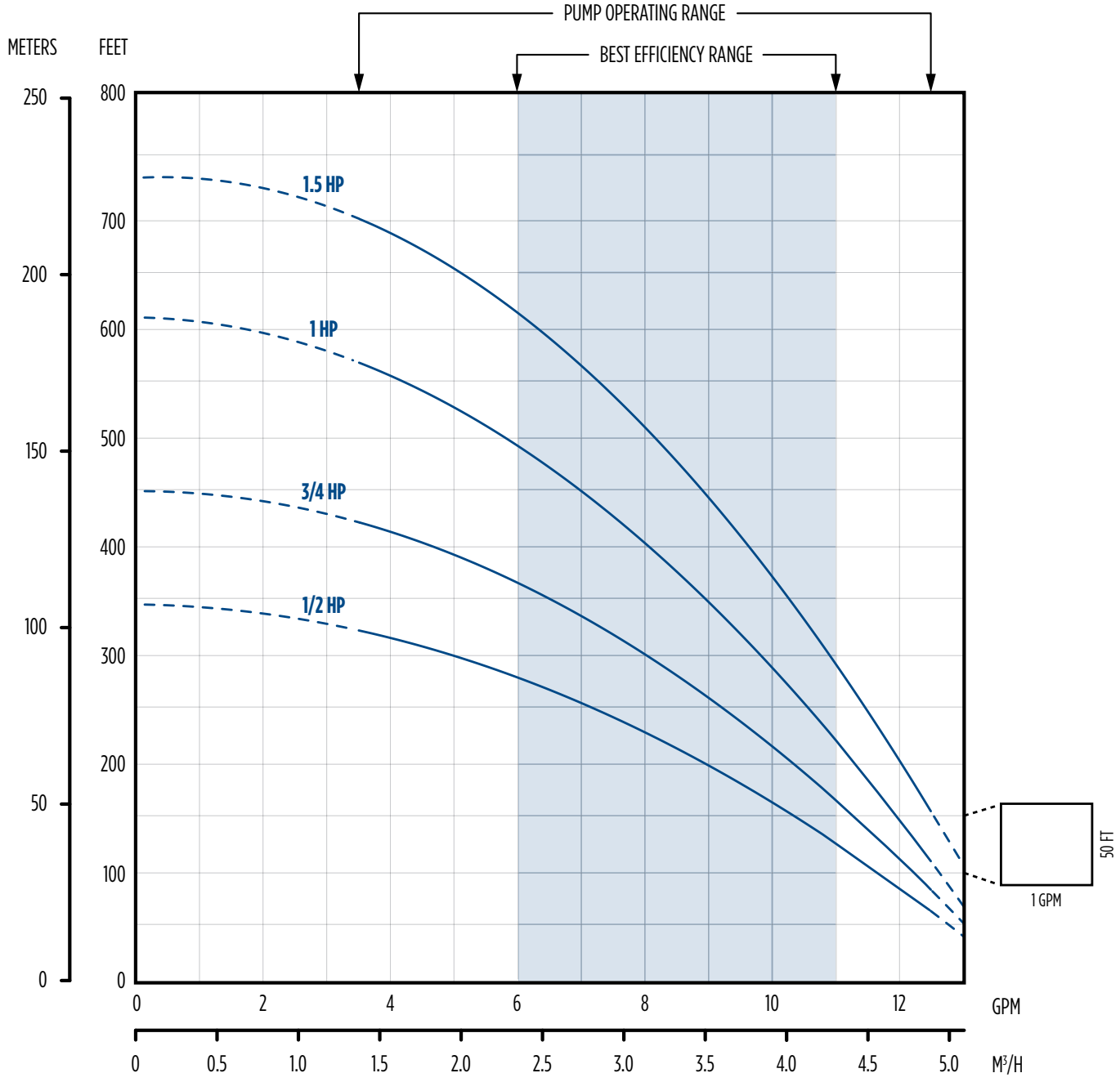
NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

HP	PSI	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	Shut-Off (ft)
3	0				12	11	11	10	9	8	6	4	2			1237
	20				12	11	10	9	8	7	5	3				
	30			12	12	11	10	9	8	7	5	3				
	40			12	11	11	10	9	8	6	5	2				
	50			12	11	10	10	9	7	6	4	1				
	60			12	11	10	9	8	7	6	4					
	80		12	11	11	10	9	8	6	5	2					
Shut-off PSI		493	450	406	363	319	276	233	189	146	103	59	16			

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

4" 3200 SERIES PUMPS - 10 GPM

PERFORMANCE



Schaefer

4" 3200 SERIES PUMPS - 10 GPM

PERFORMANCE

HP	PSI	Depth To Pumping Water Level, Lift, in Feet. Shaded Areas Indicate Most Efficient Performance																									
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	480	500	550	600	650	700	750	800	Shut-Off (ft)
1/2	0					12	12	11	11	10	10	9	8	6	4	0											353
	10				12	12	11	11	10	9	9	8	7	5	1	0											
	20		12	12	12	11	11	10	9	9	8	7	6	3	0												
	30	12	12	11	11	10	10	9	9	8	7	6	4	0													
	40	12	11	11	10	10	9	9	8	7	6	5	3	0													
	50	11	11	10	10	9	8	8	7	6	5	4	0														
	60	11	10	10	9	8	8	7	6	5	4	2	0														
	70	10	10	9	8	8	7	6	5	4	2	0															
	80	9	9	8	7	7	6	5	3	1	0																
Shut-off PSI		153	144	135	127	118	110	101	92	84	75	66	49	32	14	0											
3/4	0					13	12	12	12	11	11	10	9	9	7	6	5	2	0								455
	10				13	12	12	11	11	11	10	10	9	8	7	5	3	0									
	20		13	12	12	12	11	11	11	10	10	9	8	7	6	4	1	0									
	30	13	12	12	12	11	11	11	10	10	9	9	8	7	5	3	0										
	40	12	12	12	11	11	10	10	10	9	9	8	7	6	4	0											
	50	12	12	11	11	10	10	10	9	9	8	8	6	5	3	0											
	60	12	11	11	10	10	10	9	9	8	8	7	6	4	0												
	70	11	11	10	10	9	9	8	8	7	7	6	5	2	0												
	80	11	10	10	9	9	8	8	7	7	6	5	3	0													
Shut-off PSI		197	188	180	171	162	154	145	136	128	119	110	93	76	58	41	24	6	0								
1	0						13	12	12	12	12	11	11	10	9	9	8	7	6	6	4	2	0				618
	10					13	12	12	12	12	11	11	10	10	9	8	8	7	6	5	3	0					
	20				13	12	12	12	12	11	11	11	10	9	9	8	7	6	5	4	2	0					
	30		13	13	12	12	12	11	11	11	11	10	10	9	8	7	7	6	4	4	0						
	40	13	12	12	12	12	11	11	11	11	10	10	9	9	8	7	6	5	3	2	0						
	50	12	12	12	12	11	11	11	11	10	10	10	9	8	7	6	5	4	2	0							
	60	12	12	12	11	11	11	10	10	10	10	9	8	8	7	6	5	3	0								
	70	12	12	11	11	11	10	10	10	9	9	9	8	7	6	5	4	2	0								
	80	12	11	11	11	10	10	10	9	9	9	8	8	7	6	4	3	0									
Shut-off PSI		268	259	250	242	233	224	216	207	198	190	181	164	146	129	112	94	77	60	51	29	8	0				
1.5	0										13	12	12	11	11	11	10	9	9	9	8	7	6	4	2	0	765
	10								13	13	12	12	12	11	11	10	10	9	9	8	7	6	5	4	0		
	20							13	12	12	12	12	11	11	10	10	9	9	8	8	7	6	5	3	0		
	30						13	12	12	12	12	12	11	11	10	10	9	8	8	7	7	5	4	0			
	40					13	12	12	12	12	12	11	11	10	10	9	9	8	7	7	6	5	3	0			
	50				13	12	12	12	12	12	11	11	11	10	10	9	8	8	7	7	5	4	0				
	60			13	12	12	12	12	11	11	11	11	10	10	9	9	8	7	7	6	5	3	0				
	70	13	13	12	12	12	12	11	11	11	11	11	10	9	9	8	8	7	6	6	4	0					
	80	12	12	12	12	12	11	11	11	11	10	10	10	9	9	8	7	6	5	5	3	0					
Shut-off PSI		331	323	314	305	297	288	279	271	262	253	245	227	210	193	175	158	141	123	115	93	71	50	28	6	0	

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

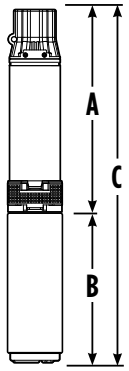
4" 3200 SERIES PUMPS - DIMENSIONS

THERMOPLASTIC

GPM	HP	Stages	2-Wire					3-Wire				
			Dimensions (in)			Wt. (lbs)		Dimensions (in)			Wt. (lbs)	
			A	B	C	PE	PMA	A	B	C	PE	PMA
5	1/2	13	18.4	9.5	27.9	8	27	18.4	9.5	27.9	8	27
	3/4	18	22.6	10.6	33.3	10	31	22.6	10.6	33.3	10	31
	1	22	26.0	11.7	37.7	11	35	26.0	11.7	37.7	11	35
7	1/2	10	15.9	9.5	25.4	7	26	15.9	9.5	25.4	7	26
	3/4	13	18.4	10.6	29.0	9	30	18.4	10.6	29.0	9	30
	1	18	22.6	11.7	34.3	11	35	22.6	11.7	34.3	11	35
10	1/2	11	16.7	9.5	26.2	8	27	16.7	9.5	26.2	8	27
	1/2	11	16.7	9.5	26.2	8	27	16.7	9.5	26.2	8	27
	3/4	14	19.2	10.6	29.8	10	31	19.2	10.6	29.8	10	31
	1	19	23.5	11.7	35.2	12	36	23.5	11.7	35.2	12	36

NOTES: PE = Pump end only; PMA = Pump and motor assembly; Diameter with cable guard is 3.75"

Thermoplastic

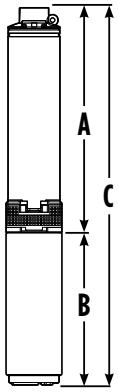


STAINLESS STEEL

GPM	HP	Stages	2-Wire					3-Wire				
			Dimensions (in)			Wt. (lbs)		Dimensions (in)			Wt. (lbs)	
			A	B	C	PE	PMA	A	B	C	PE	PMA
5	1/2	13	17	9.5	28.5	10	29	17	9.5	26.5	10	29
	3/4	18	21.2	10.6	31.9	12	33	21.2	10.6	31.9	12	33
	1	22	24.6	11.7	36.3	13	27	24.6	11.7	36.3	13	27
	1.5	30	32.7	15.1	47.8	19	50	32.7	13.6	46.3	19	50
	2	38	-	-	-	-	-	39.5	15.1	54.6	23	-
7	1/2	10	14.5	9.5	24.0	9	28	14.5	9.5	24.0	9	28
	3/4	13	17	10.6	27.6	11	32	17	10.6	27.6	11	32
	1	18	21.2	11.7	32.9	13	37	21.2	11.7	32.9	13	37
	1.5	23	25.4	15.1	40.5	17	48	25.4	13.6	39.0	17	48
	2	30	-	-	-	-	-	32.7	15.1	38.8	20	-
	3	38	-	-	-	-	-	39.5	19.04	58.5	23	-
10	1/2	11	15.3	9.5	25.8	10	29	15.3	9.5	24.8	10	29
	1/2	11	15.3	9.5	25.8	10	29	15.3	9.5	24.8	10	29
	3/4	14	17.8	10.6	28.5	12	33	17.8	10.6	28.4	12	33
	1	19	22.1	11.7	33.8	14	38	22.1	11.7	33.8	14	38
	1.5	24	26.3	15.1	41.4	18	49	26.3	13.6	39.9	18	49

NOTES: PE = Pump end only; PMA = Pump and motor assembly; Diameter with cable guard is 3.75"

Stainless Steel



Schaefer

4" TRI-SEAL PUMPS

The Tri-Seal 4" submersible pump features the Tri-Seal floating stage system. This stage system further improves efficiency and protects against wear when pumping abrasives. For details on how to become a registered dealer and receive a 5-year warranty, contact your local distributor.

FEATURES

- 300 Series stainless steel hub floats with the impeller maintaining a positive seal
- Phenolic washer provides downthrust protection
- Scalloped impellers provide high efficiency performance and abrasion resistance
- Advanced thermoplastic diffuser and disc - proven abrasion-resistant material
- Floating stage design allows impeller to float independently
- Removable, spring-loaded check valve
- Maximum water temperature: 120 °F/49 °C
- Ceramic shaft sleeve and rubber discharge bearing protect shaft and eliminate sand wear
- Powered by Franklin Electric corrosion-resistant super stainless 4" submersible motors with lightning protection
- Patented impeller hub seal system seals radially and axially to prevent fluid recirculation, providing high performance in the harshest conditions

Tri-Seal™
Floating Stage System
U.S. Patent No. 7,290,984



C SA US

UL 778
CSA 108
NSF/ANSI 372
NSF/ANSI 61 (Pump end only)



4" TRI-SEAL PUMPS - ORDERING INFORMATION

THERMOPLASTIC ORDERING INFORMATION

GPM	HP	Stages	Volts	2-Wire			3-Wire			
				Model	Order	Motor	Model	Order	Motor	Control Box
10	1/2	6	115	10SA05P4-2W115	93701005	2445049004GS	10SA05P4-3W115	93701030	2145049004GS	2801044915
	1/2	6	230	10SA05P4-2W230	93701010	2445059004GS	10SA05P4-3W230	93701035	2145059004GS	2801054915
	3/4	8	230	10SA07P4-2W230	93701015	2445079004GS	10SA07P4-3W230	93701040	2145079004GS	2801074915
	1	11	230	10SA1P4-2W230	93701020	2445089003GS	10SA1P4-3W230	93701045	2145089003GS	2801084915
	1.5	15	230	10SA15P4-2W230	93701025	2443099004GS	10SA15P4-3W230	93701050	2243009203GS	2823008110
15	1/2	4	115	15SA05P4-2W115	93701505	2445049004GS	15SA05P4-3W115	93701530	2145049004GS	2801044915
	1/2	4	230	15SA05P4-2W230	93701510	2445059004GS	15SA05P4-3W230	93701535	2145059004GS	2801054915
	3/4	6	230	15SA07P4-2W230	93701515	2445079004GS	15SA07P4-3W230	93701540	2145079004GS	2801074915
	1	9	230	15SA1P4-2W230	93701520	2445089003GS	15SA1P4-3W230	93701545	2145089003GS	2801084915
	1.5	11	230	15SA15P4-2W230	93701525	2443099004GS	15SA15P4-3W230	93701550	2243009203GS	2823008110
20	3/4	5	230	20SA07P4-2W230	93702015	2445079004GS	20SA07P4-3W230	93702040	2145079004GS	2801074915
	1	7	230	20SA1P4-2W230	93702020	2445089003GS	20SA1P4-3W230	93702045	2145089003GS	2801084915
	1.5	10	230	20SA15P4-2W230	93702025	2443099004GS	20SA15P4-3W230	93702050	2243009203GS	2823008110
25	1	6	230	25SA1P4-2W230	93702520	2445089003GS	25SA1P4-3W230	93702545	2145089003GS	2801084915
	1.5	8	230	25SA15P4-2W230	93702525	2443099004GS	25SA15P4-3W230	93702550	2243009203GS	2823008110

NOTES: Discharge is 1-1/4" NPT. Maximum diameter across cable guard is 3.90" on all models.

STAINLESS STEEL ORDERING INFORMATION

GPM	HP	Stages	Volts	2-Wire			3-Wire			
				Model	Order	Motor	Model	Order	Motor	Control Box
10	1/2	6	115	10SA05S4-2W115	93721005	2445049004GS	10SA05S4-3W115	93721030	2145049004GS	2801044915
	1/2	6	230	10SA05S4-2W230	93721010	2445059004GS	10SA05S4-3W230	93721035	2145059004GS	2801054915
	3/4	8	230	10SA07S4-2W230	93721015	2445079004GS	10SA07S4-3W230	93721040	2145079004GS	2801074915
	1	11	230	10SA1S4-2W230	93721020	2445089003GS	10SA1S4-3W230	93721045	2145089003GS	2801084915
	1.5	15	230	10SA15S4-2W230	93721025	2443099004GS	10SA15S4-3W230	93721050	2243009203GS	2823008110
15	1/2	4	115	15SA05S4-2W115	93721505	2445049004GS	15SA05S4-3W115	93721530	2145049004GS	2801044915
	1/2	4	230	15SA05S4-2W230	93721510	2445059004GS	15SA05S4-3W230	93721535	2145059004GS	2801054915
	3/4	6	230	15SA07S4-2W230	93721515	2445079004GS	15SA07S4-3W230	93721540	2145079004GS	2801074915
	1	9	230	15SA1S4-2W230	93721520	2445089003GS	15SA1S4-3W230	93721545	2145089003GS	2801084915
	1.5	11	230	15SA15S4-2W230	93721525	2443099004GS	15SA15S4-3W230	93721550	2243009203GS	2823008110
20	3/4	5	230	20SA07S4-2W230	93722015	2445079004GS	20SA07S4-3W230	93722040	2145079004GS	2801074915
	1	7	230	20SA1S4-2W230	93722020	2445089003GS	20SA1S4-3W230	93722045	2145089003GS	2801084915
	1.5	10	230	20SA15S4-2W230	93722025	2443099004GS	20SA15S4-3W230	93722050	2243009203GS	2823008110
25	1	6	230	25SA1S4-2W230	93722520	2445089003GS	25SA1S4-3W230	93722545	2145089003GS	2801084915
	1.5	8	230	25SA15S4-2W230	93722525	2443099004GS	25SA15S4-3W230	93722550	2243009203GS	2823008110

NOTES: Discharge is 1-1/4" NPT. Maximum diameter across cable guard is 3.90" on all models.

4" TRI-SEAL PUMPS - ORDERING INFORMATION

THERMOPLASTIC PUMP ENDS

GPM	HP	Stages	Model	Order
10	1/2	6	10SA05P4-PE	93711005
	3/4	8	10SA07P4-PE	93711010
	1	11	10SA1P4-PE	93711015
	1.5	15	10SA15P4-PE	93711020
15	1/2	4	15SA05P4-PE	93711505
	3/4	6	15SA07P4-PE	93711510
	1	9	15SA1P4-PE	93711515
	1.5	11	15SA15P4-PE	93711520
20	3/4	5	20SA07P4-PE	93712010
	1	7	20SA1P4-PE	93712015
	1.5	10	20SA15P4-PE	93712020
25	1	6	25SA1P4-PE	93712515
	1.5	8	25SA15P4-PE	93712520

NOTES: Discharge is 1-1/4" NPT. Maximum diameter across cable guard is 3.90" on all models.

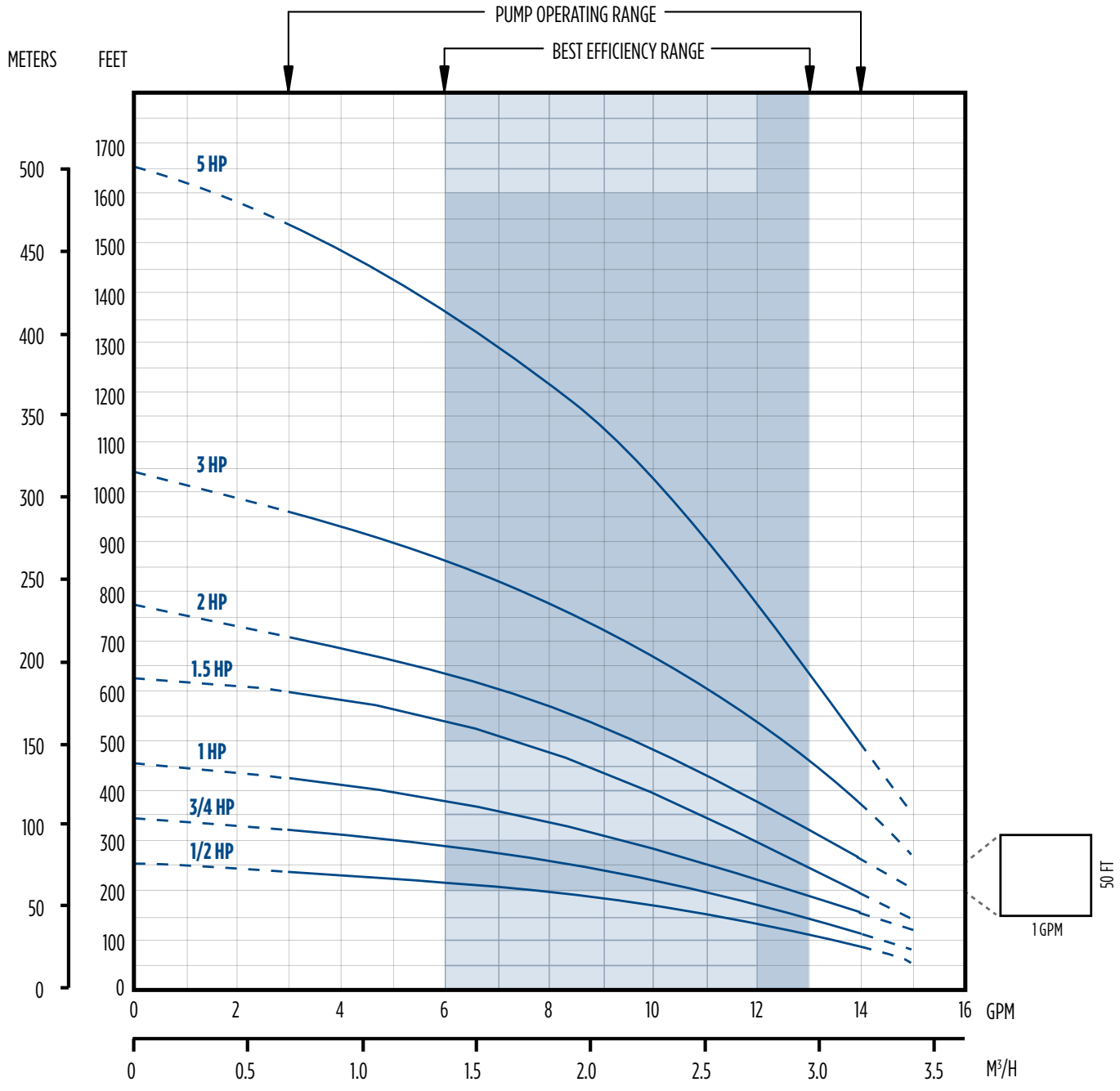
STAINLESS STEEL PUMP ENDS

GPM	HP	Stages	Model	Order
10	1/2	6	10SA05S4-PE	93731005
	3/4	8	10SA07S4-PE	93731010
	1	11	10SA1S4-PE	93731015
	1.5	15	10SA15S4-PE	93731020
	2	18	10SA2S4-PE	93731025
	3	24	10SA3S4-PE	93731030
	5	39	10SA5S4-PE	93731035
15	1/2	4	15SA05S4-PE	93731505
	3/4	6	15SA07S4-PE	93731510
	1	9	15SA1S4-PE	93731515
	1.5	11	15SA15S4-PE	93731520
	2	14	15SA2S4-PE	93731525
	3	19	15SA3S4-PE	93731530
	5	31	15SA5S4-PE	93731535
20	3/4	5	20SA07S4-PE	93732010
	1	7	20SA1S4-PE	93732015
	1.5	10	20SA15S4-PE	93732020
	2	12	20SA2S4-PE	93732025
	3	16	20SA3S4-PE	93732030
	5	26	20SA5S4-PE	93732035
	7.5	39	20SA7S4-PE	93732040
	10	52	20SA10S4-PE	93732045
25	1	6	25SA1S4-PE	93732515
	1.5	8	25SA15S4-PE	93732520
	2	10	25SA2S4-PE	93732525
	3	14	25SA3S4-PE	93732530
	5	23	25SA5S4-PE	93732535
	7.5	35	25SA7S4-PE	93732540
	10	44	25SA10S4-PE	93732545

NOTES: Discharge is 1-1/4" NPT. Maximum diameter across cable guard is 3.90" on all models.

4" TRI-SEAL PUMPS - 10 GPM

PERFORMANCE



Schaefer

4" TRI-SEAL PUMPS - 10 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																							
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	Shut-Off (ft)
1/2	0				14	13	12	11	10	9	7														244
	20	14	13	13	12	11	10	8	6	3															
	30	13	13	12	11	10	8	6	3																
	40	13	12	11	10	8	6	3																	
	50	12	11	9	8	5	3																		
	60	11	10	7	4																				
	80	8	6	4																					
Shut-off PSI		97	88	80	71	62	54	45	36	28	19														
3/4	0					14	13	13	12	11	10	7	8	4											338
	20		14	14	13	12	12	11	10	9	8	6	4												
	30	14	14	13	12	12	11	10	9	8	7	3													
	40	14	13	12	12	11	10	9	8	7	6														
	50	13	12	11	11	10	9	8	7	5	3														
	60	12	11	11	10	9	8	6	5																
	80	11	10	9	8	6	5																		
Shut-off PSI		137	129	120	111	103	94	85	77	68	59	42	34	16											
1	0							14	13	13	12	11	10	9	7	4									444
	20					14	13	13	12	11	11	9	9	7	3										
	30				14	13	13	12	11	11	10	9	8	6											
	40			14	13	13	12	11	11	10	9	8	7	5											
	50		14	13	12	12	11	11	10	9	8	7	6												
	60	13	12	12	11	11	10	10	9	8	8	5	4												
	80	12	12	11	10	10	9	8	7	6	5														
Shut-off PSI		183	174	157	148	140	131	123	114	105	97	79	71	53	27	10									
1.5	0									14	13	13	12	12	10	9	9	8	7						615
	20							14	13	13	12	12	11	11	9	8	7	6	5						
	30						14	13	13	12	12	11	11	10	8	8	6	5	4						
	40					14	13	13	12	12	12	11	10	10	8	7	6	4							
	50				14	13	13	12	12	12	11	10	10	9	8	6	5	3							
	60		14	13	13	13	12	12	11	11	11	10	9	9	7	6	4								
	80	13	13	13	12	12	11	11	11	10	10	9	9	8	6	3									
Shut-off PSI		257	248	240	231	222	214	205	197	188	179	162	153	136	110	93	75	41	32						
2	0											14	13	13	12	11	10	10	9	6					770
	20										14	13	13	12	11	10	9	9	8	5					
	30									14	13	13	12	12	10	10	9	8	8	4					
	40								14	13	13	12	12	11	10	9	9	8	7	3					
	50							14	13	13	12	12	11	11	10	9	8	7	6						
	60					14	13	13	13	12	12	11	11	10	9	8	7	6	5						
	80			14	13	13	13	12	12	12	11	11	10	9	8	8	6	4	4						
Shut-off PSI		324	316	307	298	290	281	272	264	255	246	229	220	203	177	160	143	125	117	73					
3	0														14	13	13	12	12	11	9	7	5		1034
	20													14	13	13	12	12	12	10	8	6	3		
	30												14	14	13	13	12	12	11	10	8	5			
	40											14	14	13	13	12	12	11	11	9	7	4			
	50										14	14	14	13	12	12	11	11	11	9	7	4			
	60									14	14	14	13	13	12	12	11	11	10	9	6	3			
	80								14	14	13	13	13	12	12	11	11	10	10	8	5				
Shut-off PSI		438	430	421	413	404	395	387	378	369	361	343	335	317	291	274	257	240	231	188	144	101	58		

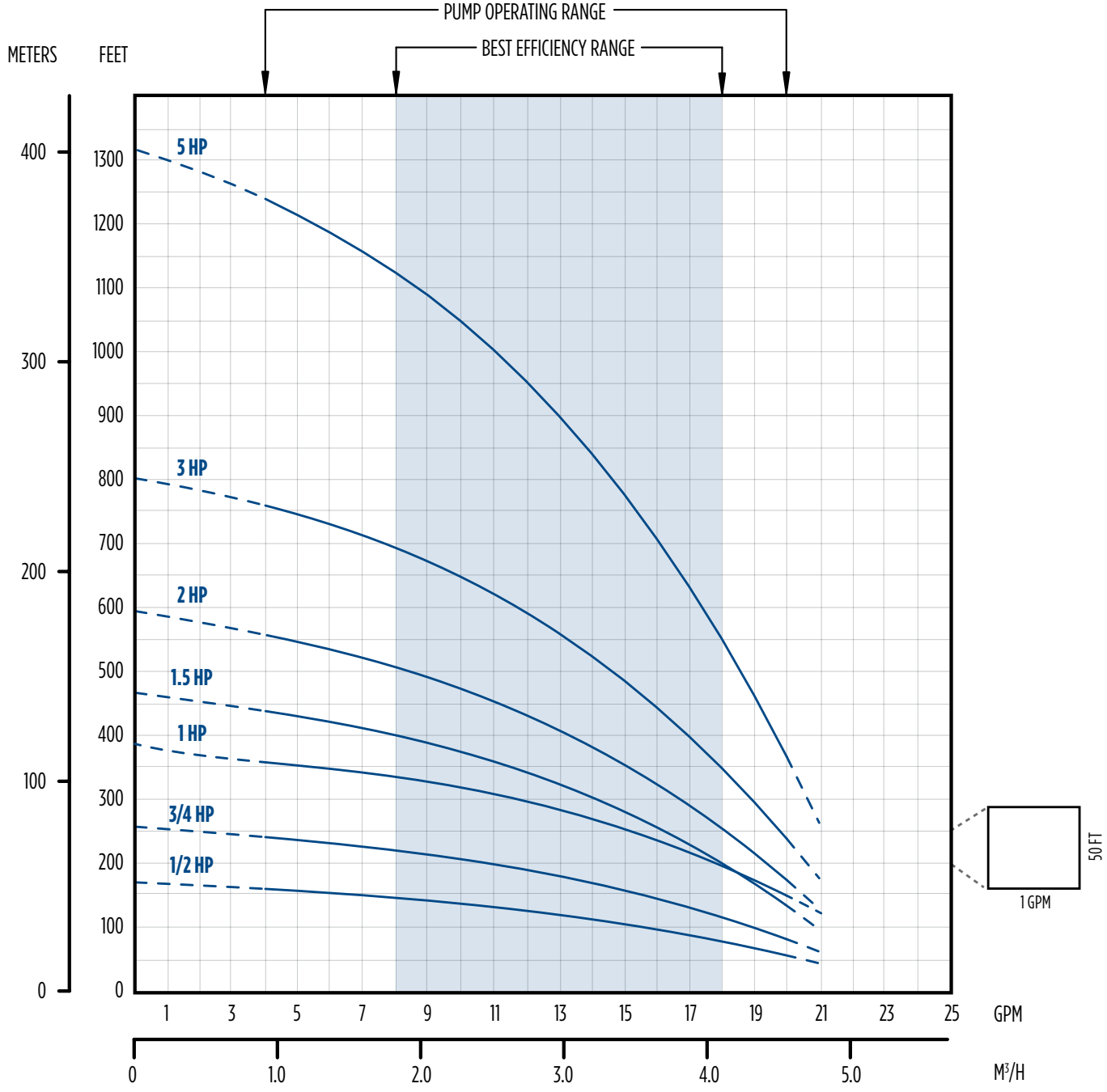
NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

HP	PSI	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	
5	0				14	13	13	12	11	11	10	9	8	6	5	1310
	20				14	13	12	12	11	10	9	8	7	6	4	
	30				14	13	12	12	11	10	9	8	7	5	4	
	40				14	13	12	11	11	10	9	8	7	5	3	
	50			14	13	13	12	11	10	9	9	7	6	5	3	
	60			14	13	13	12	11	10	9	8	7	6	4		
	80		14	14	13	12	11	11	10	9	8	7	5	3		
Shut-off PSI		670	626	583	540	497	453	410	367	324	280	237	194	151	107	

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

4" TRI-SEAL PUMPS - 15 GPM

PERFORMANCE



Schaefer

4" TRI-SEAL PUMPS - 15 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																									
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	1100	1200	Shut-Off (ft)
1/2	0			20	18	16	13	9	4																		
	20	19	17	15	12	8																					
	30	17	14	11	7																						
	40	14	11	6																							170
	50	10	5																								
	60	4																									
	80																										
Shut-off PSI		65	56	48	39	30	22	13	4																		
3/4	0				20	19	18	16	15	13	11																
	20		20	19	17	16	14	12	10	7																	
	30	20	18	17	16	14	12	10	6																		
	40	18	17	15	14	12	9	6																			257
	50	17	15	13	11	9	5																				
	60	15	13	11	8	4																					
	80	10	7																								
Shut-off PSI		103	94	85	77	68	59	51	42	33	25																

HP	PSI	Depth to Pumping Water Level, or Lift, in Feet Shaded Areas Indicate Most Efficient Performance																									
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	Shut-Off (ft)		
1	0								19	19	18	16	12	6													
	10							19	19	18	17	14	9	2													
	20					20	19	18	18	17	16	12	6														
	30				20	19	18	18	17	16	14	10	3														
	40			20	19	18	17	17	15	14	12	7															
	50		20	19	18	17	16	15	14	12	10	3															
	60	20	19	18	17	16	15	14	12	10	7																
	70	19	18	17	16	15	13	11	9	7	4																
	80	18	17	16	15	13	11	9	6	4	1																
	90	17	16	14	13	11	9	6	3																		
	100	15	14	13	11	8	6	3																			
	110	14	12	10	8	5	2																				
	120	12	10	7	5	2																					
	130	9	7	4	1																						
	140	7	4	1																							
	150	3																									
Shut-off psi			153	144	135	127	118	109	101	92	83	62	40	18													

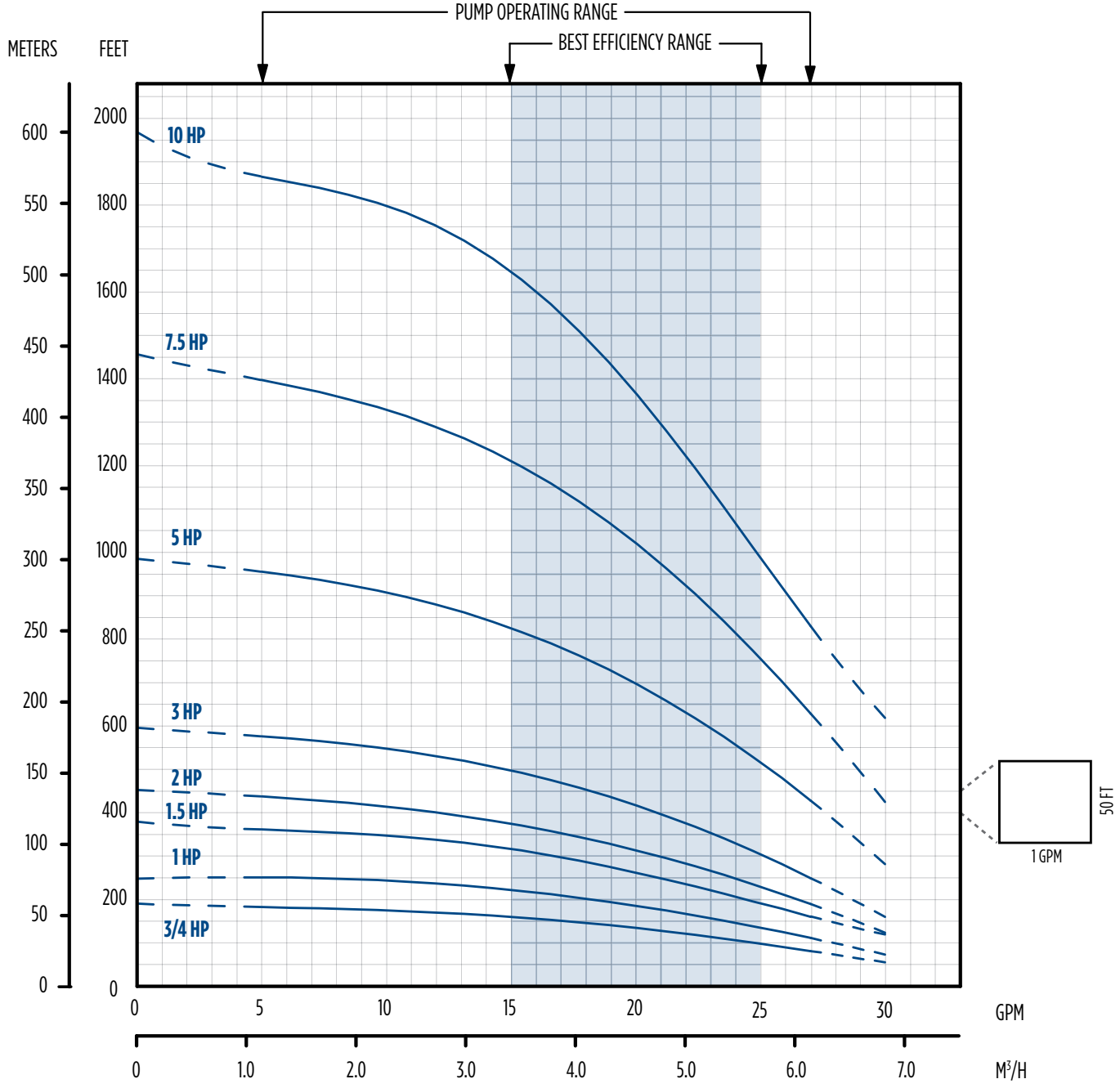
HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																									
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	1100	1200	Shut-Off (ft)
1.5	0						20	20	19	19	18	17	16	14	11	8	4										
	20				20	20	19	18	18	17	16	15	14	12	7												
	30			20	20	19	18	18	17	16	15	14	13	10	5												
	40		20	19	19	18	18	17	16	15	15	13	11	9													467
	50	20	19	19	18	17	17	16	15	14	13	11	10	7													
	60	19	19	18	17	17	16	15	14	13	12	10	8	4													
	80	18	17	16	16	15	14	13	12	11	9	6															
Shut-off PSI		193	185	176	167	159	150	141	133	124	115	98	89	72	46	29	11										
2	0								20	20	19	18	18	17	15	13	12	10	8								
	20						20	20	19	19	18	17	17	15	13	11	9	7	5								
	30					20	20	19	19	18	18	16	16	14	12	10	8	5									
	40			20	20	20	19	19	18	18	17	16	15	14	11	9	6										594
	50		20	20	19	19	19	18	17	17	16	15	14	13	10	7	4										
	60	20	20	19	19	18	18	17	17	16	16	14	13	12	9	6											
	80	19	19	18	18	17	17	16	15	15	14	12	11	9	5												
Shut-off PSI		249	240	231	223	214	205	197	188	179	171	153	145	127	101	84	67	49	41								
3	0											20	20	19	18	17	16	15	15	12	8						
	20								20	20	20	19	19	18	17	16	15	14	13	10	5						
	30							20	20	20	19	19	18	18	16	15	14	13	13	9							
	40						20	20	20	19	19	18	18	17	16	15	14	13	12	8							802
	50					20	20	20	19	19	19	18	18	17	15	14	13	12	11	7							
	60				20	20	20	19	19	19	18	17	17	16	15	14	12	11	10	5							
	80	20	20	20	20	19	19	19	18	18	17	16	16	15	13	12	11	9	8								
Shut-off PSI		339	330	321	313	304	295	287	278	269	261	243	235	217	191	174	157	139	131	87	44						

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																									
		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400												Shut-Off (ft)
5	0				20	19	17	16	15	13	11	9	6														
	20			20	19	18	17	15	14	12	10	7	4														
	30			20	19	18	17	15	14	12	9	7															
	40			20	19	18	16	15	13	11	9	6															1316
	50		20	19	18	17	16	14	13	11	8	5															
	60		20	19	18	17	16	14	12	10	8	4															
	80		20	19	18	16	15	13	11	9	6																
Shut-off PSI		527	483	440	397	353	310	267	224	180	137	94	50														

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

4" TRI-SEAL PUMPS - 20 GPM

PERFORMANCE



Schaefer

4" TRI-SEAL PUMPS - 20 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																							
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	Shut-Off (ft)
3/4	0				24	22	21	18	14																190
	20		23	21	19	17	12																		
	30	23	21	19	17	11																			
	40	21	19	17	10																				
	50	19	16	10																					
	60	14																							
Shut-off PSI		74	65	56	48	39	30	22	13																
1	0						26	25	23	20	18	11													251
	20			27	26	24	22	20	18	15	8														
	30		27	26	24	22	19	17	14	7															
	40	27	25	23	21	19	17	13																	
	50	25	23	21	19	16	12																		
	60	23	21	18	16	11																			
	70	20	18	15	10																				
	80	18	15	9																					
Shut-off PSI		100	91	83	74	66	57	48	40	31	22	5													
1.5	0								27	26	24	22	20	17	6										379
	20						27	25	24	23	21	18	16	10											
	30					26	25	24	22	21	20	16	13												
	40				26	25	23	22	21	19	18	13	8												
	50		27	26	25	23	22	21	19	17	15	7													
	60	27	26	24	23	22	20	19	17	15	11														
	70	26	24	23	21	20	19	17	14	11	5														
	80	24	23	21	20	18	16	14	10																
Shut-off PSI		156	147	138	130	121	112	104	95	86	78	60	52	34	8										
2	0											24	23	20	16	12									453
	20										24	21	20	17	12										
	30								24	23	22	20	19	16											
	40							24	23	22	21	19	17	14											
	50						24	23	22	20	19	16	14	10											
	60					24	23	22	20	19	18	14	12												
	80			24	23	21	20	19	18	16	14														
Shut-off PSI		187	179	170	161	153	144	135	127	118	110	92	84	66	40	23									
3	0													24	22	20	18	16	14						601
	20												24	23	20	17	15	12	10						
	30											24	23	21	18	16	13	10							
	40										24	23	22	20	17	14	11								
	50									24	24	22	21	19	16	13									
	60								24	24	23	21	20	18	14	10									
	80							24	23	22	20	18	17	15	10										
Shut-off PSI		251	242	234	225	216	208	199	190	182	173	156	147	130	104	87	69	52	43						
5	0																		24	23	20	16			770
	20																		24	21	18	13			
	30																	24	23	20	17	11			
	40																24	23	23	20	16	10			
	50																24	22	22	17	15				
	60															24	23	22	21	18	14				
	80														24	23	22	21	20	16	10				
Shut-off PSI		416	408	399	390	382	373	364	356	347	339	321	313	295	269	252	235	217	209	165	122	79			

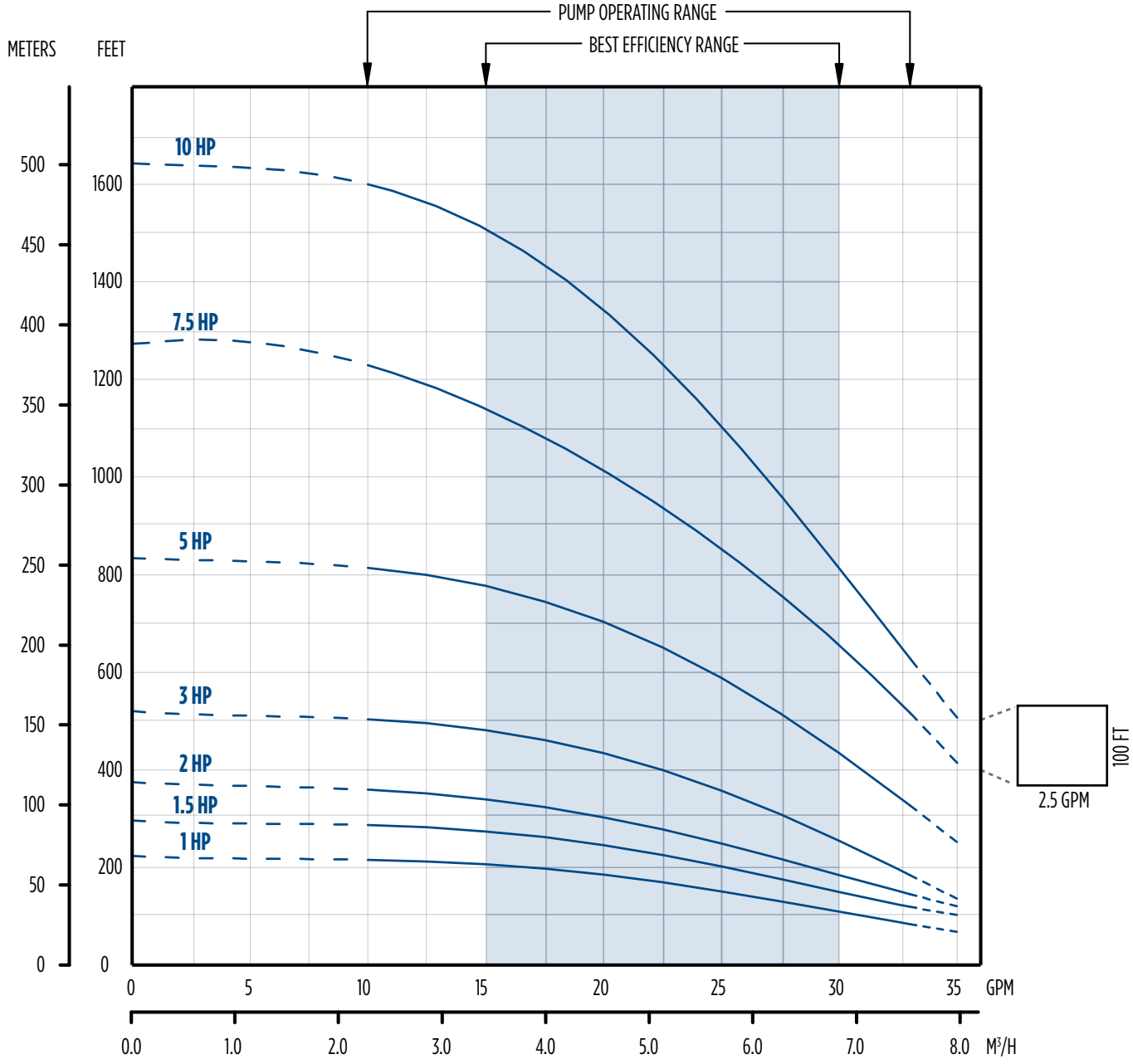
NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

HP	PSI	440	480	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	Shut-Off (ft)
7.5	0				27	26	24	22	20	18	15	11	5						170
	20				27	25	23	22	19	17	14	9							
	30				26	25	23	21	19	16	13	7							
	40				26	24	23	21	18	16	12	6							
	50			27	26	24	22	20	18	15	11								
	60		27	27	25	24	22	20	17	14	9								
	80	27	26	26	24	23	21	19	16	12	6								
Shut-off PSI		440	423	414	371	327	284	241	197	154	111	68	24						
10	0							26	25	23	22	21	20	18	16	13	9		257
	20						27	25	24	23	22	20	19	17	15	12	7		
	30						27	25	24	23	21	20	19	17	14	11	6		
	40						26	25	23	22	21	20	18	16	14	10			
	50					27	26	24	23	22	21	20	18	16	13	8			
	60					27	26	24	23	22	21	19	18	15	12	7			
	80					26	25	24	22	21	20	19	17	14	10	5			
Shut-off PSI		662	644	636	592	549	506	462	419	376	333	289	246	203	159	116	73		

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

4" TRI-SEAL PUMPS - 25 GPM

PERFORMANCE



Schaefer

4" TRI-SEAL PUMPS - 25 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																							
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	Shut-Off (ft)
1	0			35	33	31	28	26	24	21	17														222
	20		32	30	28	25	22	18	15																
	30	32	29	27	25	22	19																		
	40	29	27	25	22	19																			
	50	26	24	21	16																				
	60	24	21	17																					
Shut-off PSI		87	79	70	61	53	44	35	27	18	10														
1.5	0						33	31	29	27	25	21	19												297
	20				32	30	28	26	24	22	19														
	30			32	30	28	26	24	22	19	16														
	40	33	32	29	27	25	23	21	19	15															
	50	32	29	27	25	23	21	18																	
	60	29	27	25	23	20	18																		
	80	24	22	20	17																				
Shut-off PSI		120	111	103	94	85	77	68	59	51	42	25	16												
2	0							33	32	30	28	25	24	20											375
	20				34	33	31	29	28	26	25	21	20												
	30			34	33	31	29	28	26	24	23	19	17												
	40		34	33	31	29	28	26	24	23	21	17													
	50	33	32	30	29	27	26	24	22	20	18														
	60	32	30	28	27	26	24	22	20	18															
	80	28	26	25	23	21	20	17																	
Shut-off PSI		154	145	136	128	119	110	102	93	84	76	58	50	32											
3	0									33	32	30	29	28	24	22	19	15							519
	20						33	32	32	31	30	28	27	25	22	19									
	30					33	32	32	31	30	29	27	26	24	20										
	40				33	32	32	31	30	29	28	26	25	22	18										
	50			33	32	31	31	30	29	28	27	24	23	21	15										
	60		33	32	31	31	30	29	28	26	25	23	22	19											
	80	32	31	30	29	28	27	26	25	24	23	20	19	15											
Shut-off PSI		216	207	199	190	181	173	164	155	147	138	121	112	95	69	52	34	17							
5	0												33	32	31	30	28	28	24	20					833
	20											33	32	30	30	28	27	26	22	17					
	30										33	33	31	30	28	27	26	25	21	15					
	40									33	32	32	31	29	28	27	25	24	20						
	50								33	33	32	31	30	28	27	25	24	23	19						
	60							33	33	32	31	31	30	28	26	25	23	22	18						
	80					33	33	32	31	31	30	29	28	26	25	23	21	20							
Shut-off PSI		352	343	326	317	309	300	291	283	274	257	248	231	205	187	170	153	144	101	58					

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

HP	PSI	300	360	400	440	480	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	
7.5	0					33	33	31	29	26	23	20	17	12						1281
	20				33	32	32	31	28	25	22	19	15							
	30			33	33	32	32	30	27	24	21	18	14							
	40			33	32	32	31	29	27	24	21	17	12							
	50		33	33	32	31	31	29	26	23	20	17								
	60		33	32	32	31	31	28	25	22	19	16								
	80	33	32	32	31	30	30	27	24	21	18	13								
Shut-off PSI		425	399	382	364	347	338	295	252	208	165	122	78	35						
10	0							33	32	30	29	27	25	23	21	19	15	10		1642
	20							33	31	30	28	26	24	22	20	17	13			
	30							32	31	29	27	26	24	22	19	17	12			
	40						33	32	30	29	27	25	23	21	19	16	10			
	50					33	33	32	30	28	27	25	23	21	18	15				
	60					33	33	31	30	28	26	24	22	20	18	14				
	80				33	32	32	31	29	27	25	23	21	19	16	11				
Shut-off PSI		581	555	538	520	503	494	451	408	365	321	278	235	191	148	105	61	18		

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

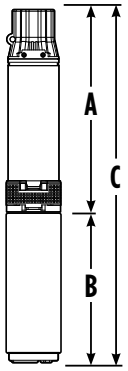
4" TRI-SEAL PUMPS - DIMENSIONS

THERMOPLASTIC

GPM	HP	Stages	2-Wire					3-Wire				
			Dimensions (in)			Wt. (lbs)		Dimensions (in)			Wt. (lbs)	
			A	B	C	PE	PMA	A	B	C	PE	PMA
5	1/2	8	14.12	9.51	23.63	8	26	14.12	9.51	23.63	8	26
	3/4	12	17.41	10.64	28.05	9	30	17.41	10.64	28.05	9	30
	1	15	19.87	11.73	31.60	10	34	19.87	11.73	31.60	10	34
	1.5	21	24.81	15.10	39.91	12	43	24.81	13.60	38.41	12	40
7	1/2	7	13.30	9.51	22.81	7	25	13.30	9.51	22.81	7	26
	3/4	10	15.76	10.64	26.40	8	29	15.76	10.64	26.40	8	29
	1	13	18.23	11.73	29.96	10	34	18.23	11.73	29.96	10	34
	1.5	18	22.34	15.10	37.44	11	42	22.34	13.60	35.94	11	39
10	1/2	6	12.97	9.51	22.48	7	25	12.97	9.51	22.48	7	26
	3/4	8	14.69	10.64	25.33	8	29	14.69	10.64	25.33	8	29
	1	11	17.44	11.73	29.17	9	33	17.44	11.73	29.17	9	33
	1.5	15	21.06	15.10	36.16	10	41	21.06	13.60	34.66	10	38
15	1/2	4	11.45	9.51	20.96	6	24	11.45	9.51	20.96	6	25
	3/4	6	12.97	10.64	23.61	7	28	12.97	10.64	23.61	7	28
	1	8	14.69	11.73	26.42	8	32	14.69	11.73	26.42	8	32
	1.5	11	17.44	15.10	32.54	9	40	17.44	13.60	31.04	9	37
20	3/4	5	13.65	10.64	24.29	6	28	13.65	10.64	24.29	6	28
	1	7	16.10	11.73	26.42	8	32	16.10	11.73	27.83	7	31
	1.5	10	19.77	15.10	34.87	8	39	19.77	13.60	33.37	8	36
25	1	6	14.88	11.73	26.61	7	31	14.88	11.73	26.61	7	31
	1.5	8	17.32	15.10	32.42	8	39	17.32	15.10	30.92	8	36

NOTES: PE = Pump end only; PMA = Pump and motor assembly; Maximum diameter with cable guard is 3.90"

Thermoplastic



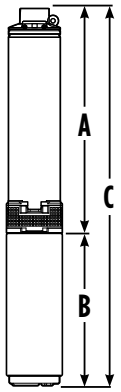
4" TRI-SEAL PUMPS - DIMENSIONS

STAINLESS STEEL

GPM	HP	Stages	2-Wire					3-Wire				
			Dimensions (in)			Wt. (lbs)		Dimensions (in)			Wt. (lbs)	
			A	B	C	PE	PMA	A	B	C	PE	PMA
5	1/2	8	13.57	9.51	23.08	10	28	13.57	9.51	23.08	10	29
	3/4	12	16.86	10.64	27.50	12	33	16.86	10.64	27.50	12	33
	1	15	19.33	11.73	31.06	14	38	19.33	11.73	31.06	14	38
	1.5	21	24.26	15.10	39.36	17	48	24.26	13.60	37.86	17	45
	2	26						30.46	15.10	45.56	20	-
7	1/2	7	12.75	9.51	22.26	9	27	12.75	9.51	22.26	9	28
	3/4	10	15.22	10.64	25.86	11	32	15.22	10.64	25.86	11	32
	1	13	17.68	11.73	29.41	13	37	17.68	11.73	29.41	13	37
	1.5	18	21.80	15.10	36.90	15	46	21.80	13.60	35.40	15	43
	2	24	-	-	-	-	-	26.73	15.10	41.83	19	-
	3	32	-	-	-	-	-	35.39	19.04	54.43	23	-
10	1/2	6	12.39	9.51	21.90	7	25	12.39	9.51	21.90	9	28
	3/4	8	14.14	10.64	24.78	10	31	14.14	10.64	24.78	10	31
	1	11	16.85	11.73	28.58	11	35	16.85	11.73	28.58	11	35
	1.5	15	20.48	15.10	35.58	14	45	20.48	13.60	34.08	14	42
	2	18	-	-	-	-	-	25.26	15.10	40.36	15	-
	3	19	-	-	-	-	-	26.17	19.04	45.21	16	-
	5	31	-	-	-	-	-	37.00	29.19	66.19	23	-
15	1/2	4	10.64	9.51	20.15	7	25	10.64	9.51	20.15	7	26
	3/4	6	12.39	10.64	23.03	9	30	12.39	10.64	23.03	9	30
	1	8	14.14	11.73	25.87	10	34	14.14	11.73	25.87	10	34
	1.5	11	16.85	15.10	31.95	11	42	16.85	13.60	30.45	11	39
	2	14	-	-	-	-	-	19.57	15.10	34.67	13	-
	3	19	-	-	-	-	-	26.17	19.04	45.21	16	-
	5	31	-	-	-	-	-	37.00	29.19	66.19	23	-
20	3/4	5	13.10	10.64	23.74	8	29	13.10	10.64	23.74	8	29
	1	7	15.55	11.73	27.28	9	33	15.55	11.73	27.28	9	33
	1.5	10	19.22	15.10	34.32	11	42	19.22	13.60	32.82	11	39
	2	12	-	-	-	-	-	21.66	15.10	36.76	12	-
	3	16	-	-	-	-	-	26.55	19.04	45.59	14	-
	5	26	-	-	-	-	-	40.86	29.19	70.05	20	-
	7.5	39	-	-	-	-	-	60.77	29.60	90.37	27	-
	10	52	-	-	-	-	-	76.66	32.60	109.26	35	-
25	1	6	14.33	11.73	26.06	9	33	14.33	11.73	26.06	9	33
	1.5	8	16.77	15.10	31.87	10	41	16.77	13.60	30.37	10	38
	2	10	-	-	-	-	-	19.22	15.10	34.32	11	-
	3	14	-	-	-	-	-	24.11	19.04	43.15	13	-
	5	23	-	-	-	-	-	37.19	28.19	66.38	18	-
	7.5	35	-	-	-	-	-	55.88	29.60	85.48	25	-
	10	44	-	-	-	-	-	66.88	32.60	99.48	30	-

NOTES: PE = Pump end only; PMA = Pump and motor assembly; Maximum diameter with cable guard is 3.90"

Stainless Steel



4" SERIES V PUMPS

The standard Series Five submersible pump features unique hydraulics that improve efficiency and minimize wear even when pumping abrasives. Discharge and motor brackets are available in thermoplastic or stainless steel with a removable check valve system. Available in 5, 7, 10, 15, 20, and 25 gpm, 1/2 - 5 horsepower. For details on how to become a registered dealer and receive a 5-year warranty, contact your local distributor.

FEATURES

- Six performance ranges: 5, 7, 10, 15, 20, and 25 gpm
- Horsepower ranges: 1/2 - 5
- Discharge head and motor bracket produced with industry-proven, engineered materials. Available in 300 Series stainless steel or high quality thermoplastic resins.
- Large wrench flat area on the discharge head for ease of installation
- Dry-run designed top bearing positively supports the 300 Series stainless steel 7/16" hex shaft
- Removable internal check valve
- Powered by Franklin Electric corrosion-resistant super stainless 4" submersible motors with lightning protection
- Maximum water temperature with proper flow is 120 °F/49 °C. Consult factory for details



C US

UL 778
CSA 108
NSF/ANSI 372
NSF/ANSI 61 (Pump end only)

4" SERIES V PUMPS - ORDERING INFORMATION

THERMOPLASTIC ORDERING INFORMATION

GPM	HP	Stages	Volts	2-Wire			3-Wire			
				Model	Order	Motor	Model	Order	Motor	Control Box
5	1/2	8	115	5SV05P4-2W115	95300505	2445049004GS	5SV05P4-3W115	95300530	2145049004GS	2801044915
	1/2	8	230	5SV05P4-2W230	95300510	2445059004GS	5SV05P4-3W230	95300535	2145059004GS	2801054915
	3/4	12	230	5SV07P4-2W230	95300515	2445079004GS	5SV07P4-3W230	95300540	2145079004GS	2801074915
	1	15	230	5SV1P4-2W230	95300520	2445089003GS	5SV1P4-3W230	95300545	2145089003GS	2801084915
	1.5	21	230	5SV15P4-2W230	95300525	2443099004GS	5SV15P4-3W230	95300550	2243009203GS	2823008110
7	1/2	7	115	7SV05P4-2W115	95300705	2445049004GS	7SV05P4-3W115	95300730	2145049004GS	2801044915
	1/2	7	230	7SV05P4-2W230	95300710	2445059004GS	7SV05P4-3W230	95300735	2145059004GS	2801054915
	3/4	10	230	7SV07P4-2W230	95300715	2445079004GS	7SV07P4-3W230	95300740	2145079004GS	2801074915
	1	13	230	7SV1P4-2W230	95300720	2445089003GS	7SV1P4-3W230	95300745	2145089003GS	2801084915
	1.5	18	230	7SV15P4-2W230	95300725	2443099004GS	7SV15P4-3W230	95300750	2243009203GS	2823008110
10	1/2	6	115	10SV05P4-2W115	95301005	2445049004GS	10SV05P4-3W115	95301030	2145049004GS	2801044915
	1/2	6	230	10SV05P4-2W230	95301010	2445059004GS	10SV05P4-3W230	95301035	2145059004GS	2801054915
	3/4	8	230	10SV07P4-2W230	95301015	2445079004GS	10SV07P4-3W230	95301040	2145079004GS	2801074915
	1	11	230	10SV1P4-2W230	95301020	2445089003GS	10SV1P4-3W230	95301045	2145089003GS	2801084915
	1.5	15	230	10SV15P4-2W230	95301025	2443099004GS	10SV15P4-3W230	95301050	2243009203GS	2823008110
15	1/2	4	115	15SV05P4-2W115	95301505	2445049004GS	15SV05P4-3W115	95301530	2145049004GS	2801044915
	1/2	4	230	15SV05P4-2W230	95301510	2445059004GS	15SV05P4-3W230	95301535	2145059004GS	2801054915
	3/4	6	230	15SV07P4-2W230	95301515	2445079004GS	15SV07P4-3W230	95301540	2145079004GS	2801074915
	1	8	230	15SV1P4-2W230	95301520	2445089003GS	15SV1P4-3W230	95301545	2145089003GS	2801084915
	1.5	11	230	15SV15P4-2W230	95301525	2443099004GS	15SV15P4-3W230	95301550	2243009203GS	2823008110
20	3/4	5	230	20SV07P4-2W230	95302015	2445079004GS	20SV07P4-3W230	95302040	2145079004GS	2801074915
	1	7	230	20SV1P4-2W230	95302020	2445089003GS	20SV1P4-3W230	95302045	2145089003GS	2801084915
	1.5	10	230	20SV15P4-2W230	95302025	2443099004GS	20SV15P4-3W230	95302050	2243009203GS	2823008110
25	1	6	230	25SV1P4-2W230	95302520	2445089003GS	25SV1P4-3W230	95302545	2145089003GS	2801084915
	1.5	8	230	25SV15P4-2W230	95302525	2443099004GS	25SV15P4-3W230	95302550	2243009203GS	2823008110

STAINLESS STEEL ORDERING INFORMATION

GPM	HP	Stages	Volts	2-Wire			3-Wire			
				Model	Order	Motor	Model	Order	Motor	Control Box
5	1/2	8	115	5SV05S4-2W115	95320505	2445049004GS	5SV05S4-3W115	95320530	2145049004GS	2801044915
	1/2	8	230	5SV05S4-2W230	95320510	2445059004GS	5SV05S4-3W230	95320535	2145059004GS	2801054915
	3/4	12	230	5SV07S4-2W230	95320515	2445079004GS	5SV07S4-3W230	95320540	2145079004GS	2801074915
	1	15	230	5SV1S4-2W230	95320520	2445089003GS	5SV1S4-3W230	95320545	2145089003GS	2801084915
	1.5	21	230	5SV15S4-2W230	95320525	2443099004GS	5SV15S4-3W230	95320550	2243009203GS	2823008110
7	1/2	7	115	7SV05S4-2W115	95320705	2445049004GS	7SV05S4-3W115	95320730	2145049004GS	2801044915
	1/2	7	230	7SV05S4-2W230	95320710	2445059004GS	7SV05S4-3W230	95320735	2145059004GS	2801054915
	3/4	10	230	7SV07S4-2W230	95320715	2445079004GS	7SV07S4-3W230	95320740	2145079004GS	2801074915
	1	13	230	7SV1S4-2W230	95320720	2445089003GS	7SV1S4-3W230	95320745	2145089003GS	2801084915
	1.5	18	230	7SV15S4-2W230	95320725	2443099004GS	7SV15S4-3W230	95320750	2243009203GS	2823008110
10	1/2	6	115	10SV05S4-2W115	95321005	2445049004GS	10SV05S4-3W115	95321030	2145049004GS	2801044915
	1/2	6	230	10SV05S4-2W230	95321010	2445059004GS	10SV05S4-3W230	95321035	2145059004GS	2801054915
	3/4	8	230	10SV07S4-2W230	95321015	2445079004GS	10SV07S4-3W230	95321040	2145079004GS	2801074915
	1	11	230	10SV1S4-2W230	95321020	2445089003GS	10SV1S4-3W230	95321045	2145089003GS	2801084915
	1.5	15	230	10SV15S4-2W230	95321025	2443099004GS	10SV15S4-3W230	95321050	2243009203GS	2823008110
15	1/2	4	115	15SV05S4-2W115	95321505	2445049004GS	15SV05S4-3W115	95321530	2145049004GS	2801044915
	1/2	4	230	15SV05S4-2W230	95321510	2445059004GS	15SV05S4-3W230	95321535	2145059004GS	2801054915
	3/4	6	230	15SV07S4-2W230	95321515	2445079004GS	15SV07S4-3W230	95321540	2145079004GS	2801074915
	1	8	230	15SV1S4-2W230	95321520	2445089003GS	15SV1S4-3W230	95321545	2145089003GS	2801084915
	1.5	11	230	15SV15S4-2W230	95321525	2443099004GS	15SV15S4-3W230	95321550	2243009203GS	2823008110
20	3/4	5	230	20SV07S4-2W230	95322015	2445079004GS	20SV07S4-3W230	95322040	2145079004GS	2801074915
	1	7	230	20SV1S4-2W230	95322020	2445089003GS	20SV1S4-3W230	95322045	2145089003GS	2801084915
	1.5	10	230	20SV15S4-2W230	95322025	2443099004GS	20SV15S4-3W230	95322050	2243009203GS	2823008110
25	1	6	230	25SV1S4-2W230	95322520	2445089003GS	25SV1S4-3W230	95322545	2145089003GS	2801084915
	1.5	8	230	25SV15S4-2W230	95322525	2443099004GS	25SV15S4-3W230	95322550	2243009203GS	2823008110



4" SERIES V PUMPS - ORDERING INFORMATION

THERMOPLASTIC PUMP ENDS

GPM	HP	Stages	Model	Order
5	0.5	8	5SV05P4-PE	95310500
	0.75	12	5SV07P4-PE	95310501
	1	15	5SV1P4-PE	95310502
	1.5	21	5SV15P4-PE	95310503
7	0.5	7	7SV05P4-PE	95310700
	0.75	10	7SV07P4-PE	95310701
	1	13	7SV1P4-PE	95310702
	1.5	18	7SV15P4-PE	95310703
10	0.5	6	10SV05P4-PE	95311000
	0.75	8	10SV07P4-PE	95311001
	1	11	10SV1P4-PE	95311002
	1.5	15	10SV15P4-PE	95311003
15	0.5	4	15SV05P4-PE	95311500
	0.75	6	15SV07P4-PE	95311501
	1	9	15SV1P4-PE	95311502
	1.5	11	15SV15P4-PE	95311503
20	0.75	5	20SV07P4-PE	95312001
	1	7	20SV1P4-PE	95312002
	1.5	10	20SV15P4-PE	95312003
25	1	6	25SV1P4-PE	95312501
	1.5	8	25SV15P4-PE	95312502

NOTES: Discharge is 1-1/4" NPT; Maximum diameter across cable guard is 3.90" on all models.

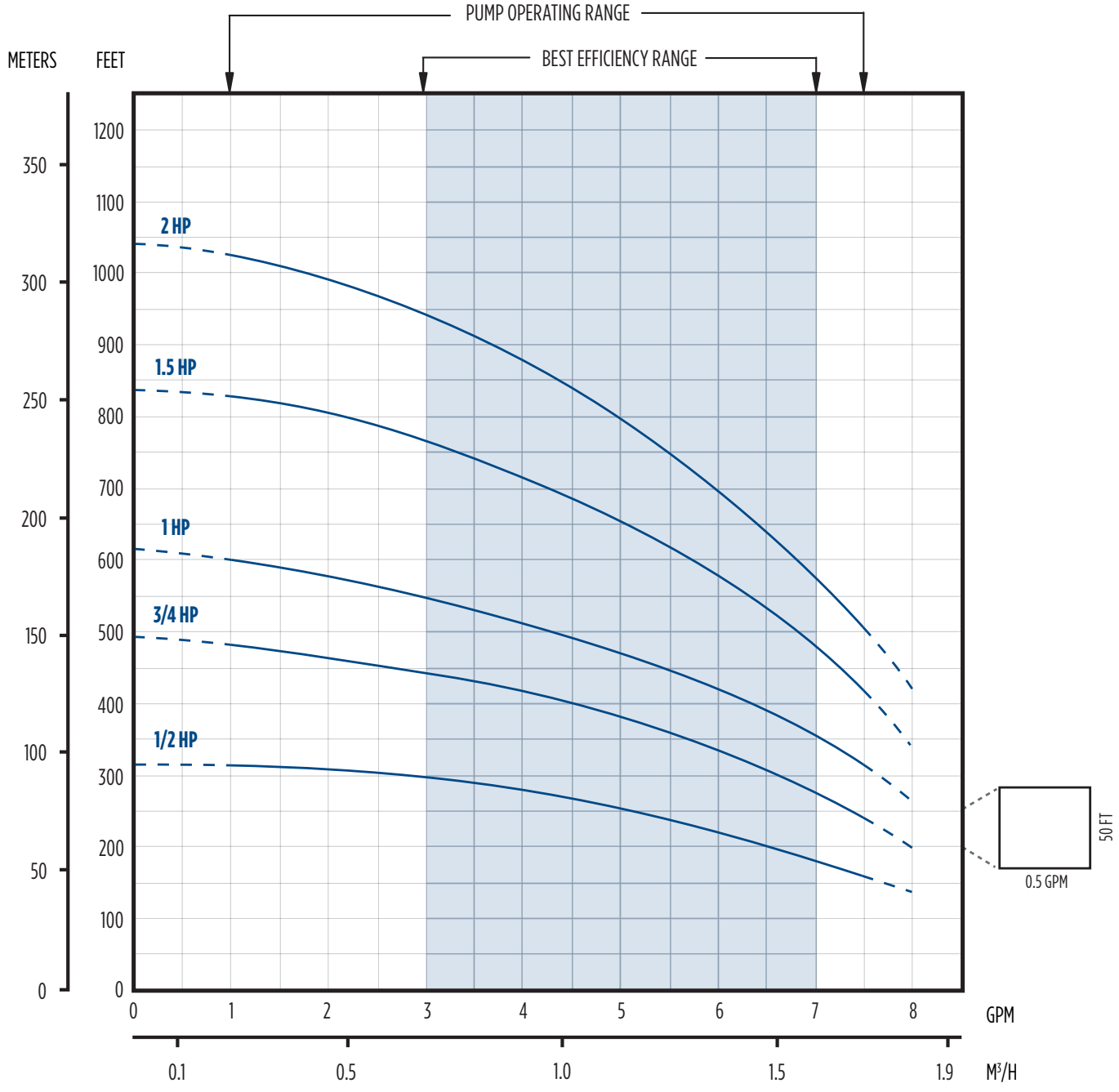
STAINLESS STEEL PUMP ENDS

GPM	HP	Stg.	Model	Order
5	0.5	8	5SV05S4-PE	95330500
	0.75	12	5SV07S4-PE	95330501
	1	15	5SV1S4-PE	95330502
	1.5	21	5SV15S4-PE	95330503
	2	26	5SV2S4-PE	95330504
7	0.5	7	7SV05S4-PE	95330700
	0.75	10	7SV07S4-PE	95330701
	1	13	7SV1S4-PE	95330702
	1.5	18	7SV15S4-PE	95330703
	2	24	7SV2S4-PE	95330704
	3	32	7SV3S4-PE	95330705
10	0.5	6	10SV05S4-PE	95331000
	0.75	8	10SV07S4-PE	95331001
	1	11	10SV1S4-PE	95331002
	1.5	15	10SV15S4-PE	95331003
	2	18	10SV2S4-PE	95331004
	3	24	10SV3S4-PE	95331005
	5	39	10SV5S4-PE	95331006
15	0.5	4	15SV05S4-PE	95331500
	0.75	6	15SV07S4-PE	95331501
	1	9	15SV1S4-PE	95331502
	1.5	11	15SV15S4-PE	95331503
	2	14	15SV2S4-PE	95331504
	3	19	15SV3S4-PE	95331505
	5	31	15SV5S4-PE	95331506
20	0.75	5	20SV07S4-PE	95332001
	1	7	20SV1S4-PE	95332002
	1.5	10	20SV15S4-PE	95332003
	2	12	20SV2S4-PE	95332004
	3	16	20SV3S4-PE	95332005
	5	26	20SV5S4-PE	95332006
25	1	6	25SV1S4-PE	95332501
	1.5	8	25SV15S4-PE	95332502
	2	10	25SV2S4-PE	95332503
	3	14	25SV3S4-PE	95332504
	5	23	25SV5S4-PE	95332505

NOTES: Discharge is 1-1/4" NPT; Maximum diameter across cable guard is 3.90" on all models

4" SERIES V PUMPS - 5 GPM

PERFORMANCE





4" SERIES V PUMPS - 5 GPM

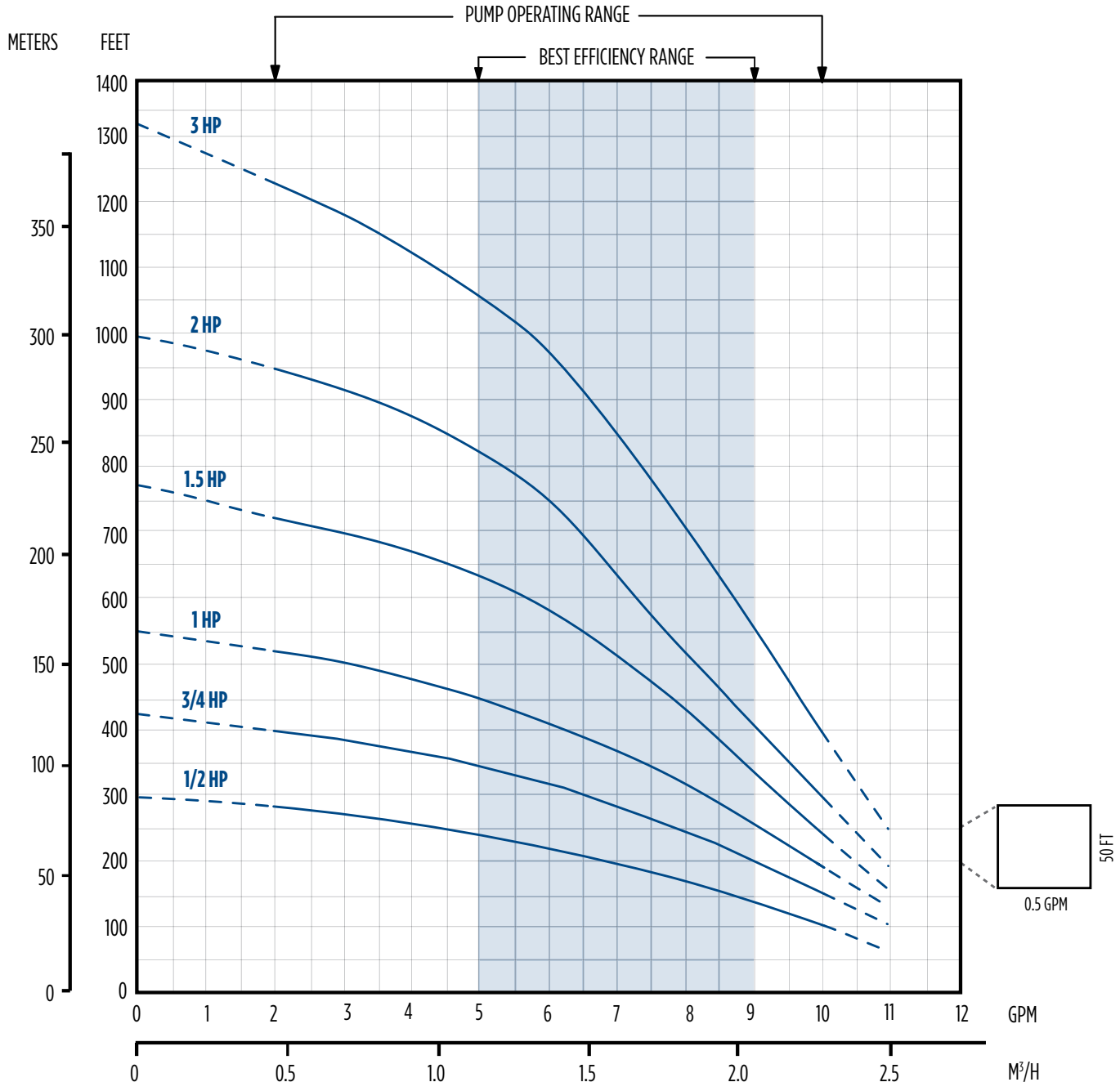
PERFORMANCE

HP	PSI	Depth To Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance																							
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	Shut-Off (ft)
1/2	0							7	7	6	6	5	4												315
	20					8	7	6	6	5	5	3	2												
	30				7	7	6	6	5	5	4	2													
	40			7	7	6	6	5	5	4	3														
	50		7	6	6	6	5	5	4	2															
	60	7	7	6	6	5	4	4	2																
	80	6	6	5	4	3																			
Shut-off PSI		127	119	110	101	93	84	75	67	58	49	32	23												
3/4	0										7	7	7	6	5	4	3								495
	20								7	7	7	6	6	5	4	3									
	30							7	7	7	6	6	6	5	3										
	40						7	7	7	6	6	6	5	4	2										
	50					7	7	7	6	6	6	5	5	4											
	60				7	7	7	6	6	6	5	5	4	3											
	80		7	7	7	6	6	6	5	5	4	3	3												
Shut-off PSI		205	196	188	179	171	162	153	145	136	127	110	101	84	58	41	23								
1	0												8	7	6	6	5	4	4						615
	20											7	7	7	6	5	4	3							
	30										7	7	7	6	5	5	3	2							
	40									7	7	7	7	6	5	4	3								
	50								7	7	7	7	6	6	4	3									
	60							7	7	7	7	6	6	5	4										
	80						7	7	7	6	6	5	5	4											
Shut-off PSI		257	248	240	231	222	214	205	197	188	179	162	153	136	110	93	75	58	49						
1.5	0															7	7	7	6	5	4	2			835
	20													7	7	7	6	6	6	5	3				
	30													7	7	7	6	6	6	4	3				
	40												7	7	7	6	6	6	5	4	2				
	50											7	7	7	7	6	6	5	5	3					
	60											7	7	7	6	6	5	5	5	3					
	80									7	7	7	7	6	6	5	5	4	4	2					
Shut-off PSI		352	344	335	326	318	309	300	292	283	274	257	249	231	205	188	171	153	145	101	58	15			
2	0																7	7	7	6	5	4	3		1040
	20															7	7	7	7	6	5	4	2		
	30														7	7	7	7	6	6	5	3			
	40														7	7	7	6	6	6	5	3			
	50													7	7	7	7	6	6	5	4	3			
	60													7	7	7	6	6	6	5	4	3			
	80											7	7	7	7	6	6	6	6	5	3				
Shut-off PSI		441	432	424	415	406	398	389	381	372	363	346	337	320	294	277	259	242	233	190	147	104	60		

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

4" SERIES V PUMPS - 7 GPM

PERFORMANCE





4" SERIES V PUMPS - 7 GPM

PERFORMANCE

HP	PSI	Depth To Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance																							
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	Shut-Off (ft)
1/2	0				10	10	9	9	8	7	6	5	4												
	20		10	9	9	8	8	7	6	5	4														
	30	10	9	9	8	7	7	6	5	4	3														
	40	9	9	8	8	7	6	5	4	3															300
	50	9	8	7	7	6	5	4	3																
	60	8	7	6	6	5	4	3																	
	80	6	5	4	3																				
Shut-off PSI		121	112	103	95	86	77	69	60	52	43	26	17												
3/4	0						10	10	9	9	9	8	7	6	4										
	20			10	10	10	9	9	8	8	7	6	6	4											
	30		10	10	10	9	9	8	8	7	7	6	5	3											
	40	10	10	10	9	9	8	8	7	7	6	5	4												422
	50	10	9	9	9	8	8	7	7	6	6	4	3												
	60	9	9	9	8	8	7	7	6	6	5	3													
	80	8	8	8	7	6	6	5	5	4	3														
Shut-off PSI		174	165	156	148	139	130	122	113	104	96	78	70	52	26										
1	0							10	10	10	9	9	8	8	7	6	5	3	3						
	20					10	10	10	9	9	9	8	8	7	6	5	3								
	30			10	10	10	10	9	9	9	8	8	7	6	5	4									
	40		10	10	10	10	9	9	9	8	8	7	7	6	4	3									544 ft
	50	10	10	10	10	9	9	9	8	8	8	7	6	5	3										
	60	10	10	9	9	9	9	8	8	8	7	6	6	5	3										
	80	9	9	9	8	8	8	7	7	7	6	5	5	3											
Shut-off PSI		226	218	209	200	192	183	174	166	157	148	131	123	105	79	62	45	27	18						
1.5	0								10	10	10	9	9	9	8	8	7	7	7	5	2				
	20						10	10	10	10	9	9	9	8	8	7	7	6	6	4					
	30				10	10	10	10	10	9	9	9	9	8	8	7	7	6	6	3					
	40			10	10	10	10	9	9	9	9	9	8	8	7	7	6	6	5	3					765
	50		10	10	10	10	9	9	9	9	9	8	8	8	7	6	6	5	5						
	60	10	10	10	10	9	9	9	9	9	8	8	8	7	7	6	6	5	4						
	80	10	10	9	9	9	9	9	8	8	8	8	7	7	6	5	5	4	3						
Shut-off PSI		322	313	305	296	287	279	270	261	253	244	227	218	201	175	158	140	123	114	71	28				
2	0									10	10	10	10	9	9	9	8	8	8	7	6	5	3		
	20							10	10	10	10	10	9	9	9	8	8	7	7	6	6	4			
	30						10	10	10	10	10	9	9	9	8	8	8	7	7	6	5	4			
	40					10	10	10	10	10	9	9	9	9	8	8	7	7	7	6	5	3			995
	50				10	10	10	10	10	9	9	9	9	8	8	8	7	7	7	6	5	3			
	60			10	10	10	10	10	9	9	9	9	9	8	8	7	7	7	7	6	4				
	80	10	10	10	10	10	9	9	9	9	9	9	8	8	7	7	7	6	6	5	3				
Shut-off PSI		421	412	404	395	386	378	369	360	352	343	326	317	300	274	257	239	222	213	170	127	84	40		

NOTES: Performance shown does not include friction loss in the drop pipe; All performance data is based on rated motor nameplate voltage

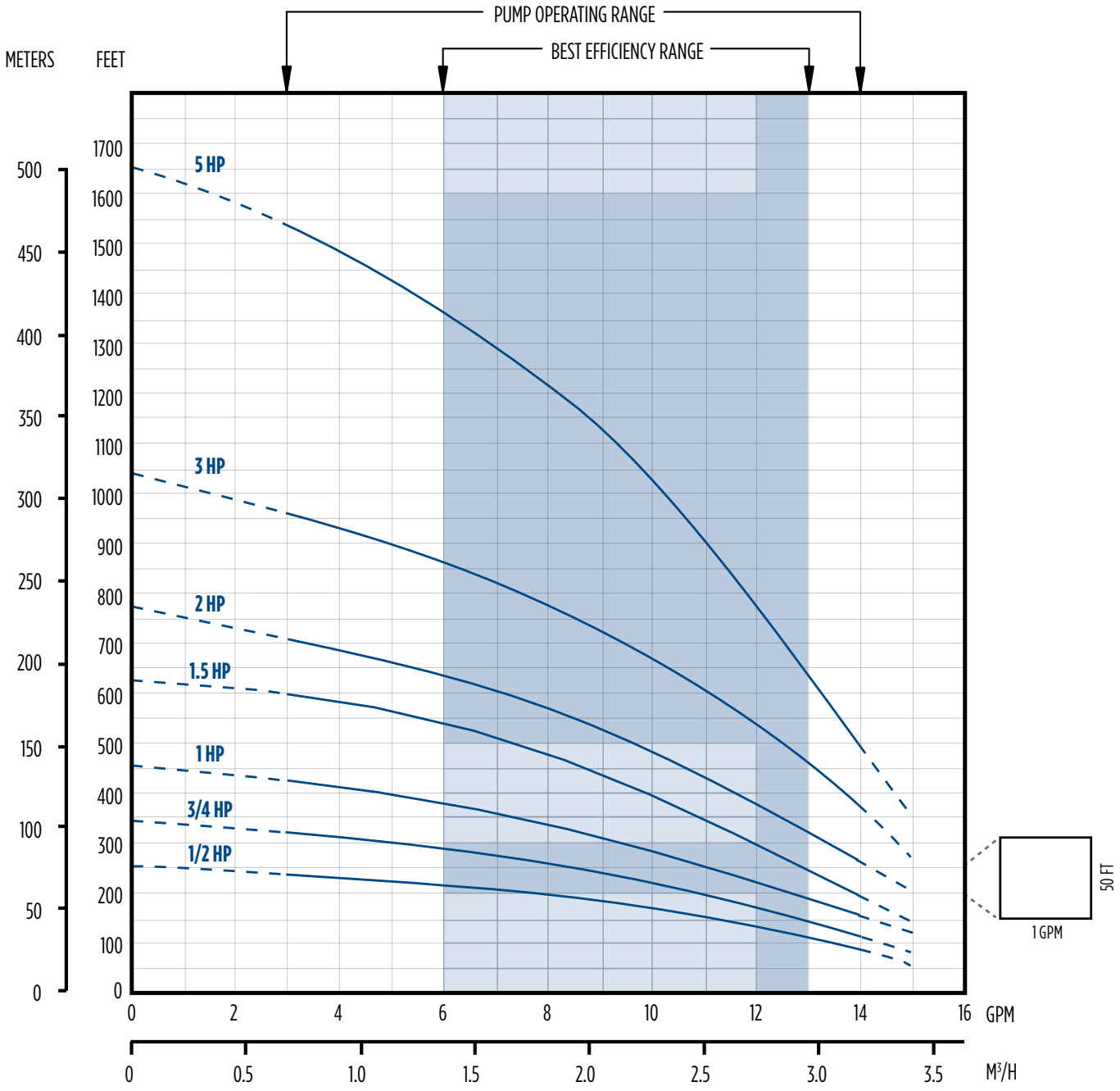
HP	PSI	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	Shut-Off (ft)
3	0			10	9	9	8	7	7	6	5	4	2			
	20		10	9	9	8	8	7	6	6	5	3				
	30		10	9	9	8	8	7	6	6	4	3				
	40		10	9	9	8	7	7	6	5	4					1310
	50	10	10	9	8	8	7	7	6	5	4					
	60	10	10	9	8	8	7	7	6	5	3					
	80	10	9	8	8	7	7	6	5	4	2					
Shut-off PSI		523	480	437	394	350	307	264	221	177	134	91	48			

NOTES: Performance shown does not include friction loss in the drop pipe; All performance data is based on rated motor nameplate voltage

Schaefer

4" SERIES V PUMPS - 10 GPM

PERFORMANCE





4" SERIES V PUMPS - 10 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																							
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	
1/2	0				14	13	12	11	10	9	7														244
	20	14	13	13	12	11	10	8	6	3															
	30	13	13	12	11	10	8	6	3																
	40	13	12	11	10	8	6	3																	
	50	12	11	9	8	5	3																		
	60	11	10	7	4																				
	80	8	6	4																					
Shut-off PSI		97	88	80	71	62	54	45	36	28	19														
3/4	0					14	13	13	12	11	10	7	8	4											338
	20		14	14	13	12	12	11	10	9	8	6	4												
	30	14	14	13	12	12	11	10	9	8	7	3													
	40	14	13	12	12	11	10	9	8	7	6														
	50	13	12	11	11	10	9	8	7	5	3														
	60	12	11	11	10	9	8	6	5																
	80	11	10	9	8	6	5																		
Shut-off PSI		137	129	120	111	103	94	85	77	68	59	42	34	16											
1	0							14	13	13	12	11	10	9	7	4									444
	20					14	13	13	12	11	11	9	9	7	3										
	30				14	13	13	12	11	11	10	9	8	6											
	40			14	13	13	12	11	11	10	9	8	7	5											
	50		14	13	12	12	11	11	10	9	8	7	6												
	60	13	12	12	11	11	10	10	9	8	8	5	4												
	80	12	12	11	10	10	9	8	7	6	5														
Shut-off PSI		183	174	157	148	140	131	123	114	105	97	79	71	53	27	10									
1.5	0									14	13	13	12	12	10	9	9	8	7						615
	20							14	13	13	12	12	11	11	9	8	7	6	5						
	30						14	13	13	12	12	11	11	10	8	8	6	5	4						
	40					14	13	13	12	12	12	11	10	10	8	7	6	4							
	50				14	13	13	12	12	12	11	10	10	9	8	6	5	3							
	60		14	13	13	13	12	12	11	11	11	10	9	9	7	6	4								
	80	13	13	13	12	12	11	11	11	10	10	9	9	8	6	3									
Shut-off PSI		257	248	240	231	222	214	205	197	188	179	162	153	136	110	93	75	41	32						
2	0											14	13	13	12	11	10	10	9	6					770
	20										14	13	13	12	11	10	9	9	8	5					
	30									14	13	13	12	12	10	10	9	8	8	4					
	40								14	13	13	12	12	11	10	9	9	8	7	3					
	50							14	13	13	12	12	11	11	10	9	8	7	6						
	60					14	13	13	13	12	12	11	11	10	9	8	7	6	5						
	80			14	13	13	13	12	12	12	11	11	10	9	8	8	6	4	4						
Shut-off PSI		324	316	307	298	290	281	272	264	255	246	229	220	203	177	160	143	125	117	73					
3	0														14	13	13	12	12	11	9	7	5		1034
	20													14	13	13	12	12	12	10	8	6	3		
	30												14	14	13	13	12	12	11	10	8	5			
	40											14	14	13	13	12	12	11	11	9	7	4			
	50										14	14	14	13	12	12	11	11	11	9	7	4			
	60									14	14	14	13	13	12	12	11	11	10	9	6	3			
	80								14	14	13	13	13	12	12	11	11	10	10	8	5				
Shut-off PSI		438	430	421	413	404	395	387	378	369	361	343	335	317	291	274	257	240	231	188	144	101	58		

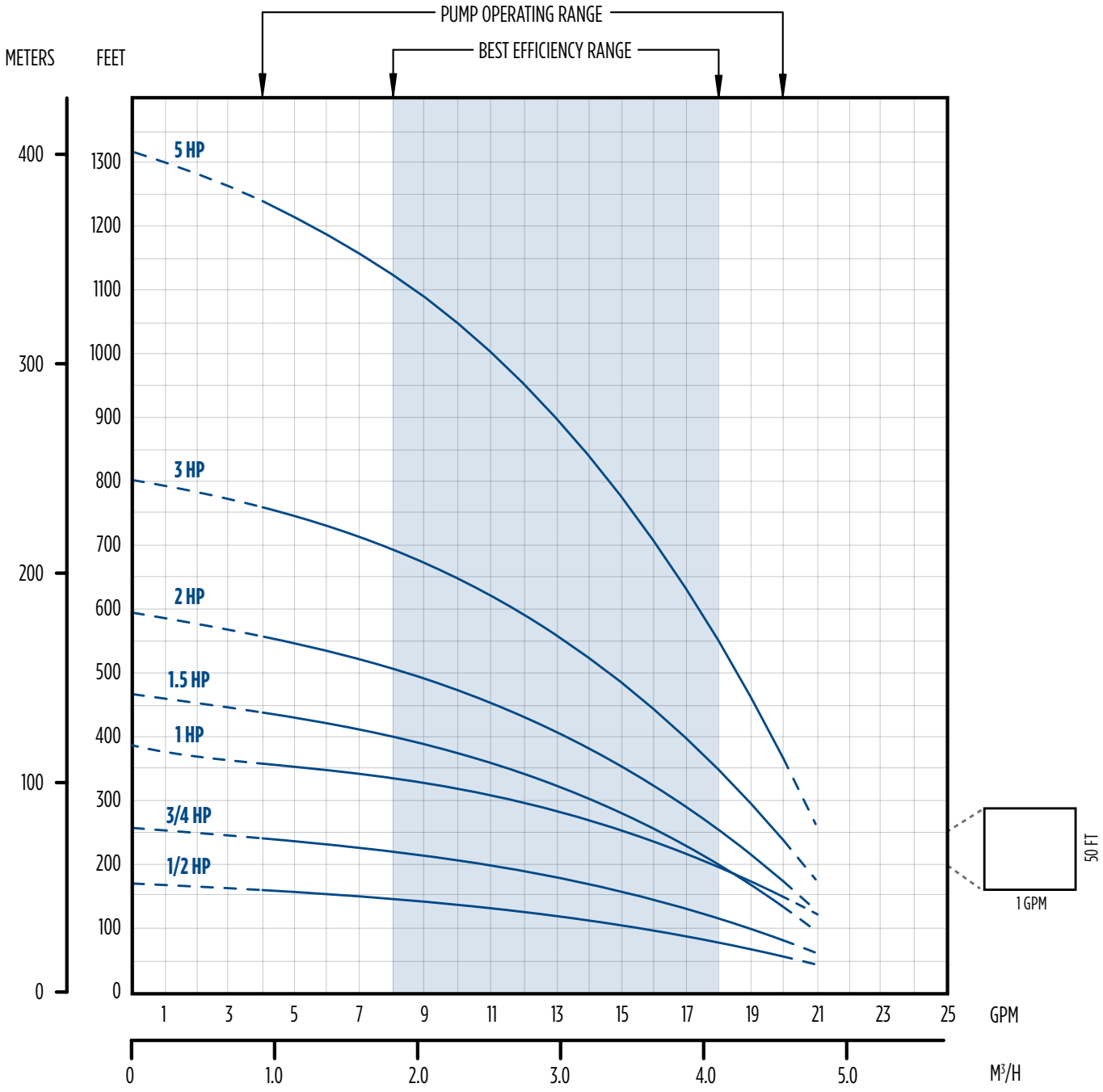
NOTES: Performance shown does not include friction loss in the drop pipe; All performance data is based on rated motor nameplate voltage

HP	PSI	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	Shut-Off (ft)
5	0				14	13	13	12	11	11	10	9	8	6	5	1310
	20				14	13	12	12	11	10	9	8	7	6	4	
	30				14	13	12	12	11	10	9	8	7	5	4	
	40				14	13	12	11	11	10	9	8	7	5	3	
	50			14	13	13	12	11	10	9	9	7	6	5	3	
	60			14	13	13	12	11	10	9	8	7	6	4		
	80		14	14	13	12	11	11	10	9	8	7	5	3		
Shut-off PSI		670	626	583	540	497	453	410	367	324	280	237	194	151	107	

NOTES: Performance shown does not include friction loss in the drop pipe; All performance data is based on rated motor nameplate voltage

4" SERIES V PUMPS - 15 GPM

PERFORMANCE





4" SERIES V PUMPS - 15 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																									
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	1100	1200	Shut-Off (ft)
1/2	0			20	18	16	13	9	4																		170
	20	19	17	15	12	8																					
	30	17	14	11	7																						
	40	14	11	6																							
	50	10	5																								
	60	4																									
	80																										
Shut-off PSI		65	56	48	39	30	22	13	4																		
3/4	0				20	19	18	16	15	13	11																257
	20		20	19	17	16	14	12	10	7																	
	30	20	18	17	16	14	12	10	6																		
	40	18	17	15	14	12	9	6																			
	50	17	15	13	11	9	5																				
	60	15	13	11	8	4																					
	80	10	7																								
Shut-off PSI		103	94	85	77	68	59	51	42	33	25																

HP	PSI	Depth to Pumping Water Level, or Lift, in Feet Shaded Areas Indicate Most Efficient Performance																									
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	Shut-Off (ft)		
1	0								19	19	18	16	12	6													392
	10							19	19	18	17	14	9	2													
	20					20	19	18	18	17	16	12	6														
	30				20	19	18	18	17	16	14	10	3														
	40			20	19	18	17	17	15	14	12	7															
	50		20	19	18	17	16	15	14	12	10	3															
	60	20	19	18	17	16	15	14	12	10	7																
	70	19	18	17	16	15	13	11	9	7	4																
	80	18	17	16	15	13	11	9	6	4	1																
	90	17	16	14	13	11	9	6	3																		
	100	15	14	13	11	8	6	3																			
	110	14	12	10	8	5	2																				
	120	12	10	7	5	2																					
	130	9	7	4	1																						
	140	7	4	1																							
	150	3																									
Shut-off psi			153	144	135	127	118	109	101	92	83	62	40	18													

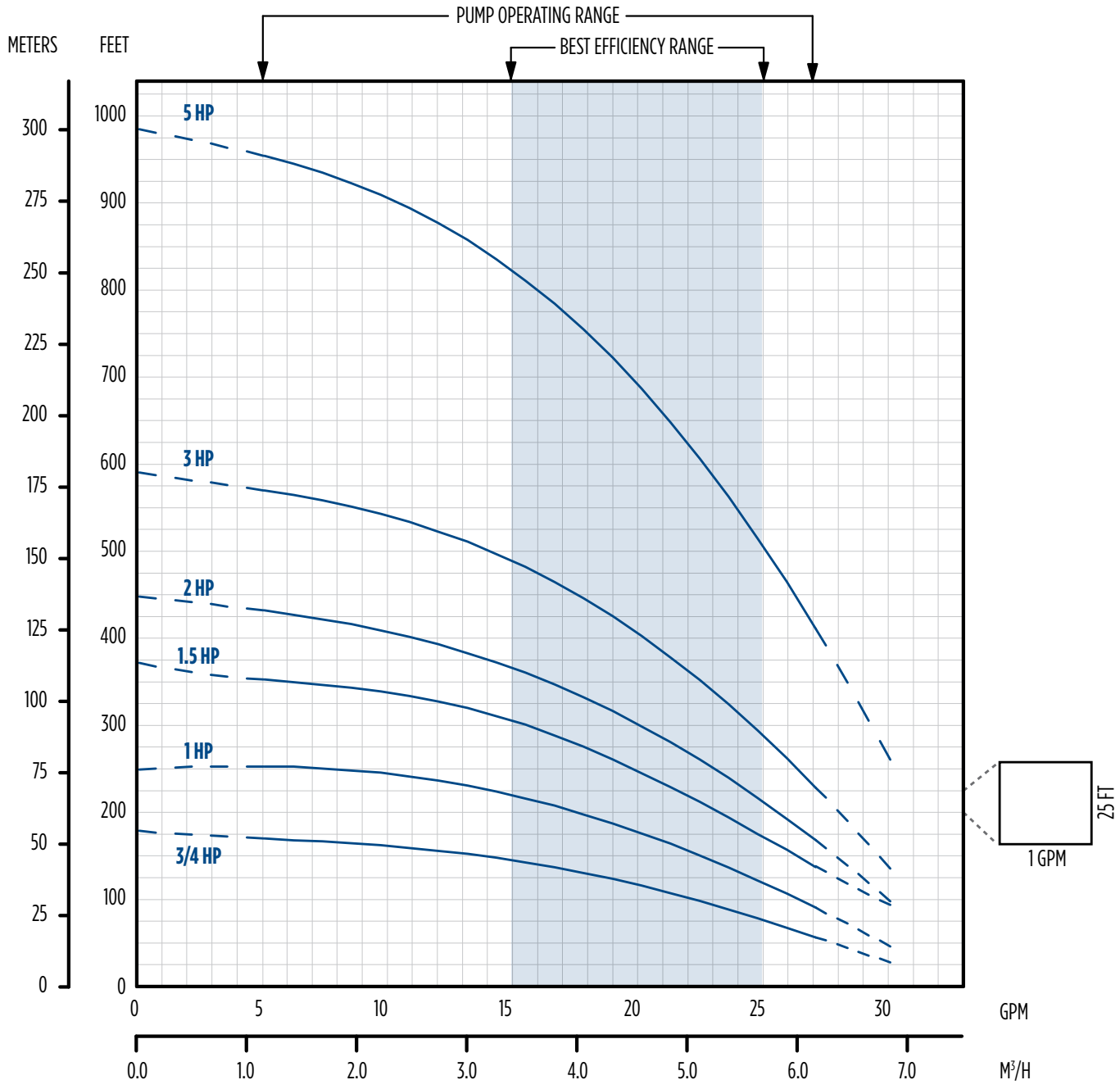
HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																									
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	1100	1200	Shut-Off (ft)
1.5	0						20	20	19	19	18	17	16	14	11	8	4										
	20				20	20	19	18	18	17	16	15	14	12	7												
	30			20	20	19	18	18	17	16	15	14	13	10	5												
	40		20	19	19	18	18	17	16	15	15	13	11	9													467
	50	20	19	19	18	17	17	16	15	14	13	11	10	7													
	60	19	19	18	17	17	16	15	14	13	12	10	8	4													
	80	18	17	16	16	15	14	13	12	11	9	6															
Shut-off PSI		193	185	176	167	159	150	141	133	124	115	98	89	72	46	29	11										
2	0											14	13	13	12	11	10	10	9	6							
	20										14	13	13	12	11	10	9	9	8	5							
	30									14	13	13	12	12	10	10	9	8	8	4							
	40								14	13	13	12	12	11	10	9	9	8	7	3							770
	50							14	13	13	12	12	11	11	10	9	8	7	6								
	60					14	13	13	13	12	12	11	11	10	9	8	7	6	5								
	80			14	13	13	13	12	12	12	11	11	10	9	8	8	6	4	4								
Shut-off PSI		324	316	307	298	290	281	272	264	255	246	229	220	203	177	160	143	125	117	73							
3	0											20	20	19	18	17	16	15	15	12	8						
	20								20	20	20	19	19	18	17	16	15	14	13	10	5						
	30							20	20	20	19	19	18	18	16	15	14	13	13	9							
	40						20	20	20	19	19	18	18	17	16	15	14	13	12	8							170
	50					20	20	20	19	19	19	18	18	17	15	14	13	12	11	7							
	60				20	20	20	19	19	19	18	17	17	16	15	14	12	11	10	5							
	80	20	20	20	20	19	19	19	18	18	17	16	16	15	13	12	11	9	8								
Shut-off PSI		339	330	321	313	304	295	287	278	269	261	243	235	217	191	174	157	139	131	87	44						
5	0														20	20	19	19	19	17	16	15	13	11	9	6	
	20													20	20	19	19	18	18	17	15	14	12	10	7	4	
	30												20	20	19	19	19	18	18	17	15	14	12	9	7		
	40											20	20	20	19	19	18	18	18	16	15	13	11	9	6		257
	50										20	20	20	19	19	18	18	17	17	16	14	13	11	8	5		
	60									20	20	20	20	19	19	18	18	17	17	16	14	12	10	8	4		
	80							20	20	20	20	19	19	19	18	18	17	17	16	15	13	11	9	6			
Shut-off PSI		561	553	544	535	527	518	509	501	492	483	466	457	440	414	397	379	362	353	310	267	224	180	137	94	50	

NOTES: Performance shown does not include friction loss in the drop pipe; All performance data is based on rated motor nameplate voltage

Schaefer

4" SERIES V PUMPS - 20 GPM

PERFORMANCE





4" SERIES V PUMPS - 20 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																							
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	Shut-Off (ft)
3/4	0				24	22	21	18	14																190
	20		23	21	19	17	12																		
	30	23	21	19	17	11																			
	40	21	19	17	10																				
	50	19	16	10																					
	60	14																							
Shut-off PSI		74	65	56	48	39	30	22	13																
1	0						26	25	23	20	18	11													251
	20			27	26	24	22	20	18	15	8														
	30		27	26	24	22	19	17	14	7															
	40	27	25	23	21	19	17	13																	
	50	25	23	21	19	16	12																		
	60	23	21	18	16	11																			
	70	20	18	15	10																				
	80	18	15	9																					
Shut-off PSI		100	91	83	74	66	57	48	40	31	22	5													
1.5	0								27	26	24	22	20	17	6										379
	20						27	25	24	23	21	18	16	10											
	30					26	25	24	22	21	20	16	13												
	40				26	25	23	22	21	19	18	13	8												
	50		27	26	25	23	22	21	19	17	15	7													
	60	27	26	24	23	22	20	19	17	15	11														
	70	26	24	23	21	20	19	17	14	11	5														
	80	24	23	21	20	18	16	14	10																
Shut-off PSI		156	147	138	130	121	112	104	95	86	78	60	52	34	8										
2	0											24	23	20	16	12									453
	20										24	21	20	17	12										
	30								24	23	22	20	19	16											
	40							24	23	22	21	19	17	14											
	50						24	23	22	20	19	16	14	10											
	60					24	23	22	20	19	18	14	12												
	80			24	23	21	20	19	18	16	14														
Shut-off PSI		187	179	170	161	153	144	135	127	118	110	92	84	66	40	23									
3	0													24	22	20	18	16	14						601
	20												24	23	20	17	15	12	10						
	30											24	23	21	18	16	13	10							
	40										24	23	22	20	17	14	11								
	50									24	24	22	21	19	16	13									
	60								24	24	23	21	20	18	14	10									
	80							24	23	22	20	18	17	15	10										
Shut-off PSI		251	242	234	225	216	208	199	190	182	173	156	147	130	104	87	69	52	43						
5	0																		24	23	20	16			770
	20																		24	21	18	13			
	30																	24	23	20	17	11			
	40																24	23	23	20	16	10			
	50																24	22	22	17	15				
	60															24	23	22	21	18	14				
	80														24	23	22	21	20	16	10				
Shut-off PSI		416	408	399	390	382	373	364	356	347	339	321	313	295	269	252	235	217	209	165	122	79			

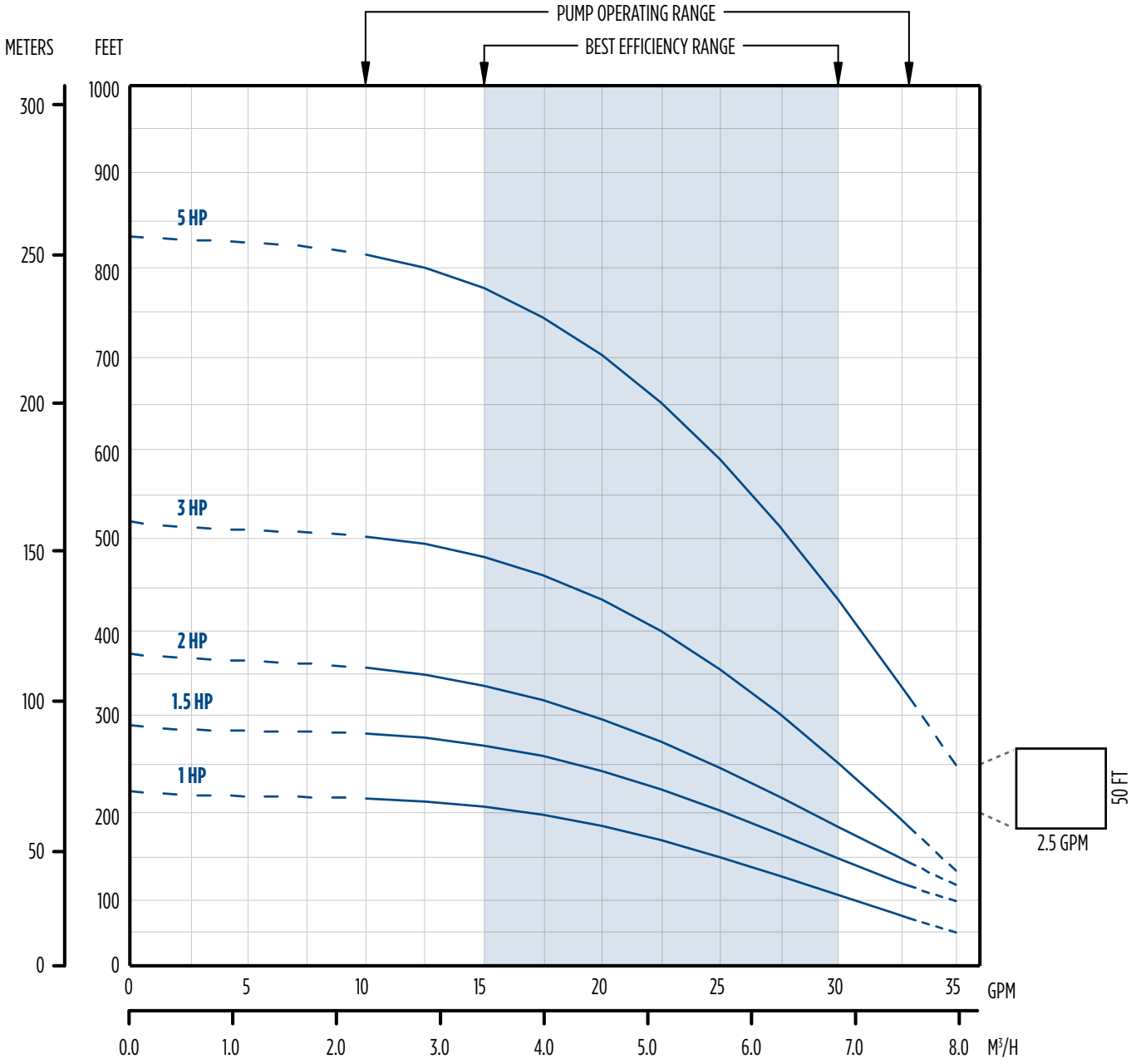
NOTES: Performance shown does not include friction loss in the drop pipe;All performance data is based on rated motor nameplate voltage

Schaefer

4" SERIES V PUMPS - 25 GPM

PERFORMANCE

Basic Model	PEI_{CL} Number
25S4	0.76





4" SERIES V PUMPS - 25 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																							
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000	Shut-Off (ft)
1	0			35	33	31	28	26	24	21	17														222
	20		32	30	28	25	22	18	15																
	30	32	29	27	25	22	19																		
	40	29	27	25	22	19																			
	50	26	24	21	16																				
	60	24	21	17																					
Shut-off PSI		87	79	70	61	53	44	35	27	18	10														
1.5	0						33	31	29	27	25	21	19												297
	20				32	30	28	26	24	22	19														
	30			32	30	28	26	24	22	19	16														
	40	33	32	29	27	25	23	21	19	15															
	50	32	29	27	25	23	21	18																	
	60	29	27	25	23	20	18																		
	80	24	22	20	17																				
Shut-off PSI		120	111	103	94	85	77	68	59	51	42	25	16												
2	0							33	32	30	28	25	24	20											375
	20				34	33	31	29	28	26	25	21	20												
	30			34	33	31	29	28	26	24	23	19	17												
	40		34	33	31	29	28	26	24	23	21	17													
	50	33	32	30	29	27	26	24	22	20	18														
	60	32	30	28	27	26	24	22	20	18															
	80	28	26	25	23	21	20	17																	
Shut-off PSI		154	145	136	128	119	110	102	93	84	76	58	50	32											
3	0									33	32	30	29	28	24	22	19	15							519
	20						33	32	32	31	30	28	27	25	22	19									
	30					33	32	32	31	30	29	27	26	24	20										
	40				33	32	32	31	30	29	28	26	25	22	18										
	50			33	32	31	31	30	29	28	27	24	23	21	15										
	60		33	32	31	31	30	29	28	26	25	23	22	19											
	80	32	31	30	29	28	27	26	25	24	23	20	19	15											
Shut-off PSI		216	207	199	190	181	173	164	155	147	138	121	112	95	69	52	34	17							
5	0												33	32	31	30	28	28	24	20					833
	20											33	32	30	30	28	27	26	22	17					
	30										33	33	31	30	28	27	26	25	21	15					
	40									33	32	32	31	29	28	27	25	24	20						
	50								33	33	32	31	30	28	27	25	24	23	19						
	60							33	33	32	31	31	30	28	26	25	23	22	18						
	80					33	33	32	31	31	30	29	28	26	25	23	21	20							
Shut-off PSI		352	343	326	317	309	300	291	283	274	257	248	231	205	187	170	153	144	101	58					

NOTES: Performance shown does not include friction loss in the drop pipe; All performance data is based on rated motor nameplate voltage

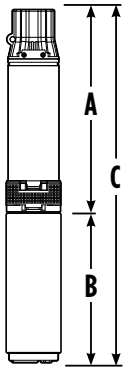
4" SERIES V PUMPS - DIMENSIONS

THERMOPLASTIC

GPM	HP	Stages	2-Wire					3-Wire				
			Dimensions (in)			Wt. (lbs)		Dimensions (in)			Wt. (lbs)	
			A	B	C	PE	PMA	A	B	C	PE	PMA
5	1/2	8	14.12	9.51	23.63	8	26	14.12	9.51	23.63	8	26
	3/4	12	17.41	10.64	28.05	9	30	17.41	10.64	28.05	9	30
	1	15	19.87	11.73	31.60	10	34	19.87	11.73	31.60	10	34
	1.5	21	24.81	15.10	39.91	12	43	24.81	13.60	38.41	12	40
7	1/2	7	13.30	9.51	22.81	7	25	13.30	9.51	22.81	7	26
	3/4	10	15.76	10.64	26.40	8	29	15.76	10.64	26.40	8	29
	1	13	18.23	11.73	29.96	10	34	18.23	11.73	29.96	10	34
	1.5	18	22.34	15.10	37.44	11	42	22.34	13.60	35.94	11	39
10	1/2	6	12.97	9.51	22.48	7	25	12.97	9.51	22.48	7	26
	3/4	8	14.69	10.64	25.33	8	29	14.69	10.64	25.33	8	29
	1	11	17.44	11.73	29.17	9	33	17.44	11.73	29.17	9	33
	1.5	15	21.06	15.10	36.16	10	41	21.06	13.60	34.66	10	38
15	1/2	4	11.45	9.51	20.96	6	24	11.45	9.51	20.96	6	25
	3/4	6	12.97	10.64	23.61	7	28	12.97	10.64	23.61	7	28
	1	8	14.69	11.73	26.42	8	32	14.69	11.73	26.42	8	32
	1.5	11	17.44	15.10	32.54	9	40	17.44	13.60	31.04	9	37
20	3/4	5	13.65	10.64	24.29	6	28	13.65	10.64	24.29	6	28
	1	7	16.10	11.73	26.42	8	32	16.10	11.73	27.83	7	31
	1.5	10	19.77	15.10	34.87	8	39	19.77	13.60	33.37	8	36
25	1	6	14.88	11.73	26.61	7	31	14.88	11.73	26.61	7	31
	1.5	8	17.32	15.10	32.42	8	39	17.32	15.10	30.92	8	36

NOTES: PE = Pump end only; PMA = Pump and motor assembly; Maximum diameter with cable guard is 3.90"

Thermoplastic

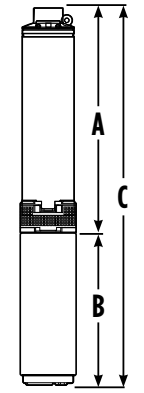


STAINLESS STEEL

GPM	HP	Stages	2-Wire					3-Wire				
			Dimensions (in)			Wt. (lbs)		Dimensions (in)			Wt. (lbs)	
			A	B	C	PE	PMA	A	B	C	PE	PMA
5	1/2	8	13.57	9.51	23.08	10	28	13.57	9.51	23.08	10	29
	3/4	12	16.86	10.64	27.50	12	33	16.86	10.64	27.50	12	33
	1	15	19.33	11.73	31.06	14	38	19.33	11.73	31.06	14	38
	1.5	21	24.26	15.10	39.36	17	48	24.26	13.60	37.86	17	45
	2	26	-	-	-	-	-	30.46	15.10	45.56	20	-
7	1/2	7	12.75	9.51	22.26	9	27	12.75	9.51	22.26	9	28
	3/4	10	15.22	10.64	25.86	11	32	15.22	10.64	25.86	11	32
	1	13	17.68	11.73	29.41	13	37	17.68	11.73	29.41	13	37
	1.5	18	21.80	15.10	36.90	15	46	21.80	13.60	35.40	15	43
	2	24	-	-	-	-	-	26.73	15.10	41.83	19	-
	3	32	-	-	-	-	-	35.39	19.04	54.43	23	-
10	1/2	6	12.39	9.51	21.90	7	25	12.39	9.51	21.90	9	28
	3/4	8	14.14	10.64	24.78	10	31	14.14	10.64	24.78	10	31
	1	11	16.85	11.73	28.58	11	35	16.85	11.73	28.58	11	35
	1.5	15	20.48	15.10	35.58	14	45	20.48	13.60	34.08	14	42
	2	18	-	-	-	-	-	25.26	15.10	40.36	15	-
	3	19	-	-	-	-	-	26.17	19.04	45.21	16	-
	5	31	-	-	-	-	-	37.00	29.19	66.19	23	-
15	1/2	4	10.64	9.51	20.15	7	25	10.64	9.51	20.15	7	26
	3/4	6	12.39	10.64	23.03	9	30	12.39	10.64	23.03	9	30
	1	8	14.14	11.73	25.87	10	34	14.14	11.73	25.87	10	34
	1.5	11	16.85	15.10	31.95	11	42	16.85	13.60	30.45	11	39
	2	14	-	-	-	-	-	19.57	15.10	34.67	13	-
	3	19	-	-	-	-	-	26.17	19.04	45.21	16	-
	5	31	-	-	-	-	-	37.00	29.19	66.19	23	-
20	3/4	5	13.10	10.64	23.74	8	29	13.10	10.64	23.74	8	29
	1	7	15.55	11.73	27.28	9	33	15.55	11.73	27.28	9	33
	1.5	10	19.22	15.10	34.32	11	42	19.22	13.60	32.82	11	39
	2	12						21.66	15.10	36.76	12	-
	3	16	-	-	-	-	-	26.55	19.04	45.59	14	-
	5	26	-	-	-	-	-	40.86	29.19	70.05	20	-
	7.5	39	-	-	-	-	-	60.77	29.60	90.37	27	-
	10	52	-	-	-	-	-	76.66	32.60	109.26	35	-
25	1	6	14.33	11.73	26.06	9	33	14.33	11.73	26.06	9	33
	1.5	8	16.77	15.10	31.87	10	41	16.77	13.60	30.37	10	38
	2	10	-	-	-	-	-	19.22	15.10	34.32	11	-
	3	14	-	-	-	-	-	24.11	19.04	43.15	13	-
	5	23	-	-	-	-	-	37.19	28.19	66.38	18	-
	7.5	35	-	-	-	-	-	55.88	29.60	85.48	25	-
	10	44	-	-	-	-	-	66.88	32.60	99.48	30	-

NOTES: PE = Pump end only; PMA = Pump and motor assembly; Maximum diameter with cable guard is 3.90"

Stainless Steel



4" TRI-SEAL HIGH CAPACITY PUMPS

FEATURES

- Four performance ranges: 35, 45, 60, and 90 gpm
- 2" NPT discharge, with and without an internal stainless steel wafer-style check valve
- Stainless steel discharge head and motor bracket
- High flow hydraulic staging allows for maximum pump output, exceeds all energy efficiency standards, and provides increased product longevity
- Ceramic shaft sleeve and rubber discharge bearing eliminates sand wear
- Intermediate bearing for increased shaft stability when pump lengths dictate on high horse, high performance constructions
- Impeller eye and hub seals for improved performance and efficiency
- Stainless steel hex pump shaft, shell, and shaft coupling
- High capacity upthrust assembly for protection during start-up and operation (35, 45, 60, and 90 gpm models)
- Designed for optimal performance when powered by Franklin's corrosion-resistant 4" submersible motors

MODEL NO. EXPLANATION

Example: 60FH10S4-PE

- 60 = gpm
- FH = Franklin Electric Brand
- 10 = 10 hp
- S = Stainless
- 4 = 4" Submersible
- PE = Pump End



CSA CERTIFIED
PUMP END ONLY

C SA US 151236

NSF/ANSI 61
Drinking Water

4" TRI-SEAL HIGH CAPACITY PUMPS - ORDERING INFORMATION

PUMP ENDS ORDERING INFORMATION

1 - 10 HP 4" High Capacity Pump Ends									
GPM	HP	Stages	Model	Order No.	Check Valve in 2" NPT Discharge	Basic Model	PEI_{CL} Number	Dimensions (in) Pump End Only	Wt. (lbs)
35	1	5	35FH1S4-PE	93653505	No	35S4	0.83	11.9	8
	1.5	7	35FH15S4-PE	93653507				14.5	9
	2	9	35FH2S4-PE	93653509				17	10
	3	12	35FH3S4-PE	93653512				20.9	11
	5	20	35FH5S4-PE	93653520				33.3	16
	7.5	29	35FH7S4-PE	93653529				44.5	23
	10	38	35FH10S4-PE	93653538				58.5	29
	1	5	35FH1S4-PECV	93663505	Yes			14.1	9
	1.5	7	35FH15S4-PECV	93663507				16.7	10
	2	9	35FH2S4-PECV	93663509				19.2	11
	3	12	35FH3S4-PECV	93663512				23	12
	5	20	35FH5S4-PECV	93663520				35.5	17
	7.5	29	35FH7S4-PECV	93663529				47	24
	10	38	35FH10S4-PECV	93663538				60.7	30
45	1.5	5	45FH15S4-PE	93654505	No	45S4	0.89	14.2	8
	2	7	45FH2S4-PE	93654507				17.6	9
	3	10	45FH3S4-PE	93654510				22.8	10
	5	16	45FH5S4-PE	93654516				35.3	14
	7.5	23	45FH7S4-PE	93654523				47.4	22
	10	31	45FH10S4-PE	93654531				63.3	28
	1.5	5	45FH15S4-PECV	93664505	Yes			16.3	9
	2	7	45FH2S4-PECV	93664507				19.8	10
	3	10	45FH3S4-PECV	93664510				25	11
	5	16	45FH5S4-PECV	93664516				37.4	15
	7.5	23	45FH7S4-PECV	93664523				49.5	23
	10	31	45FH10S4-PECV	93664531				65.5	29
60	2	7	60FH2S4-PE	93656007	No	60S4	0.94	23.5	10
	3	10	60FH3S4-PE	93656010				33.3	12
	5	16	60FH5S4-PE	93656016				48.8	18
	7.5	23	60FH7S4-PE	93656023				68.8	25
	10	30	60FH10S4-PE	93656030				86.9	31
	2	7	60FH2S4-PECV	93666007	Yes			25.7	11
	3	10	60FH3S4-PECV	93666010				35.4	13
	5	16	60FH5S4-PECV	93666016				50.9	19
	7.5	23	60FH7S4-PECV	93666023				71	26
	10	30	60FH10S4-PECV	93666030				89	32
90	2	6	90FH2S4-PE	93659006	No	90S4	0.92	23.4	10
	3	8	90FH3S4-PE	93659008				31.4	12
	5	13	90FH5S4-PE	93659013				46.3	17
	7.5	19	90FH7S4-PE	93659019				66.2	23
	10	25	90FH10S4-PE	93659025				84.2	29
	2	6	90FH2S4-PECV	93669006	Yes			25.6	11
	3	8	90FH3S4-PECV	93669008				33.6	13
	5	13	90FH5S4-PECV	93669013				48.5	18
	7.5	19	90FH7S4-PECV	93669019				68.4	24
	10	25	90FH10S4-PECV	93669025				86.3	30

NOTES: Maximum diameter across cable guard is 3.90" on all models.

PUMP & MOTOR ORDERING INFORMATION

1 - 1.5 HP Single-Phase Units (2-Wire PMA)								
GPM	HP	Stages	Volts	Model	Order No.	Check Valve in 2" NPT Discharge	Basic Model	PEI_{CL} Number	Wt. (lbs)
35	1	5	230	35FH1S4-2W230	93673505	No	35S4	0.83	32
	1.5	7		35FH15S4-2W230	93673507				40
	1	5		35FH1S4-2W230-CV	93693505	Yes			33
	1.5	7		35FH15S4-2W230-CV	93693507				41
45	1.5	5		45FH15S4-2W230	93674505	No	45S4	0.89	40
	1.5	5		45FH15S4-2W230-CV	93694505	Yes			41

1 - 1.5 HP Single-Phase Units (3-Wire PMA)								
GPM	HP	Stages	Volts	Model	Order No.	Check Valve in 2" NPT Discharge	Basic Model	PEI_{CL} Number	Wt. (lbs)
35	1	5	230	35FH1S4-3W230	93703505	No	35S4	0.83	32
	1.5	7		35FH15S4-3W230	93703507				40
	1	5		35FH1S4-3W230-CV	93713505	Yes			33
	1.5	7		35FH15S4-3W230-CV	93713507				41
45	1.5	5		45FH15S4-3W230	93704505	No	45S4	0.89	40
	1.5	5		45FH15S4-3W230-CV	93714505	Yes			41



4" TRI-SEAL HIGH CAPACITY PUMPS - MODEL CROSS REFERENCE

DOE COMPLIANT VS ORIGINAL SCHAEFER PUMP ENDS

1 - 10 HP 4" High Capacity Pump Ends					
GPM	Check Valve in 2" NPT Discharge	Tri-Seal High Capacity, DOE PEI_{CL} Rated		Original Schaefer (Discontinued, replaced by Tri-Seal High Capacity)	
		Model	Order No.	Model	Order No.
35	No	35FH1S4-PE	93653505	35LD1S4-PE	93443506
		35FH15S4-PE	93653507	35LD15S4-PE	93443508
		35FH2S4-PE	93653509	35LD2S4-PE	93443510
		35FH3S4-PE	93653512	35LD3S4-PE	93443514
		35FH5S4-PE	93653520	35LD5S4-PE	93443522
		35FH7S4-PE	93653529	35LD7S4-PE	93443534
		35FH10S4-PE	93653538	35LD10S4-PE	93443542
	Yes	35FH1S4-PECV	93663505	35LD1S4-PE W/ Check valve	90643506
		35FH15S4-PECV	93663507	35LD15S4-PE W/ Check valve	90643508
		35FH2S4-PECV	93663509	35LD2S4-PE W/ Check valve	90643510
		35FH3S4-PECV	93663512	35LD3S4-PE W/ Check valve	90643514
		35FH5S4-PECV	93663520	35LD5S4-PE W/ Check valve	90643522
		35FH7S4-PECV	93663529	35LD7S4-PE W/ Check valve	90643534
		35FH10S4-PECV	93663538	35LD10S4-PE W/ Check valve	90643542
45	No	45FH15S4-PE	93654505	45LD15S4-PE	93444506
		45FH2S4-PE	93654507	45LD2S4-PE	93444508
		45FH3S4-PE	93654510	45LD3S4-PE	93444511
		45FH5S4-PE	93654516	45LD5S4-PE	93444518
		45FH7S4-PE	93654523	45LD7S4-PE	93444526
		45FH10S4-PE	93654531	45LD10S4-PE	93444531
	Yes	45FH15S4-PECV	93664505	45LD15S4-PE W/ Check valve	90644506
		45FH2S4-PECV	93664507	45LD2S4-PE W/ Check valve	90644508
		45FH3S4-PECV	93664510	45LD3S4-PE W/ Check valve	90644511
		45FH5S4-PECV	93664516	45LD5S4-PE W/ Check valve	90644518
		45FH7S4-PECV	93664523	45LD7S4-PE W/ Check valve	90644526
		45FH10S4-PECV	93664531	45LD10S4-PE W/ Check valve	90644531
60	No	60FH2S4-PE	93656007	60LD2S4-PE	93446006
		60FH3S4-PE	93656010	60LD3S4-PE	93446008
		60FH5S4-PE	93656016	60LD5S4-PE	9346013
		60FH7S4-PE	93656023	60LD7S4-PE	93446017
		60FH10S4-PE	93656030	60LD10S4-PE	93446024
	Yes	60FH2S4-PECV	93666007	60LD2S4-PE W/ Check valve	90646006
		60FH3S4-PECV	93666010	60LD3S4-PE W/ Check valve	90646008
		60FH5S4-PECV	93666016	60LD5S4-PE W/ Check valve	90646013
		60FH7S4-PECV	93666023	60LD7S4-PE W/ Check valve	90646017
		60FH10S4-PECV	93666030	60LD10S4-PE W/ Check valve	90646024
90	No	90FH2S4-PE	93659006	90LD2S4-PE	93449005
		90FH3S4-PE	93659008	90LD3S4-PE	93449007
		90FH5S4-PE	93659013	90LD5S4-PE	93449012
		90FH7S4-PE	93659019	90LD7S4-PE	93449019
		90FH10S4-PE	93659025	90LD10S4-PE	93449020
	Yes	90FH2S4-PECV	93669006	90LD2S4-PE W/ Check valve	90649005
		90FH3S4-PECV	93669008	90LD3S4-PE W/ Check valve	90649007
		90FH5S4-PECV	93669013	90LD5S4-PE W/ Check valve	90649012
		90FH7S4-PECV	93669019	90LD7S4-PE W/ Check valve	90649019
		90FH10S4-PECV	93669025	90LD10S4-PE W/ Check valve	90649020

DOE COMPLIANT VS ORIGINAL SCHAEFER PUMP & MOTOR

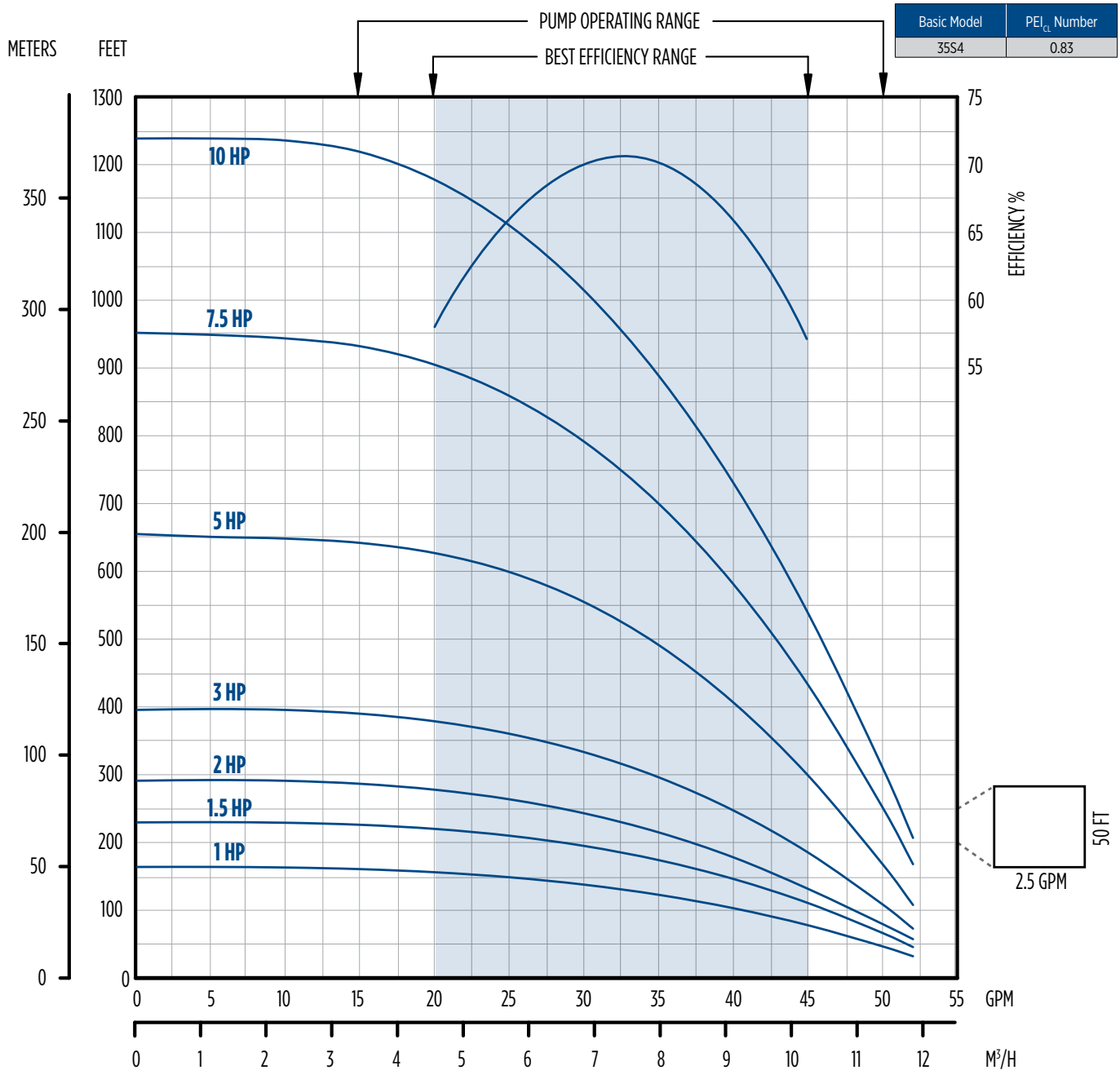
1 - 1.5 HP Single-Phase Units (2-Wire PMA)					
GPM	Check Valve in 2" NPT Discharge	Tri-Seal High Capacity, DOE PEI_{CL} Rated		Original Schaefer (Discontinued, replaced by Tri-Seal High Capacity)	
		Model	Order No.	Model	Order No.
35	No	35FH1S4-2W230	93673505	35LD1S4-2W230	93443606
		35FH15S4-2W230	93673507	35LD15S4-2W230	93443608
	Yes	35FH1S4-2W230-CV	93693505	35LD15S4-2W230 W/ CV	90643606
		35FH15S4-2W230-CV	93693507	35LD15S4-2W230 W/ CV	90643608
45	No	45FH15S4-2W230	93674505	45LD15S4-2W230	93444606
	Yes	45FH15S4-2W230-CV	93694505	45LD15S4-2W230 W/ CV	90644606

1 - 1.5 HP Single-Phase Units (3-Wire PMA)					
GPM	Check Valve in 2" NPT Discharge	Tri-Seal High Capacity, DOE PEI_{CL} Rated		Original Schaefer (Discontinued, replaced by Tri-Seal High Capacity)	
		Model	Order No.	Model	Order No.
35	No	35FH1S4-3W230	93703505	35LD1S4-3W230	93443706
		35FH15S4-3W230	93703507	35LD15S4-3W230	93443708
	Yes	35FH1S4-3W230-CV	93713505	35LD1S4-3W230 W/ CV	90643706
		35FH15S4-3W230-CV	93713507	35LD15S4-3W230 W/ CV	90643708
45	No	45FH15S4-3W230	93704505	45LD15S4-3W230	93444706
	Yes	45FH15S4-3W230-CV	93714505	45LD15S4-3W230 W/ CV	90644706

4" TRI-SEAL HIGH CAPACITY PUMPS - 35 GPM

PERFORMANCE

Basic Model	PEI_{CL} Number
35S4	0.83





4" TRI-SEAL HIGH CAPACITY PUMPS - 35 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																			
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	480	Shut-Off (ft)
1	0					44	40	35	28											
	10				44	39	34	27												
	20			43	39	33	25													
	30		42	38	32	23														
	40	42	37	31																161
	50	36	30																	
	60	29																		
	70																			
	80																			
Shut-off PSI		70	61	52	44	35	26	18	9											
1.5	0							43	41	37	33	28								
	10					46	43	40	37	32	27									
	20				45	43	40	36	32	26										
	30			45	42	39	35	31	24											
	40		44	42	39	35	30	23												230
	50	44	41	38	34	29	21													
	60	41	37	33	28															
	70	37	33	27																
	80	32	26																	
Shut-off PSI		100	91	82	74	65	56	48	39	30	22	13								
2	0								44	42	40	37	30							
	10							44	42	39	36	33	25							
	20					46	43	41	39	36	33	29								
	30				45	43	41	38	35	32	28	23								
	40			45	43	40	38	35	32	27	22									300
	50		45	42	40	37	34	31	27	20										
	60	44	42	40	37	34	30	26												
	70	42	39	37	33	30	25													
	80	39	36	33	29	24														
Shut-off PSI		130	121	113	104	95	87	78	69	61	52	43	26							
3	0										45	44	40	37	32	25				
	10									45	43	42	38	34	28					
	20								45	43	42	40	36	31	23					
	30							44	43	41	40	38	33	27						
	40						44	43	41	39	37	35	30							400
	50				45	44	42	41	39	37	35	32	26							
	60			45	44	42	41	39	37	34	32	29								
	70		45	44	42	40	38	36	34	31	28	24								
	80	45	43	42	40	38	36	34	31	28	23									
Shut-off PSI		173	165	156	147	139	130	121	113	104	95	87	69	52	35	17				

HP	PSI	120	140	160	180	200	240	280	320	360	400	440	480	500	550	600	650	700	750	800	Shut-Off (ft)
5	0								44	42	40	38	36	34	30	24					
	10							45	43	41	39	37	34	32	28	20					
	20							44	42	40	38	35	32	30	25						
	30						45	43	41	39	36	33	30	28	21						
	40					45	44	42	40	37	35	32	28	25							650
	50				45	44	42	41	38	36	33	29	25	22							
	60			45	44	43	41	39	37	34	31	27	21								
	70		45	44	43	42	40	38	35	32	29	24									
	80	45	44	43	42	41	39	37	34	30	26										
Shut-off PSI		229	221	212	203	195	177	160	143	126	108	91	74	65	43	22					

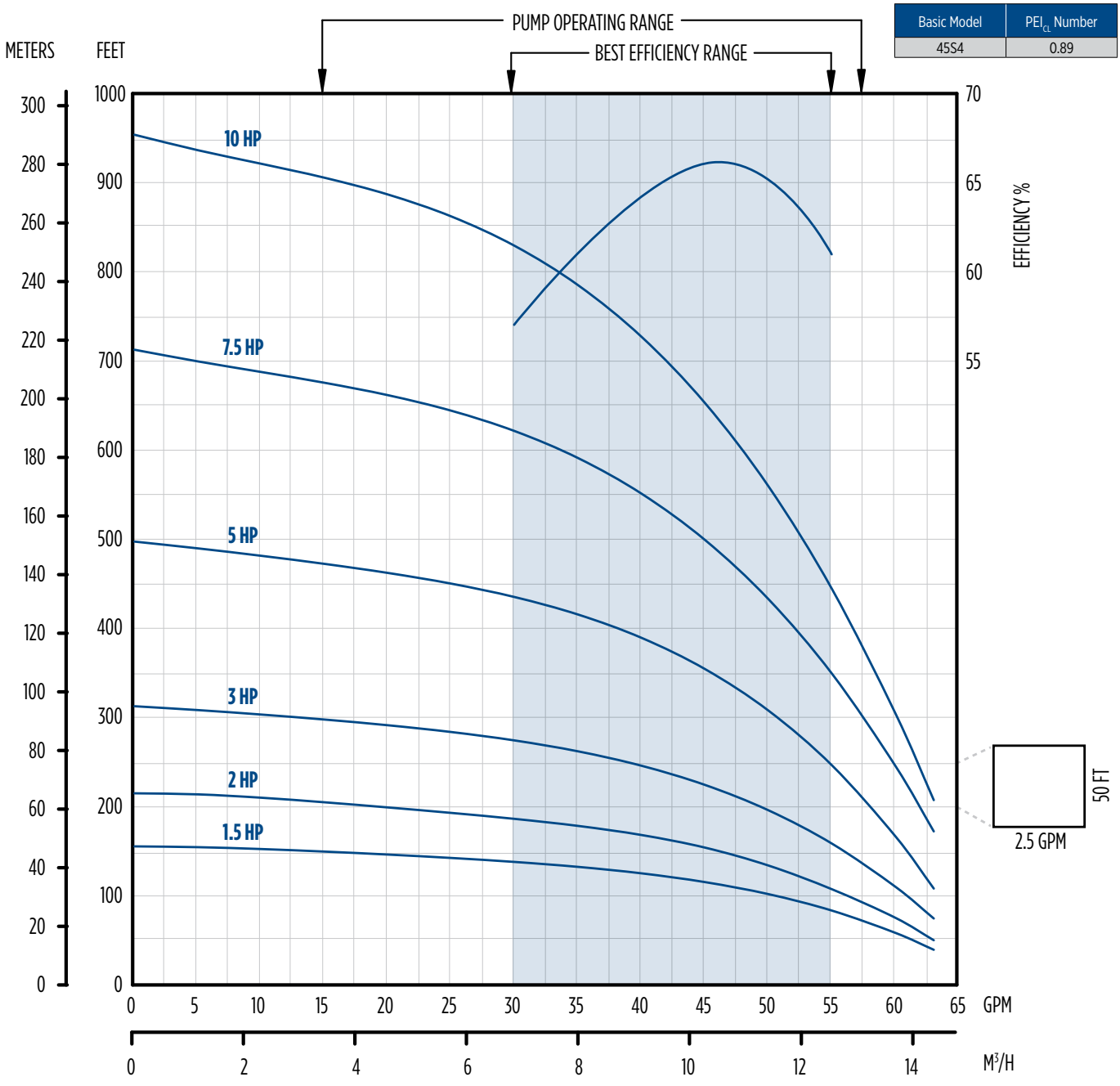
HP	PSI	240	280	320	360	400	440	480	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	Shut-Off (ft)
7.5	0						45	43	43	41	39	37	35	32	29	25	20						
	10						44	43	42	40	38	36	34	31	28	23							
	20					45	43	42	41	39	37	35	33	30	26	21							
	30				45	44	43	41	40	38	36	34	31	28	24								
	40			46	44	43	42	40	40	38	35	33	30	26	21								950
	50			45	44	42	41	39	39	37	34	31	28	24									
	60		45	44	43	42	40	39	38	35	33	30	26	22									
	70		45	43	42	41	39	38	37	34	32	28	24										
	80	45	44	43	41	40	38	37	36	33	30	27	22										
Shut-off PSI		307	290	273	255	238	221	203	195	173	152	130	108	87	65	43	22						
10	0									45	43	42	41	39	38	36	35	33	31	28	25	22	
	10								45	44	43	42	40	39	37	35	34	32	29	27	24	20	
	20							45	45	44	42	41	40	38	36	35	33	31	28	26	22		
	30							45	44	43	42	40	39	37	36	34	32	30	27	24	20		
	40						45	44	44	42	41	40	38	37	35	33	31	28	26	22			1250
	50					46	45	44	43	42	40	39	37	36	34	32	30	27	24	21			
	60				46	45	44	43	42	41	40	38	37	35	33	31	29	26	23				
	70				45	44	43	42	42	41	39	38	36	34	32	30	28	25	21				
	80			46	45	44	43	42	41	40	38	37	35	33	31	29	26	23					
Shut-off PSI				403	385	368	351	333	325	303	281	260	238	216	195	173	152	130	108	87	65	43	

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage. Performance shown is based on a pump without check valve.

4" TRI-SEAL HIGH CAPACITY PUMPS - 45 GPM

PERFORMANCE

Basic Model	PEI_{CL} Number
45S4	0.89





4" TRI-SEAL HIGH CAPACITY PUMPS - 45 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																			
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	480	500	Shut-Off (ft)
1.5	0					55	50	43													156
	10				54	49	41														
	20			54	48	39															
	30		53	47	38																
	40	52	46	36																	
	50	44	33																		
	60	30																			
Shut-off PSI		68	59	50	42	33	24	16													
2	0							52	48	43	35										216
	10						52	47	42	33											
	20				55	51	47	41	31												
	30			54	51	46	39	29													
	40		54	50	45	38															
	50	53	49	44	37																
	60	48	43	35																	
	70	42	34																		
	80	32																			
Shut-off PSI		94	85	76	68	59	50	42	33	24	16										
3	0									54	52	49	41								312
	10								54	51	48	45	35								
	20							54	51	48	44	40									
	30						53	50	47	44	39	32									
	40				55	53	50	47	43	38	31										
	50			55	52	50	46	42	37												
	60		55	52	49	46	42	36													
	70	54	52	49	45	41	35														
	80	51	48	44	40	34															
Shut-off PSI		135	126	118	109	100	92	83	74	66	57	48	31								
5	0												55	52	48	44	38				500
	10												53	50	46	41	33				
	20											55	51	48	43	37					
	30									56	54	53	49	45	40	32					
	40								56	54	53	51	47	42	36						
	50							55	54	52	51	49	45	39	30						
	60						55	54	52	50	49	46	42	34							
	70					55	53	52	50	48	46	44	38								
	80					53	52	50	48	46	43	41	33								
Shut-off PSI						182	173	165	156	147	139	130	113	95	78	61	43				

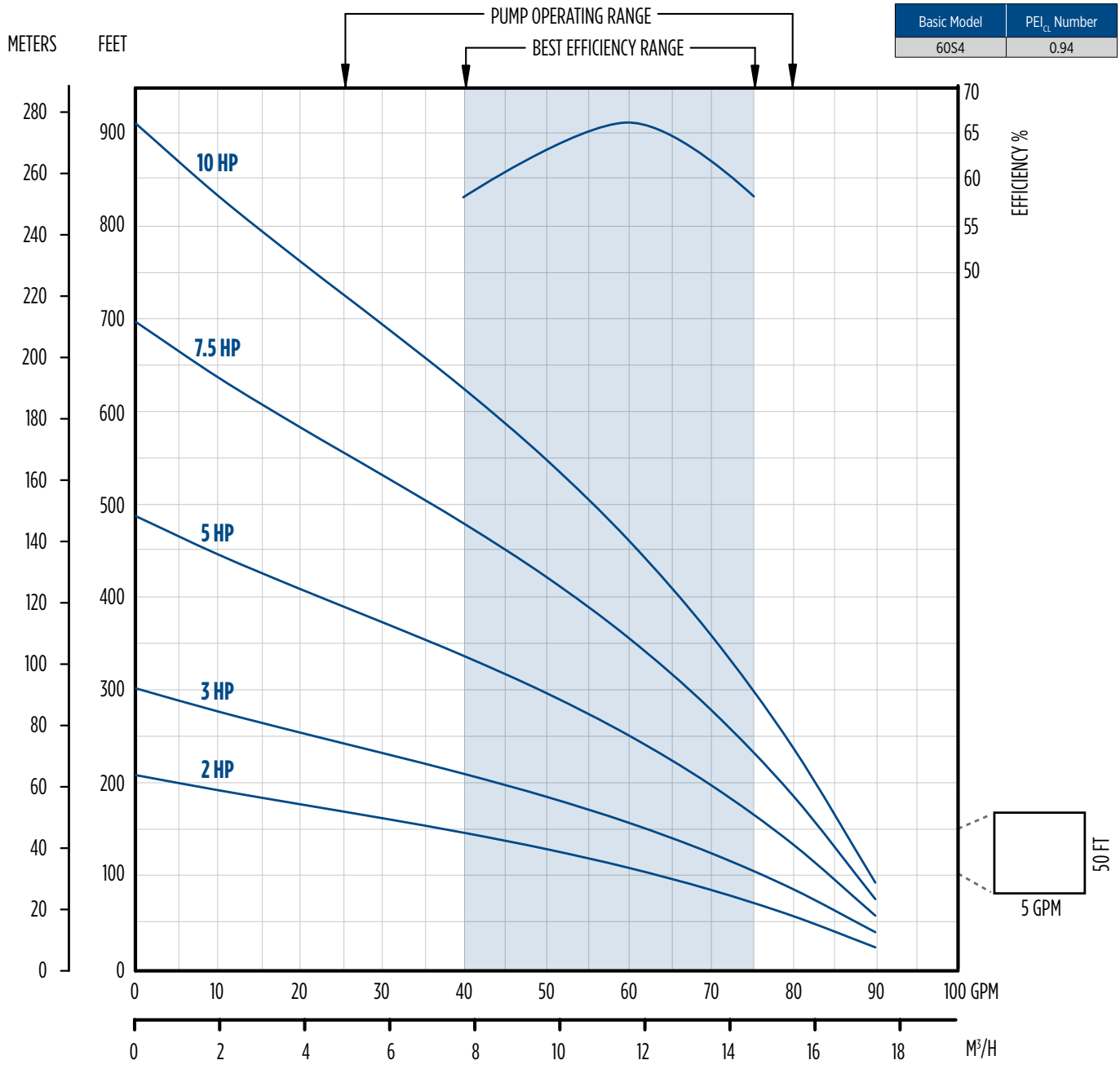
HP	PSI	160	180	200	240	280	320	360	400	440	480	500	550	600	650	700	750	800	850	900	Shut-Off (ft)
7.5	0							54	52	49	46	45	40	34							707
	10						55	53	50	48	44	43	37	30							
	20						54	52	49	46	42	40	34								
	30					55	53	50	47	44	40	38	30								
	40				56	54	51	48	45	42	37	35									
	50				54	52	50	47	43	39	34	31									
	60			55	53	51	48	45	41	37	30										
	70		55	54	52	49	46	43	39	33											
	80	55	54	53	50	48	44	41	36												
Shut-off PSI		237	228	219	202	185	168	150	133	116	98	90	68	46							
10	0									55	53	53	50	48	45	42	38	33			950
	10								56	54	52	52	49	47	44	40	36	31			
	20								55	53	51	51	48	45	42	38	34				
	30							56	54	52	50	49	47	44	40	36	31				
	40							55	53	51	49	48	46	42	39	34					
	50						55	54	52	50	48	47	44	41	37	31					
	60					56	54	53	51	49	47	46	43	39	34						
	70					55	53	52	50	48	46	44	41	37	32						
	80				56	54	52	51	49	47	44	43	39	35							
Shut-off PSI					307	290	273	255	238	221	203	195	173	152	130	108	87	65			

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage. Performances for former XP models are the same as 45 gpm models. Performance shown is based on a pump without check valve.

4" TRI-SEAL HIGH CAPACITY PUMPS - 60 GPM

PERFORMANCE

Basic Model	PEI_{CL} Number
60S4	0.94





4" TRI-SEAL HIGH CAPACITY PUMPS - 60 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																		
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	480	Shut-Off (ft)
2	0				79	72	64	55	45											206
	10			78	71	63	54	43												
	20		77	70	62	52	41													
	30	76	69	60	51															
	40	68	59	49																
	50	57	47																	
	60	45																		
Shut-off PSI		89	81	72	63	55	46	37	29											
3	0					82	77	71	66	59	52	44								300
	10				81	76	71	65	58	51	43									
	20			80	75	70	64	57	50	42										
	30		79	74	69	63	56	49	40											
	40	79	74	68	62	55	47	39												
	50	73	67	61	54	46	38	29												
	60	66	60	53	45															
	70	59	52	44																
	80	50	42																	
Shut-off PSI		130	121	113	104	95	87	78	69	61	52	43								
5	0							82	79	76	73	70	62	54	44					485
	10						82	79	76	73	69	66	58	49						
	20					81	78	75	72	69	65	61	53	43						
	30				81	78	75	72	68	64	60	56	47							
	40			80	77	74	71	68	64	60	56	51	41							
	50		80	77	74	71	67	63	59	55	50	45								
	60	79	76	73	70	66	63	59	54	50	45	40								
	70	76	73	69	66	62	58	54	49	44	39									
	80	72	69	65	61	57	53	48	43											
Shut-off PSI		210	201	193	184	175	167	158	149	141	132	123	106	89	71					
7.5	0										81	79	75	70	65	60	54	47	40	700
	10									80	78	76	72	67	62	56	50	43		
	20								80	78	76	74	69	64	59	53	46			
	30							80	78	76	74	71	66	61	55	49	42			
	40						80	78	75	73	71	69	63	58	52	45				
	50				81	79	77	75	73	71	68	66	60	54	48	41				
	60			81	79	77	75	72	70	68	65	63	57	51	44					
	70		81	79	77	74	72	70	67	65	62	59	53	47	40					
	80	80	78	76	74	72	69	67	64	62	59	56	50	43						
Shut-off PSI		303	294	286	277	268	260	251	242	234	225	216	199	182	165	147	130	113	95	

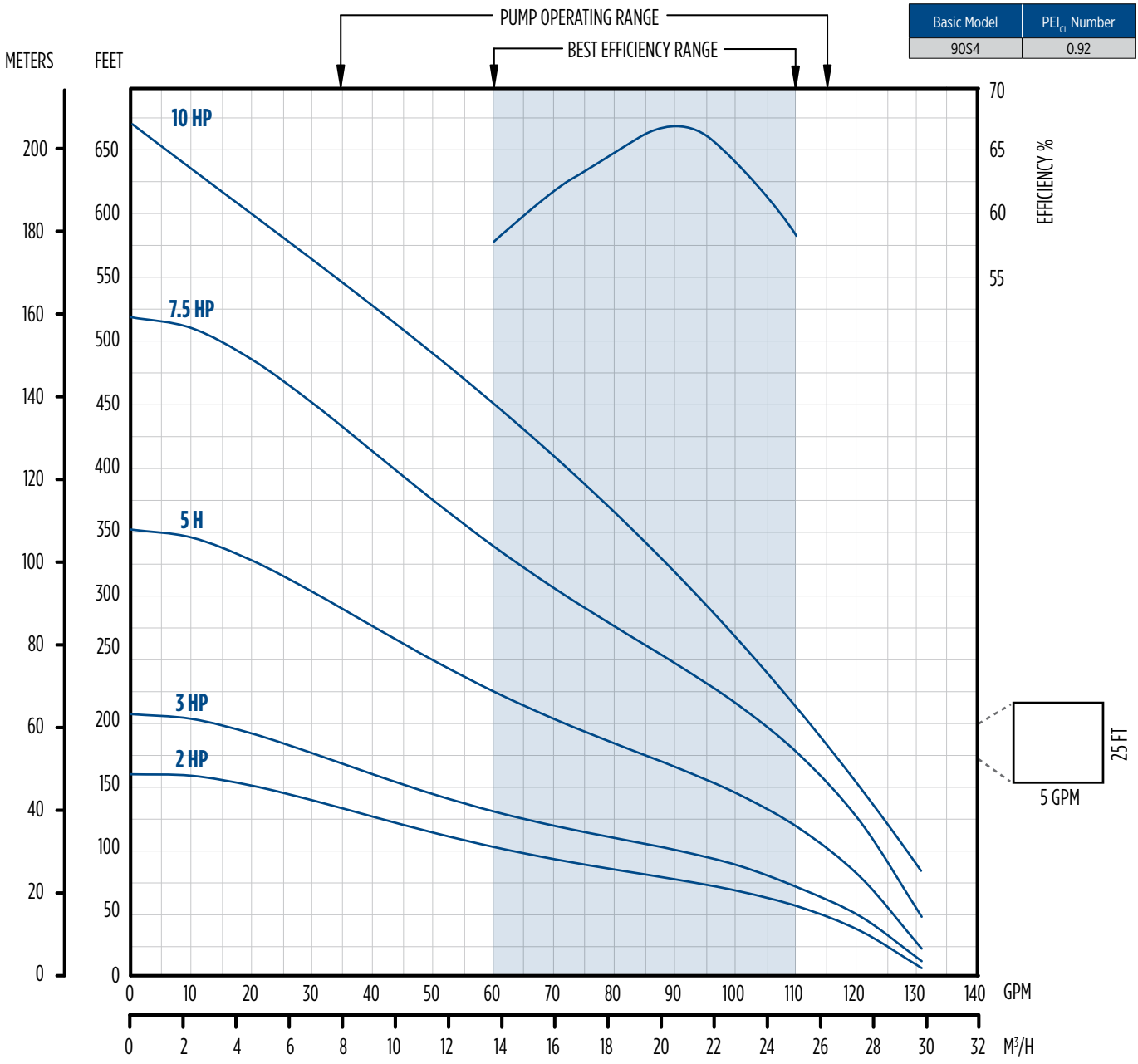
HP	PSI	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	480	500	550	600	Shut-Off (ft)
10	0										80	77	74	70	66	62	58	56	50	43	905
	10									81	78	75	72	68	64	60	55	53	47	40	
	20								81	79	76	73	69	66	62	57	53	50	44		
	30							81	79	78	74	71	67	63	59	55	50	47	41		
	40						81	79	77	76	72	69	65	61	57	52	47	44			
	50					80	79	77	76	74	70	67	63	58	54	49	44	41			
	60				80	79	77	75	74	72	68	64	60	56	51	46	41				
	70		81	80	78	77	75	73	72	70	66	62	58	53	48	43					
	80	81	80	78	76	75	73	71	70	68	64	60	55	50	45	40					
Shut-off PSI		374	366	357	348	340	331	323	314	305	288	271	253	236	219	201	184	175	154	132	

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage. Performances for former XP models are the same as 45 gpm models. Performance shown is based on a pump without check valve.

4" TRI-SEAL HIGH CAPACITY PUMPS - 90 GPM

PERFORMANCE

Basic Model	PEI_{CL} Number
90S4	0.92





MENU

4" TRI-SEAL HIGH CAPACITY PUMPS - 90 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																	
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	Shut-Off (ft)
2	0				104	89													170
	10			102	86	67													
	20		100	83	64														
	30	97	80	60															
	40	77																	
Shut-off PSI		74	65	56	48	39													
3	0					103	90	76											220
	10				101	88	73												
	20		110	99	86	71													
	30	109	97	84	68														
	40	95	81	65															
	50	79	63																
	60	60																	
Shut-off PSI		95	87	78	69	61	52	43											
5	0							106	99	92	84	76							365
	10						105	98	91	83	74	65							
	20				110	104	97	90	82	73	64								
	30			109	103	96	88	80	72	62									
	40		108	102	95	87	79	70	61										
	50	107	101	94	86	78	69	60											
	60	100	92	85	76	67													
	70	91	83	75	66														
	80	82	74	65															
Shut-off PSI		158	149	141	132	123	115	106	97	89	80	71							
7.5	0									111	106	101	91	81	69				535
	10								110	105	101	96	85	74	62				
	20							109	105	100	95	90	79	68					
	30						108	104	99	94	89	84	73	60					
	40					108	103	98	93	88	83	77	66						
	50				107	102	98	93	87	82	76	71							
	60		111	106	102	97	92	87	81	76	70	64							
	70	110	106	101	96	91	86	80	75	69	63								
	80	105	100	95	90	85	79	74	68	62									
Shut-off PSI		232	223	214	206	197	188	180	171	162	154	145	128	110	93				
10	0											112	105	98	90	82	74	65	680
	10										112	108	101	93	86	77	69	60	
	20									111	108	104	97	89	81	73	64		
	30							114	111	107	104	100	92	84	76	68	59		
	40						114	110	107	103	99	95	88	80	71	62			
	50					113	110	106	102	99	95	91	83	75	66				
	60				113	109	106	102	98	94	90	86	78	70	61				
	70			112	109	105	101	98	94	90	86	82	73	65					
	80		112	108	104	101	97	93	89	85	81	77	69	60					
Shut-off PSI		294	286	277	268	260	251	242	234	225	216	208	190	173	156	139	121	104	

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage. Performance shown is based on a pump without check valve.

6" TRI-SEAL HIGH CAPACITY PUMPS

Ideal for farm, home, irrigation, industry, municipal, and commercial applications, equipped with the power, performance, and reliability you expect from Franklin Electric.



FEATURES

- Heavy-duty stainless steel discharge head and motor bracket
- Stainless steel shaft, shell, intake screen, and cable guard provides corrosion resistance and longer pump life
- High flow hydraulic staging allows for maximum pump output, exceeds all energy efficiency standards, and provides increased product longevity
- Glass-filled modified PPO impeller stage assemblies provide exceptional strength and durability
- Ceramic shaft sleeve and rubber discharge bearing minimizes bearing wear and shaft misalignment
- 3" NPT heavy-duty stainless steel discharge head
- Modular motor bracket enabling 4" or 6" motor mount for 5-10 hp units
- Flow ratings of 50, 75, 100, and 125 gpm with TDH up to 1400 ft
- Horsepower ranges from 1-1/2 to 40 hp

MODEL NO. EXPLANATION

Example: 50FH2S6-PE

- 50 = gpm
- FH = Franklin Electric Brand
- 2 = 2 hp
- S = Stainless
- 6 = 6" Submersible
- PE = Pump End



MENU

6" TRI-SEAL HIGH CAPACITY PUMPS - ORDERING INFORMATION

ORDERING INFORMATION

6" Tri-Seal High Capacity Pump Ends								
GPM	HP	Stages	Weight (lbs)	Length (in)	Model	Order No.	Basic Model	PEI_{CL} Number
50	1.5	3	30	13.5	50FH15S6-PE	93655003	50S6	1.00
	2	4	31	15.1	50FH2S6-PE	93655004		
	3	5	32	16.8	50FH3S6-PE	93655005		
	5	8	36	21.6	50FH5S6-PE	93655008		
	7.5	11	40	26.5	50FH7S6-PE	93655011		
	10	15	46	32.9	50FH10S6-PE	93655015		
	15	22	46	47.6	50FH015S6-PE	93655022		
75	3	3	30	13.5	75FH3S6-PE	93657503	75S6	0.99
	5	5	32	16.8	75FH5S6-PE	93657505		
	7.5	7	35	20.0	75FH7S6-PE	93657507		
	10	9	38	23.3	75FH10S6-PE	93657509		
	15	13	43	29.8	75FH15S6-PE	93657513		
	20	17	48	36.2	75FH20S6-PE	93657517		
	25	23	52	46.0	75FH25S6-PE	93657523		
100	5	3	30	15.1	100FH5S6-PE	93650003	100S6	N/A
	7.5	5	33	19.2	100FH7S6-PE	93650005		
	10	6	34	21.3	100FH10S6-PE	93650006		
	15	10	39	29.6	100FH15S6-PE	93650010		
	20	12	41	33.8	100FH20S6-PE	93650012		
	25	16	47	42.1	100FH25S6-PE	93650016		
125	5	2	29	12.9	125FH5S6-PE	93652502	125S6	N/A
	7.5	4	31	17.1	125FH7S6-PE	93652504		
	10	5	33	19.2	125FH10S6-PE	93652505		
	15	8	36	25.4	125FH15S6-PE	93652508		
	20	10	39	29.6	125FH20S6-PE	93652510		
	25	13	43	35.9	125FH25S6-PE	93652513		
	30	16	46	42.1	125FH30S6-PE	93652516		
	40	20	51	50.4	125FH40S6-PE	93652520		

NOTES: Discharge is 3" NPT. Maximum diameter across cable guard is 5.50" on all models.
100 and 125 GPM models are outside the scope of the Department of Energy Pump Efficiency Standards. As such, a Pump Energy Index (PEI) is not required or published.

CROSS REFERENCE

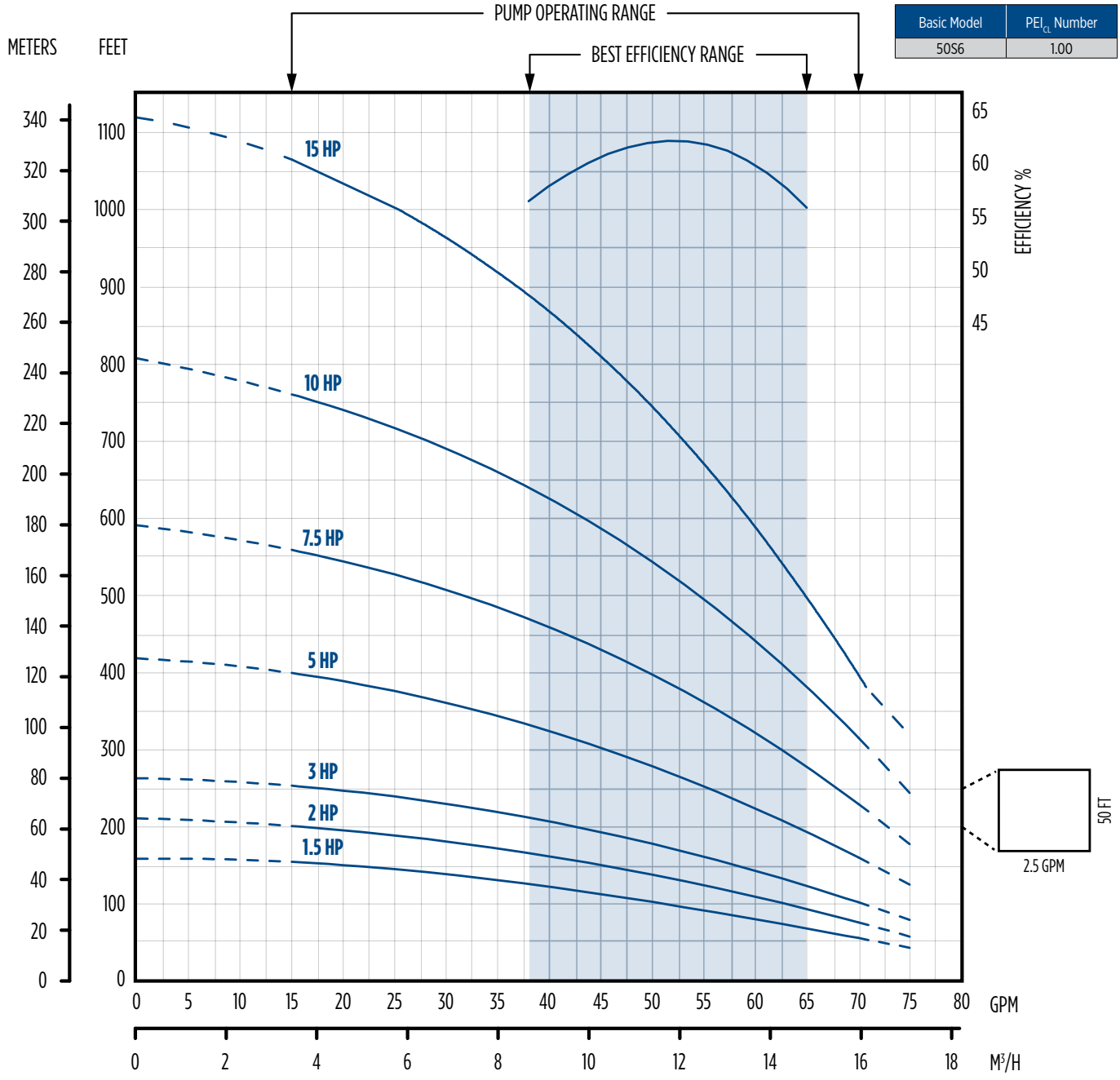
GPM	NEW DOE PEI_{CL} Rated		Original Shaefer 6" Pump Ends	
	Model	Order No.	Model	Order No.
50	50FH15S6-PE	93655003	50LD15S6-PE	94805003
	50FH2S6-PE	93655004	50LD2S6-PE	94805004
	50FH3S6-PE	93655005	50LD3S6-PE	94805005
	50FH5S6-PE	93655008	50LD5S6-PE	94805008
	50FH7S6-PE	93655011	50LD7S6-PE	94805011
	50FH10S6-PE	93655015	50LD10S6-PE	94805015
	50FH015S6-PE	93655022	-	-
75	75FH3S6-PE	93657503	75LD3S6-PE	94807503
	75FH5S6-PE	93657505	75LD5S6-PE	94807505
	75FH7S6-PE	93657507	75LD7S6-PE	94807507
	75FH10S6-PE	93657509	75LD10S6-PE	94807509
	75FH15S6-PE	93657513	75LD15S6-PE	94807513
	75FH20S6-PE	93657517	75LD20S6-PE	94807517
	75FH25S6-PE	93657523	75LD25S6-PE	94807523
100	100FH5S6-PE	93650003	100LD5S6-PE	94800003
	100FH7S6-PE	93650005	100LD7S6-PE	94800005
	100FH10S6-PE	93650006	100LD10S6-PE	94800006
	100FH15S6-PE	93650010	100LD15S6-PE	94800009
	100FH20S6-PE	93650012	100LD20S6-PE	94800013
	100FH25S6-PE	93650016	100LD25S6-PE	94800016
125	125FH5S6-PE	93652502	125LD5S6-PE	94802502
	125FH7S6-PE	93652504	125LD7S6-PE	94802503
	125FH10S6-PE	93652505	125LD10S6-PE	94802504
	125FH15S6-PE	93652508	125LD15S6-PE	94802507
	125FH20S6-PE	93652510	125LD20S6-PE	94802509
	125FH25S6-PE	93652513	125LD25S6-PE	94802511
	125FH30S6-PE	93652516	125LD30S6-PE	94802513
	125FH40S6-PE	93652520	125LD40S6-PE	94802518

Schaefer

6" TRI-SEAL HIGH CAPACITY PUMPS - 50 GPM

PERFORMANCE

Basic Model	PEI_{CL} Number
50S6	1.00





MENU

6" TRI-SEAL HIGH CAPACITY PUMPS - 50 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																	
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	Shut-Off (ft)
1.5	0			68	61	51	41	30											158
	20	66	58	47	38	25													
	30	56	46	37	21														
	40	44	35	16															
	50	33																	
Shut-off PSI		60	51	43	34	25	17	8											
2	0				69	63	57	49	41	31	16								211
	20		67	62	54	46	38	27											
	30	67	60	53	45	37	25												
	40	59	52	44	35	23													
	50	51	42	34	20														
	60	41	32	17															
Shut-off PSI		83	74	65	57	48	39	31	22	13	5								
3	0					70	66	61	55	49	42	17							263
	20			69	65	60	53	47	40	33	21								
	30		68	64	59	52	46	39	31	18									
	40	68	63	58	51	45	38	30	15										
	50	63	57	50	44	37	28												
Shut-off PSI		105	97	88	79	71	62	53	45	36	27	6							
5	0								70	67	64	55	45	34					418
	20						69	66	63	60	56	46	35	16					
	30					69	66	63	59	56	51	41	28						
	40				68	66	62	59	55	51	47	36	18						
	50		70	68	65	62	58	54	50	46	42	29							
	60	70	67	65	61	58	54	50	45	41	37	20							
Shut-off PSI		173	164	155	147	138	129	121	112	103	95	73	51	30					
7.5	0											68	63	57	49	42	32	18	591
	20										70	68	63	57	50	42	33	19	
	30								70	68	66	60	54	47	38	27			
	40							70	68	66	64	58	51	43	34	21			
	50						69	67	65	63	61	54	47	39	28				
Shut-off PSI		247	239	230	221	213	204	195	187	178	169	148	126	104	83	61	39	18	

HP	PSI	100	120	140	160	180	200	250	300	350	400	450	500	550	600	650	700	750	
10	0									68	64	59	54	49	43	37	28	18	808
	20								68	64	60	55	50	44	37	29	19		
	30							70	66	62	57	52	47	41	34	25			
	40							68	64	60	55	50	44	38	30	20			
	50						70	66	62	58	53	47	41	34	26				
	60					70	68	65	60	56	50	45	38	31	21				
Shut-off PSI		306	298	289	281	272	263	242	220	198	177	155	133	112	90	68	47	25	

HP	PSI	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	650	700	750	800	Shut-Off (ft)
15	0								80	78	76	74	72	70	68	65	62	59	56	53	49	46	1129
	20						79	78	77	76	74	72	70	68	65	62	59	56	53	50	46	42	
	40			80	79	78	77	76	75	74	72	70	68	65	63	60	57	53	50	46	43	38	
	60	80	78	77	76	76	75	74	73	72	70	68	66	63	60	57	54	50	47	43	39	34	
	80	77	76	75	75	74	73	72	71	71	68	66	63	60	57	54	50	47	43	39	34	29	
	100	75	74	73	73	72	71	70	69	68	66	63	60	57	54	51	47	43	39	35	29	22	
	120	73	72	72	71	70	69	68	67	66	64	61	58	54	51	47	44	40	35	30	23	14	
	140	71	71	70	69	68	67	66	65	64	61	68	55	51	48	44	40	36	30	23	14	3	
	160	67	66	65	64	62	62	61	59	58	55	52	48	45	41	36	31	24	16	5			
Shut-off PSI									411	402	380	359	337	315	294	272	250	229	207	186	164	142	

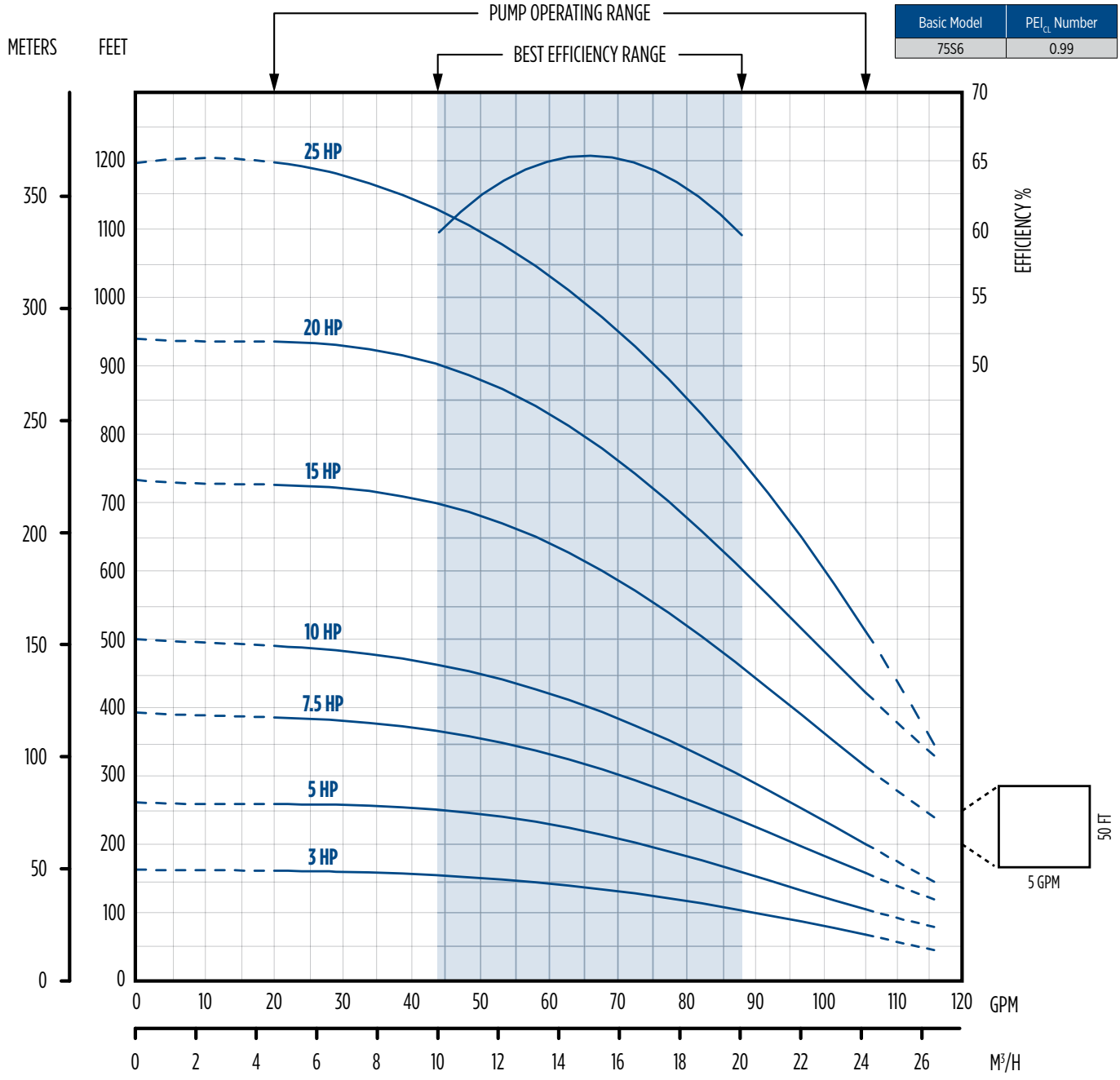
NOTES: Discharge 3" NPT; Performance shown does not include friction loss in the drop pipe; All performance data is based on rated motor nameplate voltage

Schaefer

6" TRI-SEAL HIGH CAPACITY PUMPS - 75 GPM

PERFORMANCE

Basic Model	PEI_{CL} Number
75S6	0.99





6" TRI-SEAL HIGH CAPACITY PUMPS - 75 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																	
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	Shut-Off (ft)
3	0			108	101	89	77	64	26										162
	20	106	98	85	73	57													
	30	96	83	72	53														
	40	81	70	47															
	50	68	40																
Shut-off PSI		61	53	44	35	27	18	9	1										
5	0				116	106	102	96	88	79	73	41							259
	20		112	105	100	93	85	77	71	64	47								
	30	110	104	99	92	84	76	70	63	43									
	40	103	98	91	82	75	69	61	37										
	50	97	89	81	74	68	58	31											
	60	88	80	73	67	56	24												
Shut-off PSI		103	95	86	77	69	60	51	43	34	25	4							
7.5	0						116	109	105	101	97	83	70	54					387
	20				114	108	104	100	96	90	85	71	56						
	30			112	107	103	99	95	89	84	78	65	40						
	40		111	106	103	99	94	88	83	77	72	57							
	50	111	106	102	98	93	88	82	76	71	66	43							
	60	105	102	97	92	87	81	76	71	65	59								
Shut-off PSI		159	150	142	133	124	116	107	98	90	81	59	38	16					
10	0								112	109	106	98	88	77	66	50			493
	20					116	111	108	105	102	99	89	78	67	52				
	30				115	111	107	104	101	98	94	84	73	61	39				
	40			114	110	107	104	101	98	94	89	78	68	54	18				
	50		114	109	106	104	100	97	93	89	84	74	63	42					
	60	113	109	106	103	100	96	92	88	84	79	69	55	22					
Shut-off PSI		205	196	187	179	170	161	153	144	135	127	105	84	62	40	19			

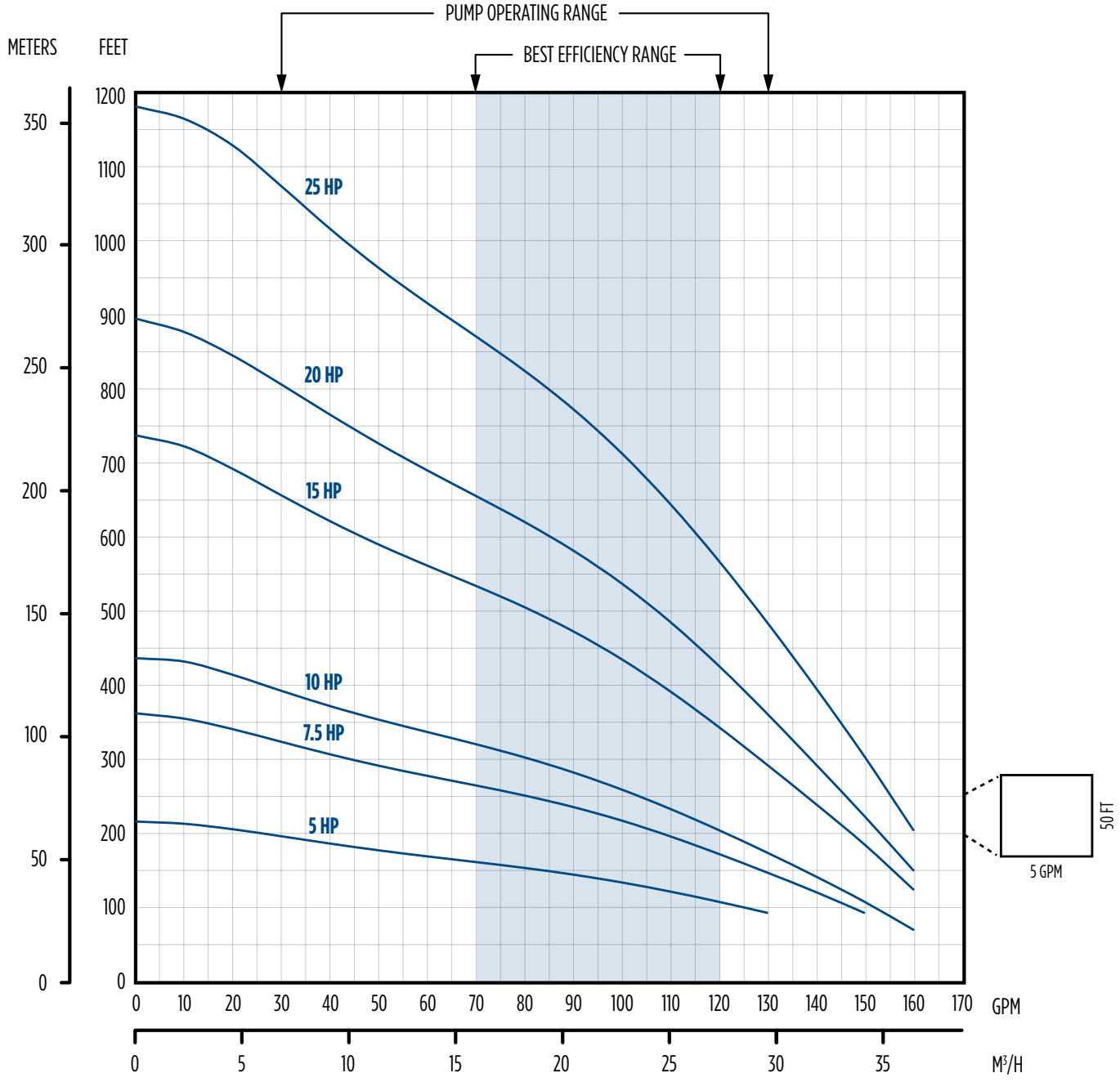
HP	PSI	120	140	160	180	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	Shut-Off (ft)
15	0						114	107	102	97	89	81	74	68	60	41						727
	20					115	107	103	97	90	82	75	69	61	43							
	30				114	110	105	100	94	86	78	72	66	55	28							
	40			113	110	107	103	98	90	82	75	69	62	45								
	50		113	109	107	105	101	95	87	79	73	66	56	31								
	60	112	109	107	105	103	98	91	83	76	70	63	47									
Shut-off PSI		263	254	245	237	228	206	185	163	142	120	98	77	55	33	12						
20	0								113	107	103	100	94	88	82	76	71	66	58	43		936
	20							113	107	104	100	95	89	82	76	72	67	59	44			
	30							110	106	102	98	92	86	79	74	69	64	54	33			
	40						114	108	104	100	95	89	83	77	72	67	60	46				
	50						110	106	102	98	93	86	80	74	70	64	55	35				
	60					115	108	104	101	96	90	83	77	72	67	61	47					
Shut-off PSI		353	345	336	327	319	297	275	254	232	210	189	167	145	124	102	80	59	37	15		

HP	PSI	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	
25	0			116	112	109	107	104	101	97	93	89	84	79	75	70	65	59	50	38	19	1202
	20		116	112	109	107	104	101	98	93	89	84	80	75	70	65	59	51	39	21		
	30		114	111	108	106	103	100	96	91	87	82	78	73	68	63	56	46	31			
	40		112	109	107	104	101	98	94	89	85	80	75	71	66	60	51	40	23			
	50	114	111	108	106	103	100	96	92	87	83	78	73	69	63	56	47	33				
	60	113	110	107	105	102	98	94	90	85	80	76	71	66	60	52	41	24				
Shut-off PSI		412	391	369	347	326	304	283	261	239	218	196	174	153	131	109	88	66	44	23	1	

NOTES: Discharge 3" NPT; Performance shown does not include friction loss in the drop pipe; All performance data is based on rated motor nameplate voltage

6" TRI-SEAL HIGH CAPACITY PUMPS - 100 GPM

PERFORMANCE





6" TRI-SEAL HIGH CAPACITY PUMPS - 100 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	Shut-Off (ft)
5	0						125	110	92	72	48							216
	10					123	107	89	68	44								
	20				120	105	86	64	40									
	30		132	118	102	83	61	36										
	40	130	116	99	80	57	32											
	50	113	96	76	53													
	60	93	73	50														
	70	70	46															
	80	42																
Shut-off PSI		94	85	76	68	59	50	42	33	24	16							
7.5	0										117	107	85	59	30			360
	10									115	106	95	71	42				
	20							123	114	104	93	82	55					
	30						121	112	102	92	80	66	38					
	40					120	111	101	90	78	64	50						
	50				119	109	99	88	76	62	48	33						
	60			117	108	98	86	74	60	46	31							
	70		116	106	96	84	72	58	43									
	80	114	105	94	82	69	56	41										
Shut-off PSI		156	147	139	130	121	113	104	95	87	78	69	52	35	17			
10	0										128	121	106	89	69	47		433
	10									127	120	113	96	78	56	33		
	20								126	119	111	103	86	66	43			
	30						131	125	118	110	102	94	74	53				
	40					130	124	117	109	101	92	83	62	39				
	50				129	123	115	108	100	91	81	71	49					
	60			128	121	114	106	98	89	80	70	59	36					
	70		127	120	113	105	97	88	78	68	57	46						
	80	126	119	112	104	95	86	77	66	55	44	32						
Shut-off PSI		187	179	170	161	153	144	135	127	118	110	101	84	66	49	32		

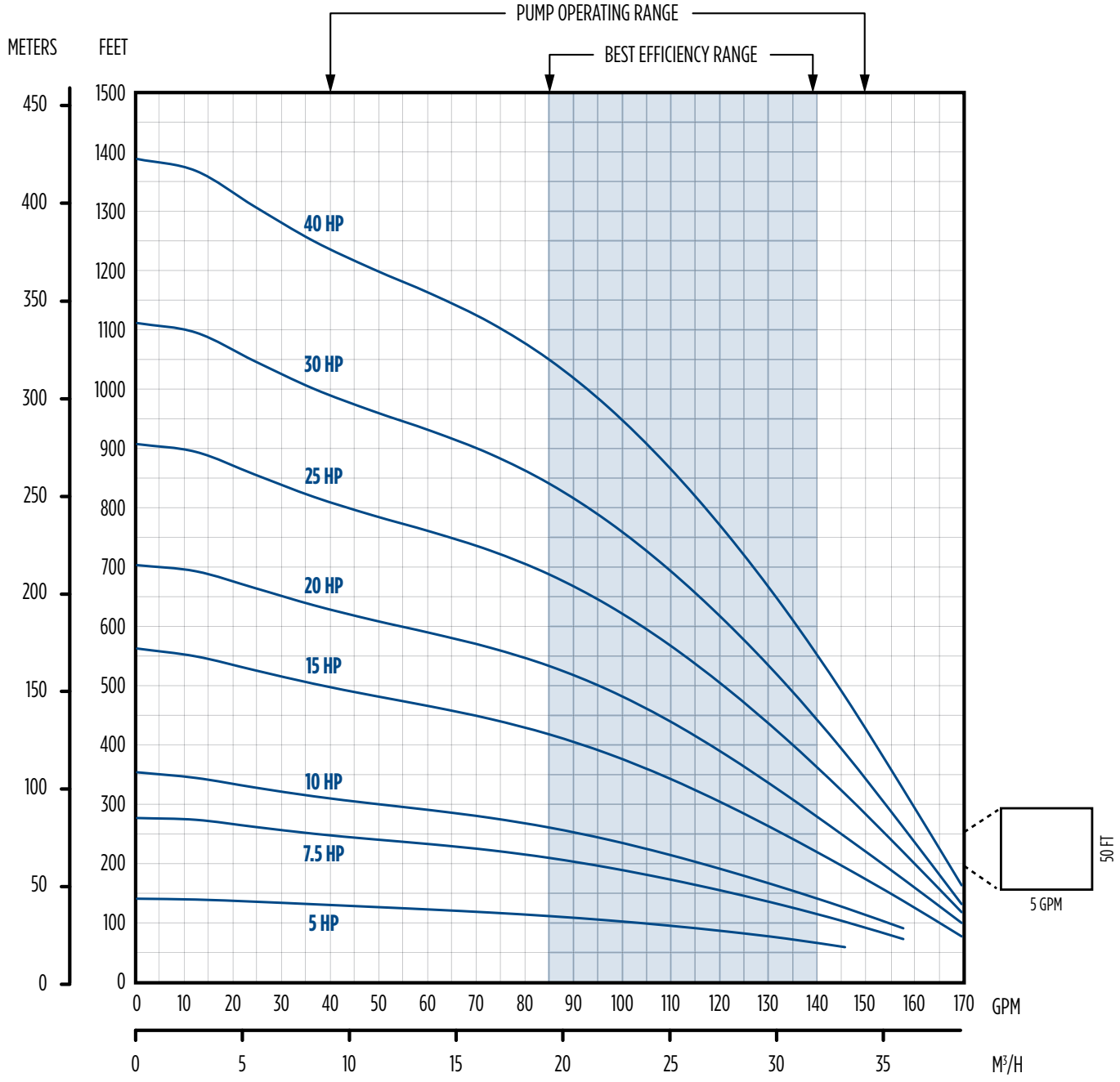
HP	PSI	100	120	140	160	180	200	240	280	320	360	400	440	480	500	550	600	650	Shut-Off (ft)
15	0									124	116	106	96	85	79	64	47	29	730
	10								128	120	110	101	90	78	72	56	39		
	20							131	123	114	105	95	83	71	65	48	31		
	30							127	118	109	99	88	76	64	57	40			
	40						130	122	113	103	93	82	69	56	49	32			
	50					129	125	117	107	97	86	75	62	48	41				
	60				129	125	121	112	102	91	80	67	54	40	33				
	70		132	128	124	120	115	106	96	85	73	60	46	32					
	80	132	128	123	119	115	110	100	89	78	65	52	38						
Shut-off PSI		273	264	255	247	238	229	212	195	177	160	143	126	108	100	78	56	35	

HP	PSI	160	180	200	240	280	320	360	400	440	480	500	550	600	650	700	750	800	Shut-Off (ft)
20	0							130	123	117	109	105	95	83	71	57	43		886
	10						133	126	120	112	105	100	90	78	65	51	36		
	20						129	122	115	108	100	96	84	72	58	44	29		
	30					132	125	118	111	103	95	90	79	66	52	37			
	40					128	121	114	107	98	90	85	73	59	45	30			
	50				131	124	117	110	102	93	84	80	67	53	38				
	60				127	120	113	105	97	88	79	74	61	46	32				
	70			130	123	116	109	101	92	83	73	68	54	40					
	60	132	129	126	119	112	104	96	87	77	67	62	47	33					
Shut-off PSI		314	306	297	280	262	245	228	210	193	176	167	145	124	102	81	59		

HP	PSI	320	360	400	440	480	500	550	600	650	700	750	800	850	900	950	1000	1050	Shut-Off (ft)
25	0					130	128	121	115	107	100	92	83	74	64	53	42	31	1170
	10				132	127	125	118	111	104	96	88	79	69	59	48	37	26	
	20				129	124	122	115	108	100	92	84	74	65	54	43	32	21	
	30			131	127	121	119	112	104	97	88	79	70	60	49	38			
	40			129	124	118	116	108	101	93	84	75	65	55	44	33			
	50		131	126	121	115	112	105	97	89	80	71	61	50	39				
	60	133	128	123	117	112	109	102	93	85	76	66	56	45	34				
	70	130	125	120	114	109	106	98	90	81	71	61	51	40					
	60	127	122	117	111	105	102	94	86	77	67	57	46	35					
Shut-off PSI		368	351	333	316	299	290	268	247	225	203	182	160	139	117	95	74	52	

6" TRI-SEAL HIGH CAPACITY PUMPS - 125 GPM

PERFORMANCE





MENU

6" TRI-SEAL HIGH CAPACITY PUMPS - 125 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																			
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	480	500	Shut-Off (ft)
5	0				145	125	99	60													138
	10			135	122	94	51														
	20		139	118	89	42															
	30	136	114	83																	
	40	110	77																		
	50	71																			
Shut-off PSI		60	51	42	34	25	16	8													
7.5	0						149	140	130	119	106	90	49								273
	10					148	139	128	117	103	88	69									
	20				146	137	127	115	101	85	65	41									
	30			145	136	125	113	99	82	62											
	40		144	134	123	111	97	79	58												
	50	142	132	121	109	94	76	55													
	60	131	120	107	92	73	51														
	70	118	104	89	70	47															
	80	102	86	67	43																
Shut-off PSI		118	110	101	92	84	75	66	58	49	40	32	14								
10	0							150	143	135	127	118	96	67							351
	10						149	142	134	126	116	106	80	47							
	20					148	141	133	124	115	104	92	62								
	30				147	140	132	123	113	102	90	76	41								
	40			146	138	130	121	112	100	88	73	56									
	50		145	137	129	120	110	99	86	71	54										
	60	144	136	128	118	108	97	83	68	51											
	70	135	126	117	107	95	81	66	48												
	80	125	115	105	93	79	63	45													
Shut-off PSI		152	143	135	126	117	109	100	91	83	74	65	48	31							
15	0											149	139	129	118	105	90	73	52	40	559
	10										148	143	134	123	111	97	81	62			
	20								152	147	143	138	127	116	103	88	70	49			
	30							151	146	142	137	132	121	109	95	78	58				
	40						150	146	141	136	131	126	114	101	85	67	45				
	50					150	145	140	135	130	125	119	107	92	75	55					
	60				149	144	140	135	130	124	118	112	99	83	64	41					
	70			148	144	139	134	129	123	117	111	105	90	72	51						
	80	152	147	143	138	133	128	122	116	110	103	96	80	61							
Shut-off PSI		242	233	225	216	207	199	190	181	173	164	155	138	121	103	86	69	52	34	26	

HP	PSI	60	80	100	120	140	160	180	200	240	280	320	360	400	440	480	500	550	600	650	Shut-Off (ft)
20	0										145	137	129	121	111	100	94	78	58		700
	10									148	141	133	124	115	105	93	87	69	46		
	20								151	144	136	128	119	109	98	86	79	59			
	30							150	147	140	132	123	114	103	91	78	70	48			
	40						150	146	143	135	127	118	108	97	84	69	61				
	50					149	146	142	138	130	122	112	102	90	76	60	50				
	60				149	145	142	138	134	125	116	106	95	82	67	49					
	70		152	148	145	141	137	133	129	120	111	100	88	73	57						
	80	151	148	144	140	137	133	128	124	115	104	93	80	64	46						
Shut-off PSI		277	268	260	251	242	234	225	216	199	182	165	147	130	113	95	87	65	43		

Schaefer

6" TRI-SEAL HIGH CAPACITY PUMPS - 125 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																						
		120	140	160	180	200	240	280	320	360	400	440	480	500	550	600	650	700	750	800	850	900	Shut-Off (ft)
25	0								150	145	139	134	127	124	115	105	94	81	66	48	27	4	906
	10								147	142	136	130	123	120	110	100	88	74	58	39	16	0	
	20							149	144	139	133	126	119	116	106	95	82	67	49	29	6	0	
	30							146	141	135	129	122	115	111	101	89	75	59	40	18	0		
	40						149	143	138	132	125	118	111	107	96	83	68	51	30	7	0		
	50					151	146	140	134	128	121	114	106	102	90	77	61	42	20	0			
	60				150	148	142	137	131	124	117	109	101	96	84	70	52	32	9	0			
	70		153	150	147	145	139	133	127	120	113	105	96	91	78	62	43	22	0				
	80	152	150	147	144	142	136	130	123	116	108	100	90	85	71	54	34	11	0				
Shut-off PSI		340	332	323	314	306	288	271	254	236	219	202	184	176	154	132	111	89	68	46	24	3	

HP	PSI	200	240	280	320	360	400	440	480	500	550	600	650	700	750	800	850	900	950	1000	1050	Shut-Off (ft)
30	0						149	145	141	138	132	126	119	111	103	93	83	71	57	41		1112
	10						147	143	138	136	129	123	115	107	99	89	78	65	50	33		
	20					149	144	140	135	133	126	119	112	103	94	84	72	58	43			
	30				150	146	142	137	132	130	123	116	108	99	90	78	66	51				
	40			152	148	144	139	134	129	127	120	112	104	95	85	73	59	44				
	50			150	146	141	136	132	126	124	116	109	100	90	79	67	52					
	60		151	147	143	138	134	129	123	120	113	105	96	85	74	60	45					
	70		149	145	140	136	131	126	120	117	109	101	91	80	68	54						
	80	151	147	142	138	133	128	122	117	114	105	96	86	75	62	46						
Shut-off PSI		395	377	360	343	326	308	291	274	265	243	222	200	178	157	135	113	92	70	48		

HP	PSI	280	320	360	400	440	480	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	Shut-Off (ft)
40	0						151	149	145	141	136	131	126	120	114	108	101	93	85	76	66	54	41	1390
	10						149	147	143	138	134	129	123	118	111	105	98	90	81	71	61	48		
	20					150	147	145	141	136	131	126	121	115	108	102	94	86	77	66	55	42		
	30					149	145	143	139	134	129	124	118	112	105	98	90	82	72	61	49			
	40				150	147	143	141	137	132	127	121	115	109	102	95	86	77	67	56	43			
	50			151	148	145	141	139	134	129	124	118	112	106	99	91	82	73	62	50				
	60			149	146	143	139	137	132	127	122	116	109	103	95	87	78	68	57	44				
	70		151	147	144	140	137	135	130	125	119	113	106	99	92	83	74	63	51					
	80	152	149	146	142	138	135	133	127	122	116	110	103	96	88	79	69	58	45					
Shut-off PSI		481	463	446	429	411	394	385	364	342	320	299	277	255	234	212	190	169	147	126	104	82	61	

NOTES: Discharge 3" NPT; Performance shown does not include friction loss in the drop pipe; All performance data is based on rated motor nameplate voltage

E SERIES EFFLUENT PUMPS

FEATURES

- Ideal for effluent pumping applications
- Stainless steel or thermoplastic discharge and motor bracket are tough and non-corrosive. Both materials are highly resistant to damage by minerals, metals, and other substances typically found in water
- Heavy-duty, 300 V, 10' SJOOW motor leads
- Designed to provide years of reliable service:
  - 10 and 20 gpm units are equipped with a highly-engineered shaft bearing with built in dry-run protection
  - High-flow 35 to 90 gpm units are built with a proven and durable ceramic sleeve bearing
- Water flow path through the discharge of the pump is designed to pass particulate to allow for efficient and continuous operation
- Proven hydraulic staging allows close tolerances and increased performance
- Carbon phenolic upthrust washer prevents excessive wear in severe applications
- Removable built-in check valve on 10-20 gpm pumps. No built-in check valves on high capacity pumps
- Powered by a Franklin Electric submersible motor

APPLICATIONS

- Filtered effluent service
- Aeration
- Ornamental fountains/waterfalls



E SERIES EFFLUENT PUMPS - ORDERING INFORMATION

THERMOPLASTIC ORDERING INFORMATION

1/2 - 1.5 HP Single-Phase Units					
GPM	HP	Volt	Wire	Model	Order No.
10	1/2	115	2	10LE05P4-2W115	94701005
	1/2	230	2	10LE05P4-2W230	94701010
	3/4	230	2	10LE07P4-2W230	94701015
	1	230	2	10LE1P4-2W230	94701020
	1.5	230	2	10LE15P4-2W230	94701025
20	1/2	115	2	20LE05P4-2W115	94702005
	1/2	230	2	20LE05P4-2W230	94702010
	3/4	230	2	20LE07P4-2W230	94702015
	1	230	2	20LE1P4-2W230	94702020
	1.5	230	2	20LE15P4-2W230	94702025

THERMOPLASTIC PUMP ENDS

1/2 - 2 HP Pump Ends				
GPM	HP	Stages	Model	Order No.
10	1/2	6	10LE05P4-PE	94711005
	3/4	8	10LE07P4-PE	94711010
	1	11	10LE1P4-PE	94711015
	1.5	15	10LE15P4-PE	94711020
20	1/2	4	20LE05P4-PE	94712005
	3/4	5	20LE07P4-PE	94712010
	1	7	20LE1P4-PE	94712015
	1.5	10	20LE15P4-PE	94712020
	2	12	20LE2P4-PE	94712025

NOTES: Discharge is 1-1/4" NPT. Maximum diameter across cable guard is 3.90" on all models.

STAINLESS STEEL ORDERING INFORMATION

1/2 - 1.5 HP Single-Phase Units (2-Wire)					
GPM	HP	Stages	Volts	Model	Order No.
35	1/2	2	115	35HE05S4-2W115	93933505
	1/2	2	230	35HE05S4-2W230	93933510
	3/4	3	230	35HE07S4-2W230	93933515
	1	5	230	35HE1S4-2W230	93933520
	1.5	7	230	35HE15S4-2W230	93933525
45	1/2	2	115	45HE05S4-2W115	93934505
	1/2	2	230	45HE05S4-2W230	93934510
	3/4	3	230	45HE07S4-2W230	93934515
	1	4	230	45HE1S4-2W230	93934520
	1.5	5	230	45HE15S4-2W230	93934525
60	1/2	2	115	60HE05S4-2W115	93936005
	1/2	2	230	60HE05S4-2W230	93936010
	3/4	3	230	60HE07S4-2W230	93936015
	1	4	230	60HE1S4-2W230	93936020
	1.5	5	230	60HE15S4-2W230	93936025
90	1.5	4	230	90HE15S4-2W230	93939025

STAINLESS STEEL PUMP ENDS

1 - 10 HP 4" High Capacity Pump Ends				
GPM	HP	Stages	Model	Order No.
35	1/2	2	35HE05S4-PE	93923502
	3/4	3	35HE07S4-PE	93923503
	1	5	35HE1S4-PE	93923505
	1.5	7	35HE15S4-PE	93923507
	2	9	35HE2S4-PE	93923509
	3	12	35HE3S4-PE	93923512
45	1/2	2	45HE05S4-PE	93924502
	3/4	3	45HE07S4-PE	93924503
	1	4	45HE1S4-PE	93924504
	1.5	5	45HE15S4-PE	93924505
	2	7	45HE2S4-PE	93924507
	3	10	45HE3S4-PE	93924510
60	1/2	2	60HE05S4-PE	93926002
	3/4	3	60HE07S4-PE	93926003
	1	4	60HE1S4-PE	93926004
	1.5	5	60HE15S4-PE	93926005
	2	7	60HE2S4-PE	93926007
	3	10	60HE3S4-PE	93666010
90	1.5	4	90HE15S4-PE	93929004
	2	6	90HE2S4-PE	93929006
	3	8	90HE3S4-PE	93929008

NOTES: Discharge is 2" NPT with no built in check valve. Maximum diameter across cable guard is 3.90" on all models.

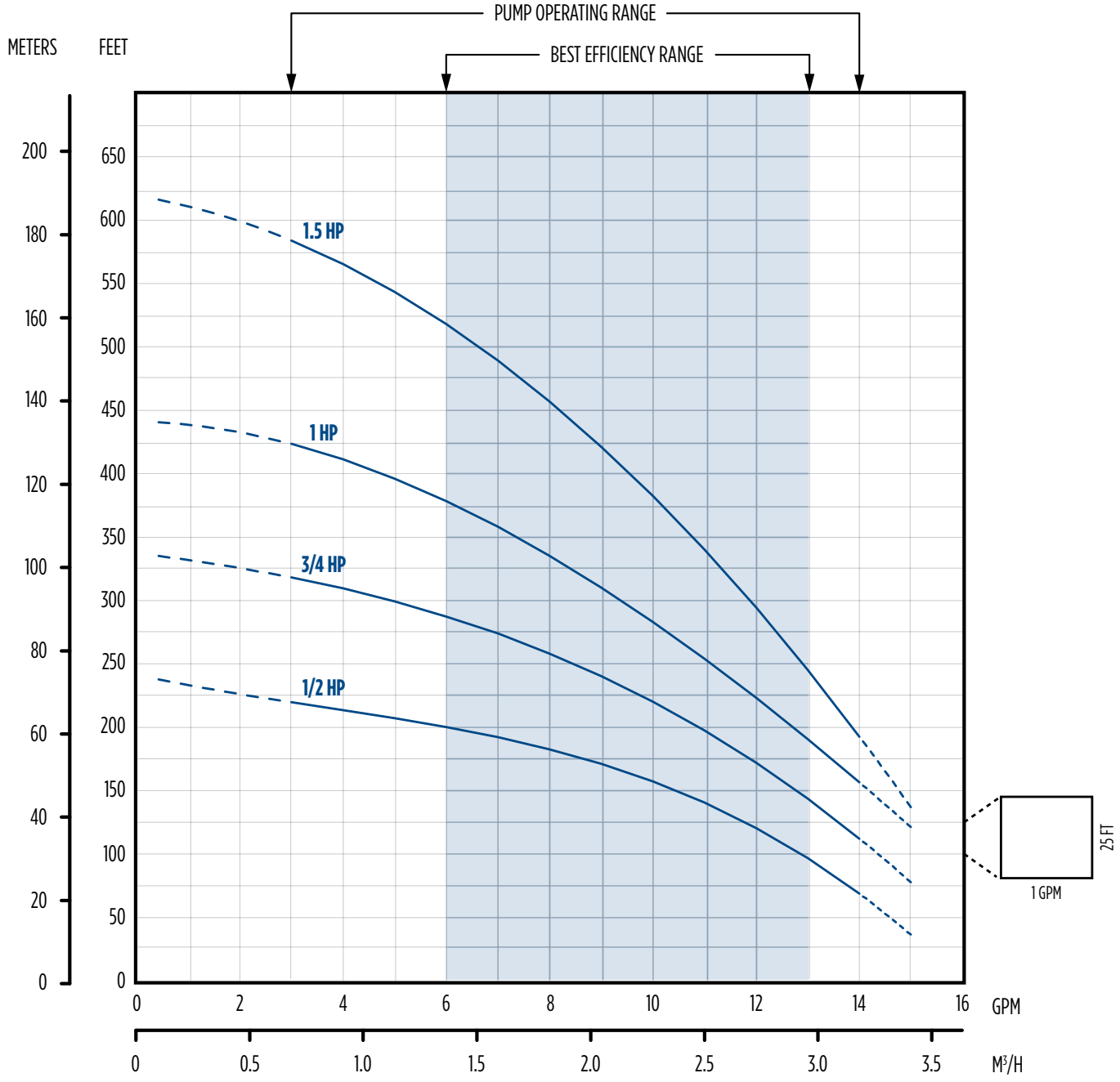
CROSS REFERENCE

GPM	NEW Franklin High Cap E-Series		Original Shaefer Pump Ends	
	Model	Order No.	Model	Order No.
35	35HE05S4-PE	93923502	35LE05S4-PE	94713505
	35HE07S4-PE	93923503	35LE07S4-PE	94713510
	35HE1S4-PE	93923505	35LE1S4-PE	94713515
	35HE15S4-PE	93923507	35LE15S4-PE	94713520
	35HE2S4-PE	93923509	35LE2P4-PE	94713525
	35HE3S4-PE	93923512	35LE3P4-PE	94713530
45	45HE05S4-PE	93924502	45LE05S4-PE	94714505
	45HE07S4-PE	93924503	45LE07S4-PE	94714510
	45HE1S4-PE	93924504	45LE1S4-PE	94714515
	45HE15S4-PE	93924505	45LE15S4-PE	94714520
	45HE2S4-PE	93924507	45LE2P4-PE	94714525
	45HE3S4-PE	93924510	45LE3P4-PE	94714530

GPM	NEW Franklin High Cap E-Series		Original Shaefer Pump Ends	
	Model	Order No.	Model	Order No.
60	60HE05S4-PE	93926002	60LE05S4-PE	94716005
	60HE07S4-PE	93926003	60LE07S4-PE	94716010
	60HE1S4-PE	93926004	60LE1S4-PE	94716015
	60HE15S4-PE	93926005	60LE15S4-PE	94716020
	60HE2S4-PE	93926007	60LE2S4-PE	94716025
	60HE3S4-PE	93926010	60LE3S4-PE	94716030
90	90HE15S4-PE	93929004	90LE15S4-PE	94719020
	90HE2S4-PE	93929006	90LE2S4-PE	94719025
	90HE3S4-PE	93929008	90LE3S4-PE	94719030

E SERIES EFFLUENT PUMPS - 10 GPM

PERFORMANCE



Schaefer

E SERIES EFFLUENT PUMPS - 10 GPM

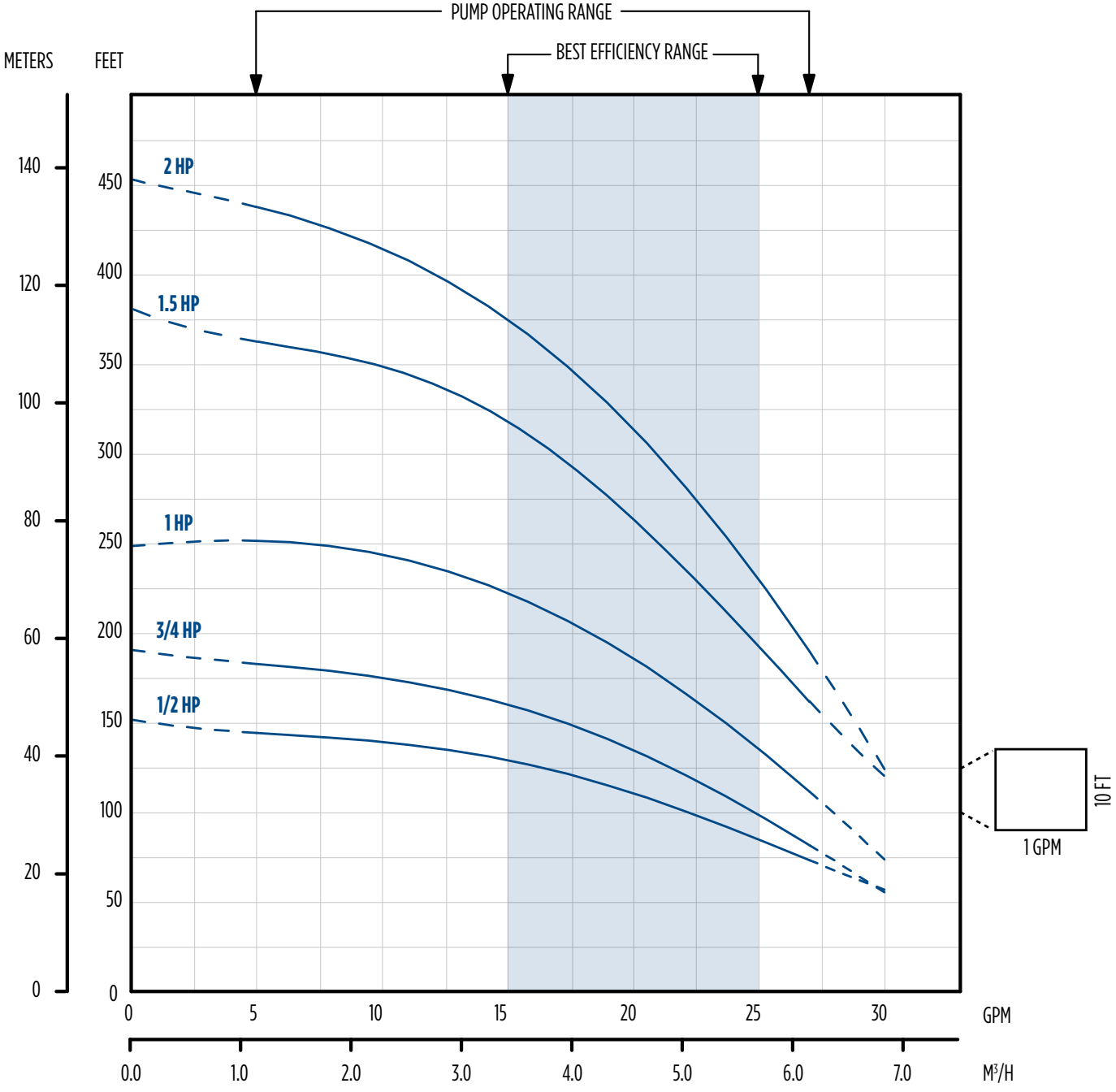
PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																		
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	Shut-Off (ft)
1/2	0			14	14	13	12	11	10	8	6									242
	20	14	13	13	12	11	9	8	5											
	30	13	12	12	11	9	7	5												
	40	12	11	10	9	7	4													
	50	11	10	9	6	4														
	60	10	8	6	3															
	70	8	6	3																
	80	5																		
Shut-off PSI		96	87	79	70	61	53	44	35	27	18									
3/4	0					14	14	13	12	12	11	8	5							337
	20			14	14	13	12	11	11	10	9	5								
	30		14	13	13	12	11	10	10	9	7	3								
	40	14	13	13	12	11	10	9	8	7	6									
	50	13	13	12	11	10	9	8	7	5	3									
	60	13	12	11	10	9	8	7	5	3										
	70	12	11	10	9	8	6	5												
	80	11	10	9	8	6	4													
Shut-off PSI		137	129	120	111	103	94	85	77	68	59	38	16							
1	0							14	14	13	13	11	9	7	5					441
	20					14	14	13	13	12	11	9	8	5						
	30				14	14	13	13	12	11	10	9	7	3						
	40			14	13	13	12	12	11	10	10	8	5							
	50	14	14	13	13	12	12	11	10	9	9	7	4							
	60	14	13	13	12	12	11	10	9	9	8	6								
	70	13	13	12	11	11	10	9	8	8	7	4								
	80	13	12	11	11	10	9	8	8	7	6									
Shut-off PSI		182	174	165	156	148	139	130	122	113	105	83	61	40	18					
1.5	0									14	14	13	12	11	9	8	7	5		619
	20						14	14	14	13	13	12	11	10	8	7	5			
	30					14	14	14	13	13	13	12	10	9	8	6	4			
	40				14	14	14	13	13	13	12	11	10	8	7	5				
	50			14	14	14	13	13	12	12	12	10	9	8	6	4				
	60		14	14	14	13	13	12	12	12	11	10	8	7	5	3				
	70	14	14	13	13	13	12	12	11	11	10	9	8	6	4					
	80	14	13	13	13	12	12	11	11	10	10	9	7	5	3					
Shut-off PSI		259	251	242	233	225	216	207	199	190	181	160	138	117	95	73	52	30	8	

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

E SERIES EFFLUENT PUMPS - 20 GPM

PERFORMANCE



Schaefer

E SERIES EFFLUENT PUMPS - 20 GPM

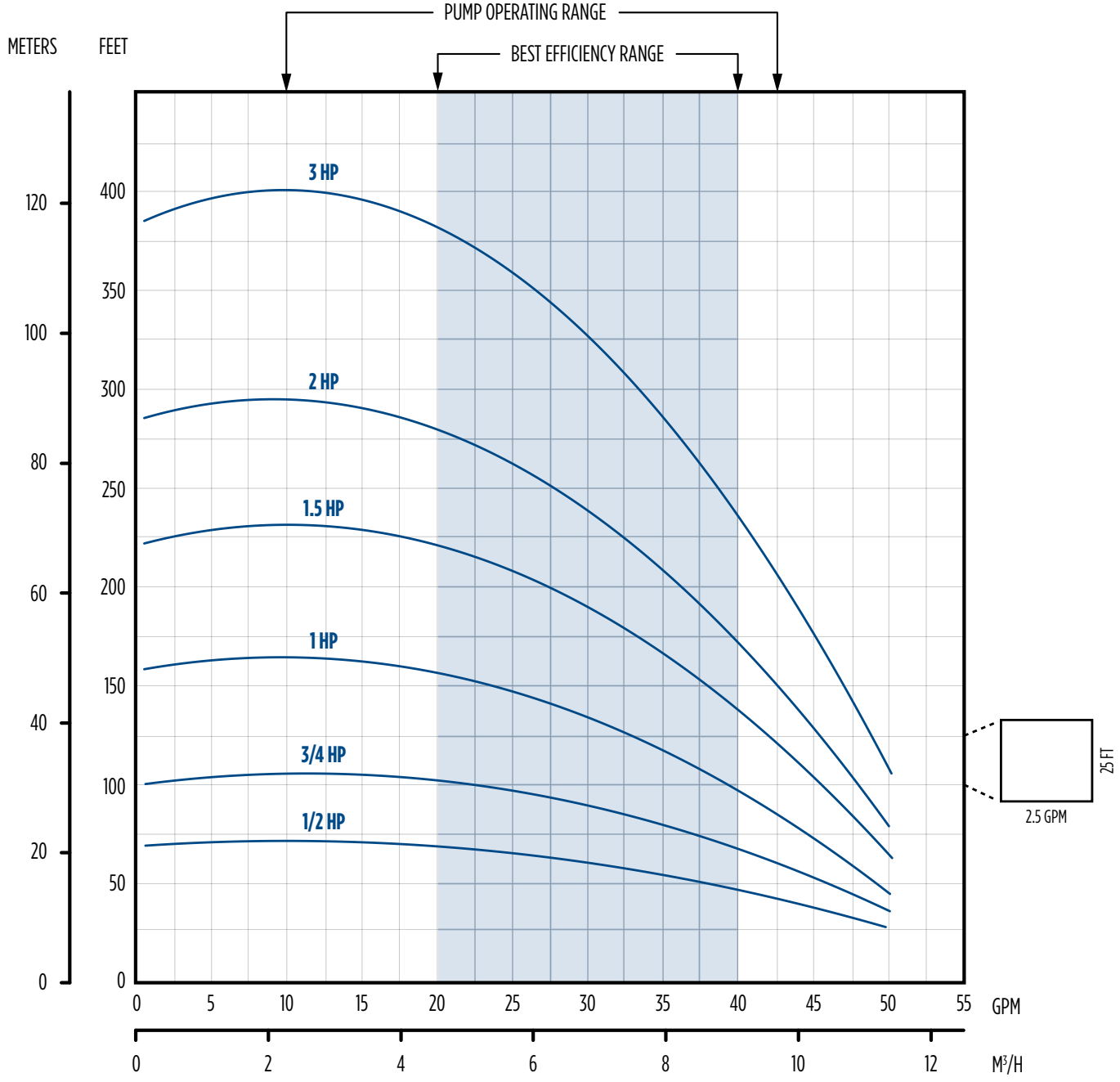
PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																	
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	Shut-Off (ft)
1/2	0				26	22	18	9											152
	20		24	21	16														
	30	24	21	15															
	40	20	13																
	50	12																	
	60																		
	70																		
	80																		
Shut-off PSI		57	48	40	31	22	14	5											
3/4	0				27	25	22	19	15	7									191
	20		26	24	21	18	13												
	30	26	24	21	18	12													
	40	23	20	17	11														
	50	20	16	9															
	60	15	8																
	70	6																	
	80																		
Shut-off PSI		74	65	57	48	39	31	22	13	5									
1	0						26	25	23	20	18	6							251
	20			27	26	24	22	20	18	15	8								
	30		27	26	24	22	19	17	14	7									
	40	27	25	23	21	19	17	13											
	50	25	23	21	19	16	12												
	60	23	21	18	16	11													
	70	20	18	15	10														
	80	18	15	9															
Shut-off PSI		100	91	83	74	65	57	48	40	31	22	1							
1.5	0								27	26	24	21	17	9					379
	20						27	25	24	23	21	17	10						
	30					26	25	24	22	21	20	15							
	40				26	25	23	22	21	19	18	11							
	50		27	26	25	23	22	21	19	17	15								
	60	27	26	24	23	22	20	19	17	15	11								
	70	26	24	23	21	20	19	17	14	11	5								
	80	24	23	21	20	18	16	14	10										
Shut-off PSI		156	147	138	130	121	112	104	95	86	78	56	34	13					
2	0									27	27	24	21	17	12				452
	20							27	26	25	24	21	18	13					
	30						27	26	25	24	23	19	16	9					
	40					27	26	25	24	23	21	18	13						
	50				27	26	25	24	22	21	20	16	10						
	60		27	27	26	25	23	22	21	19	18	14	5						
	70	27	27	26	24	23	22	21	19	18	16	10							
	80	26	25	24	23	22	20	19	18	16	14	6							
Shut-off PSI		187	178	170	161	153	144	135	127	118	109	88	66	44	23				

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

E SERIES EFFLUENT PUMPS - 35 GPM

PERFORMANCE



Schaefer

E SERIES EFFLUENT PUMPS - 35 GPM

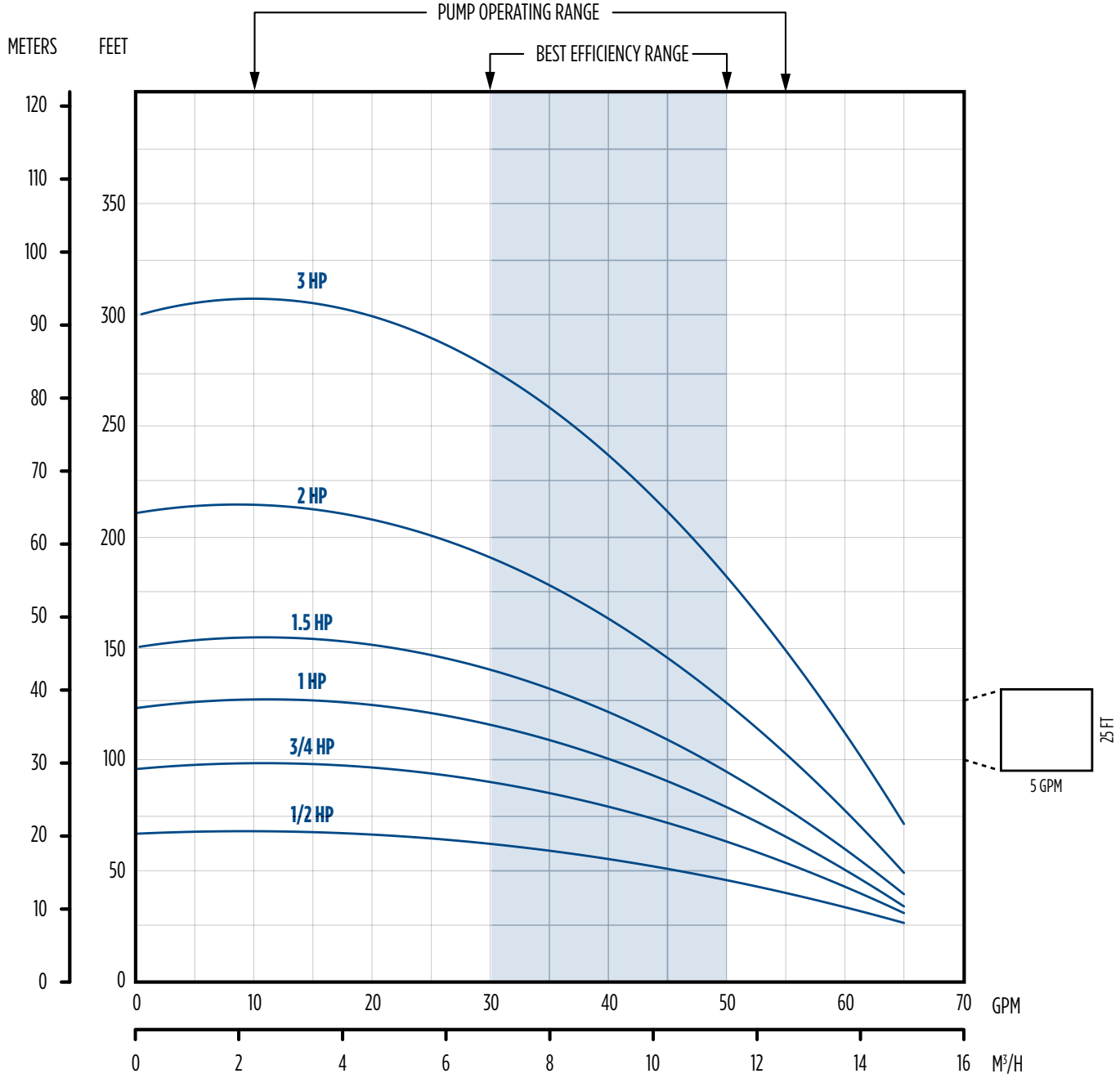
PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																	
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	Shut-Off (ft)
1/2	0			44	31														70
	10		42	28															
	20	40	24																
	30	19																	
	40																		
	50																		
Shut-off PSI		30	22	13	4	-4													
3/4	0				43	35	22												103
	10			42	33														
	20		40	32															
	30	39	30																
	40	28																	
	50																		
Shut-off PSI		45	36	27	19	10	1												
1	0					44	39	34	28										162
	10				43	39	33	27											
	20			42	38	32	25												
	30		42	37	31	24													
	40	41	36	30	22														
	50	35	29	20															
	60	28																	
Shut-off PSI		70	61	53	44	35	27	18	10										
1.5	0							43	40	36	32	27							228
	10						42	39	36	32	27								
	20					42	39	35	31	26									
	30				41	38	34	30	25										
	40			41	38	34	29	24											
	50		40	37	33	29	22												
	60	40	37	33	28	21													
	70	36	32	27	20														
	80	31	26																
Shut-off PSI		99	90	81	73	64	55	47	38	29	21	12							
2	0								44	41	39	36	30	20					290
	10							43	41	39	36	33	25						
	20						43	41	38	35	32	29							
	30					43	40	38	35	32	28	23							
	40				42	40	37	34	31	27	22								
	50			42	40	37	34	31	27	21									
	60		42	39	36	33	30	26	20										
	70	41	39	36	33	29	25	19											
	80	38	36	32	29	24	18												
Shut-off PSI		126	117	108	100	91	82	74	65	56	48	39	22	4					
3	0											43	40	36	31	25			394
	10										43	41	37	33	28	20			
	20									43	41	39	35	30	24				
	30								42	41	39	37	32	27					
	40							42	40	38	36	34	29	22					
	50						42	40	38	36	34	32	26						
	60					42	40	38	36	34	31	28	21						
	70				41	39	38	35	33	31	28	25							
	80			41	39	37	35	33	30	27	24								
Shut-off PSI				153	145	136	127	119	110	101	93	84	67	49	32	15			

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

E SERIES EFFLUENT PUMPS - 45 GPM

PERFORMANCE



Schaefer

E SERIES EFFLUENT PUMPS - 45 GPM

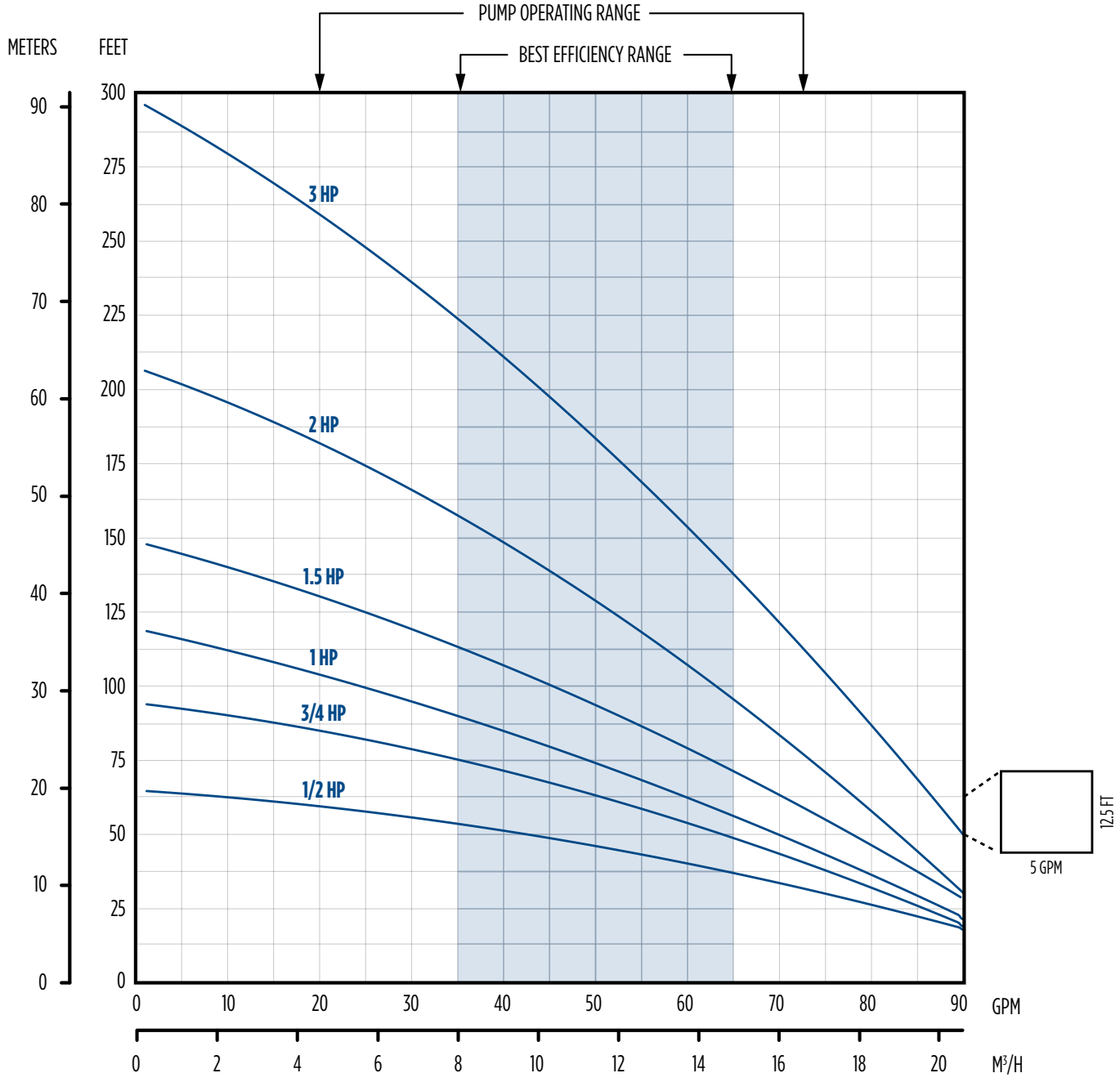
PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																	
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	Shut-Off (ft)
1/2	0			55	32														68
	10		52																
	20	49																	
	30																		
	40																		
Shut-off PSI		29	21	12	3														
3/4	0				52	39													98
	10			50	36														
	20		48	33															
	30	46	30																
	40																		
Shut-off PSI		42	34	25	16	8													
1	0					50	41												129
	10				48	39													
	20			47	37														
	30	54	46	35															
	40	44	33																
	50	31																	
Shut-off PSI		56	47	39	30	21	13	4											
1.5	0					52	48	40	30										155
	10				53	47	39												
	20			52	46	38													
	30		52	45	36														
	40	51	44	34															
	50	42	33																
	60	31																	
Shut-off PSI		67	58	50	41	32	24	15	6										
2	0							51	46	41	34								215
	10						50	46	40	33									
	20					50	45	39	31										
	30				49	44	38	30											
	40			48	43	37													
	50		47	42	36														
	60	47	41	34															
	70	40	33																
	80	32																	
Shut-off PSI		93	84	76	67	58	50	41	32	24	15								
3	0									53	50	47	39						311
	10								53	50	47	43	34						
	20							53	49	46	42	38							
	30						52	49	45	42	37	32							
	40					52	48	45	41	37	31								
	50				51	48	44	40	36	30									
	60			51	47	44	40	35											
	70		50	47	43	39	34												
	80	50	46	43	38	33													
Shut-off PSI		135	126	117	109	100	91	83	74	65	57	48	31						

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

E SERIES EFFLUENT PUMPS - 60 GPM

PERFORMANCE



Schaefer

E SERIES EFFLUENT PUMPS - 60 GPM

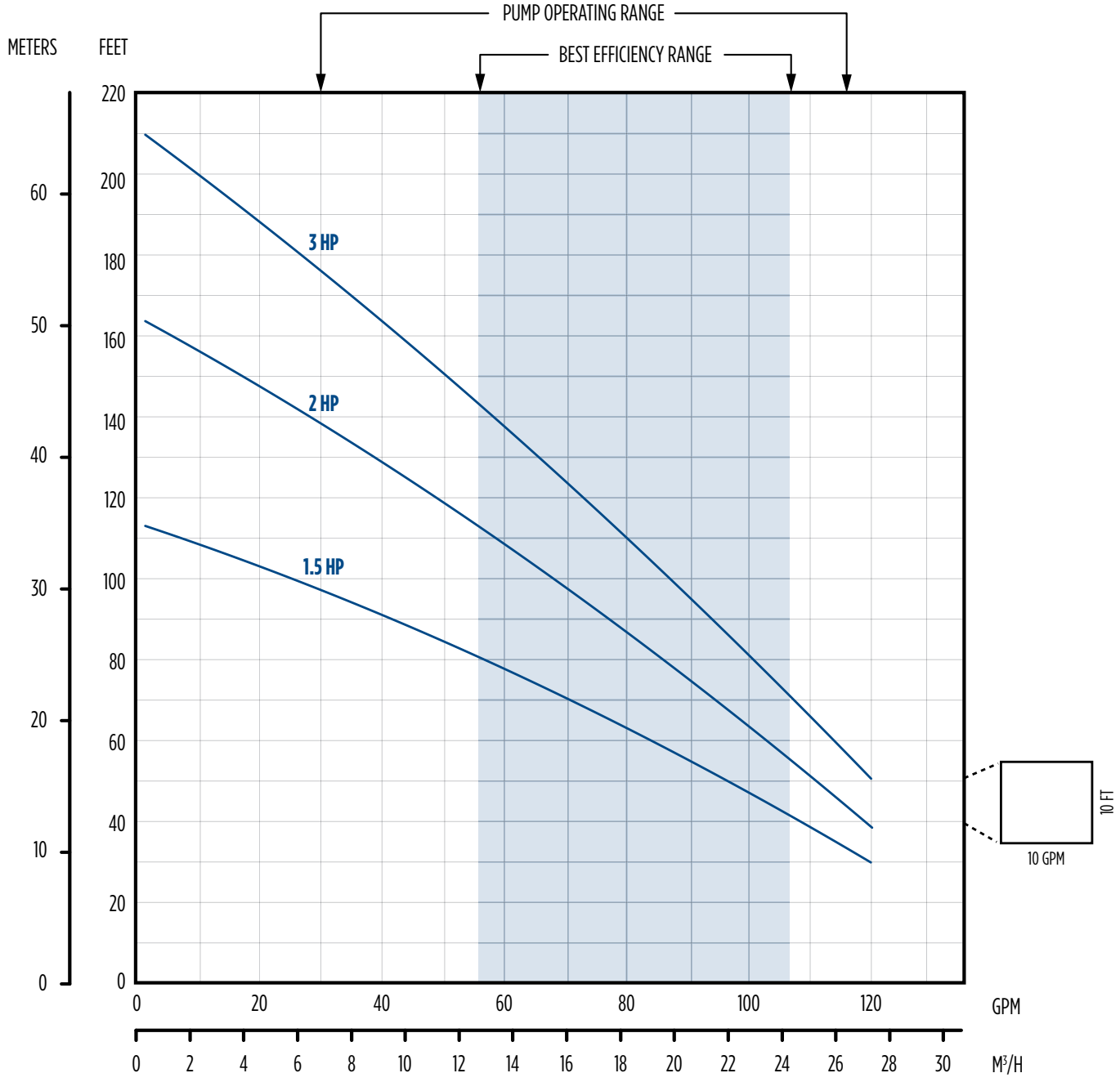
PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																	
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	Shut-Off (ft)
1/2	0			60															65
	10		55																
	20	49																	
	30																		
	40																		
Shut-off PSI		28	19	11															
3/4	0				53														96
	10			50															
	20		46																
	30	42																	
	40																		
Shut-off PSI		42	33	24	16														
1	0				62	44													121
	10			59	42														
	20		57	39															
	30	54	35																
	40																		
Shut-off PSI		52	44	35	26	18													
1.5	0					59	45												151
	10				57	43													
	20			55	41														
	30		53	38															
	40	51	36																
	50	33																	
Shut-off PSI		65	57	48	39	31	22												
2	0						63	54	44										210
	10					62	53	43	32										
	20				61	51	41	30											
	30			59	50	40													
	40		58	48	38														
	50	56	47	36															
	60	45	34																
Shut-off PSI		91	82	74	65	56	48	39	30										
3	0									58	51	44							302
	10							63	57	50	43	35							
	20						62	56	49	42	34								
	30					62	55	48	41										
	40				61	54	47	39											
	50		66	60	53	46	38												
	60	65	58	52	45	37													
	70	57	51	44	36														
	80	50	42	35															
Shut-off PSI		131	122	113	105	96	87	79	70	61	53	44							

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

E SERIES EFFLUENT PUMPS - 90 GPM

PERFORMANCE



Schaefer

E SERIES EFFLUENT PUMPS - 90 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																	
		0	20	40	60	80	100	120	140	160	180	200	240	280	320	360	400	440	Shut-Off (ft)
1.5	0				65	57													112
	10		105	81	75														
	20	102	76																
	30	72	44																
Shut-off PSI		48	40	31	23	14													
2	0				103	86	69												162
	10			101	84	66													
	20		98	81	63														
	30	95	78	60															
	40	76	57																
Shut-off PSI		70	61	53	44	35	27												
3	0					101	87	73	59										210
	10				99	85	71	57											
	20			97	83	69													
	30	108	95	81	67														
	40	93	79	64															
	50	77	62																
	60	60																	
Shut-off PSI		91	82	74	65	56	48	39	30										

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

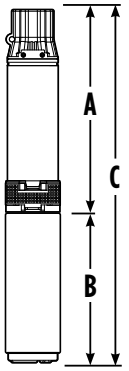
E SERIES EFFLUENT PUMPS - DIMENSIONS

THERMOPLASTIC

GPM	HP	Stages	Dimensions (in)			Wt. (lbs)	
			A	B	C	PE	PMA
10	1/2	6	12.97	9.51	22.48	7	25
	3/4	8	14.69	10.64	25.33	8	29
	1	11	17.44	11.73	29.17	9	33
	1.5	15	21.06	15.10	36.16	10	41
20	1/2	4	12.97	9.51	22.48	7	25
	3/4	5	13.65	10.64	24.29	6	28
	1	7	16.10	11.73	26.42	8	32
	1.5	10	19.77	15.10	34.87	8	39

NOTES: PE = Pump end only; PMA = Pump and motor assembly; Maximum diameter with cable guard is 3.90"

Thermoplastic

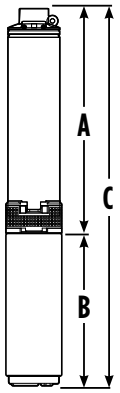


STAINLESS STEEL DIMENSIONS

GPM	HP	Stages	Dimensions (in)			Wt. (lbs)	
			A	B	C	PE	PMA
35	1/2	2	9.1	9.5	18.6	6	24
	1/2	2	9.1	9.5	18.6	6	24
	3/4	3	10.3	10.7	21.0	7	28
	1	5	12.9	11.7	24.6	8	32
	1.5	7	15.4	15.1	30.5	9	38
	2	9	17.1	15.1	32.2	11	44
	3	12	20.9	19.0	40.0	12	53
45	1/2	2	9.9	9.5	19.4	9	27
	1/2	2	9.9	9.5	19.4	9	27
	3/4	3	14.3	10.6	24.9	10	32
	1	4	16.5	11.7	28.2	11	35
	1.5	5	18.8	15.1	33.9	14	43
	2	7	17.6	15.1	32.7	10	43
	3	10	22.9	19.0	41.8	11	52
60	1/2	2	9.9	9.5	19.4	10	28
	1/2	2	9.9	9.5	19.4	10	28
	3/4	3	12.1	10.6	22.7	11	32
	1	4	14.3	11.7	26.0	12	35
	1.5	5	16.5	15.1	31.6	13	44
	2	7	23.5	15.1	38.6	11	44
	3	10	33.3	19.0	52.3	13	54
90	1.5	4	17.3	15.1	32.4	14	43
	2	6	23.4	15.1	38.5	11	44
	3	8	31.4	19.0	50.4	13	54

NOTES: PE = Pump end only; PMA = Pump and motor assembly; Maximum diameter with cable guard is 3.90"

Stainless Steel



C1 SERIES CISTERN PUMPS

Designed for use in gray water/filtered effluent service applications, the C1 Series cistern pump provides high performance and long life in less than ideal water conditions. The C1 Series pump is able to pass solids up to 1/8" without having a negative effect on the internal hydraulic components.

The pump's unique bottom suction design allows for maximum fluid drawdown without compromising durability or overall life, and it does not require the use of a flow induction sleeve. Intended specifically for use in a cistern or tank, C1 Series pumps are suitable for use in agricultural, residential, and commercial installations.



FEATURES

- Supplied with a removable 5" base for secure and reliable mounting
- Bottom suction design
- Robust thermoplastic discharge head design resists breakage during installation and operation
- Standard backflow prevention through a built-in, but removable, check valve
- Single-shell housing design provides a compact unit while ensuring cool and quiet operation
- Hydraulic components molded from high quality engineered thermoplastics
- Optimized hydraulic design allows for increased performance and decreased power usage
- All metal components are made of high grade stainless steel for corrosion resistance
- Available with a high quality 115 V or 230 V, 1/2 hp motor
- Fluid flows of 10, 20, and 30 gpm, with a maximum shut-off pressure of 100 psi
- Heavy-duty 300 V 10 foot SJOOW jacketed lead

APPLICATIONS

- Gray water pumping
- Filtered effluent service water pumping
- Water reclamation projects such as pumping from rain catchment basins
- Aeration and other fountain or pond applications
- Agriculture and livestock water pumping

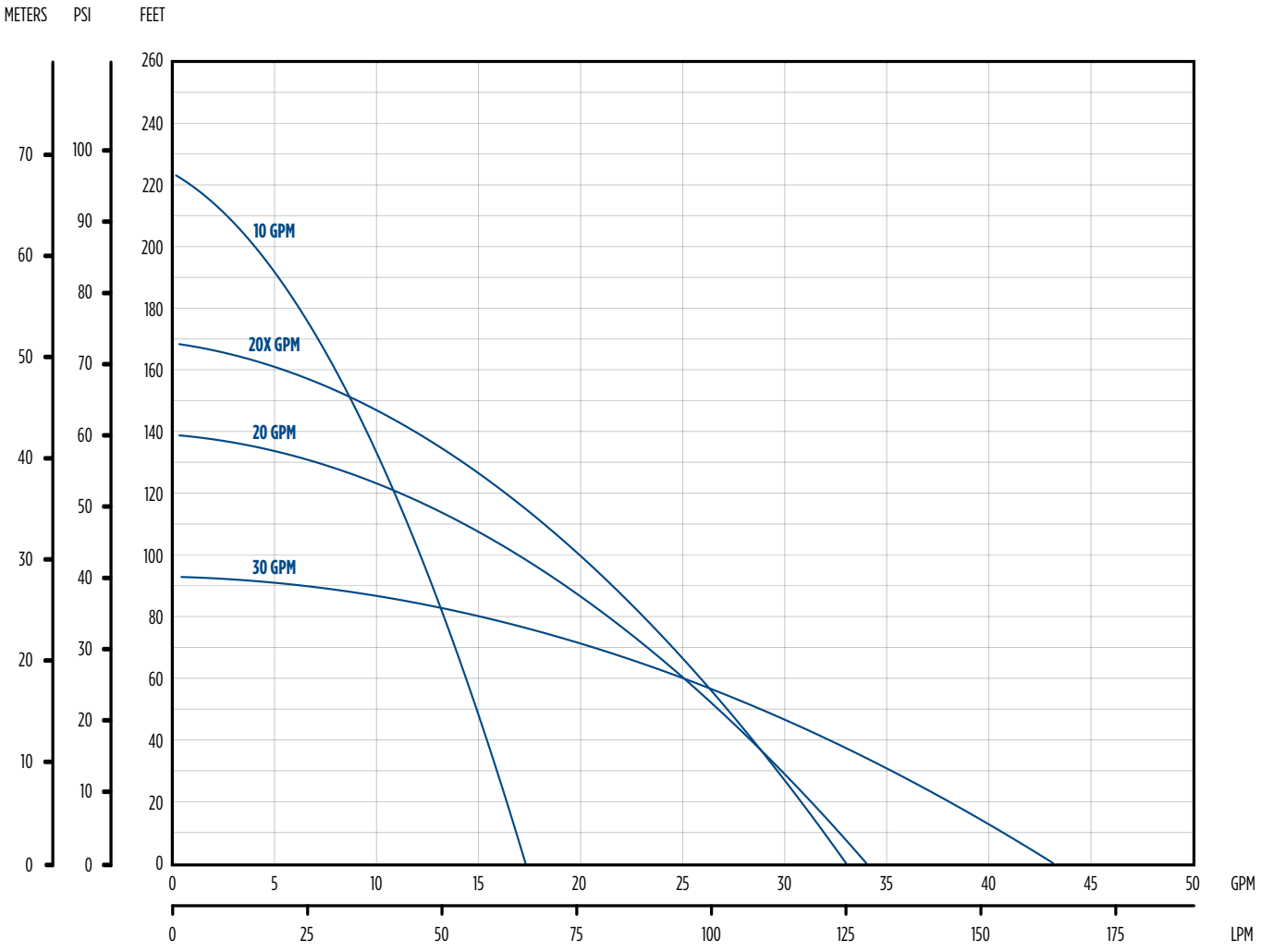
C1 SERIES CISTERN PUMPS - ORDERING INFORMATION

ORDERING INFORMATION

FPS C1 Series Pumps							
GPM	HP	Volts	Stage	Model	Order	Length (in)	Weight (lbs)
10	1/2	115	6	10C1-05P4-2W115	90301005	26	17
		230	6	10C1-05P4-2W230	90301010	26	17
20		115	4	20C1-05P4-2W115	90302005	25	16
		230	4	20C1-05P4-2W230	90302010	25	16
20X		115	5	20XC1-05P4-2W115	90302015	26	17
		230	5	20XC1-05P4-2W230	90302020	26	17
30		115	3	30C1-05P4-2W115	90303005	25	16
		230	3	30C1-05P4-2W230	90303010	25	16

NOTES: All units have 10 foot long SJ00W leads.

PERFORMANCE



SUBMERSIBLE PUMP ACCESSORIES

ORDERING INFORMATION

Check Valves - Silicone Bronze					
Description	Inlet	Outlet	Case Qty.	Order No.	Wt. (lbs)
Flomatic™ 4221LEB	1-1/4" MNPT	1" FNPT	36	91980631	1.25
Flomatic™ 4242LEB	1-1/4" MNPT	1-1/4" FNPT	36	91980649	1.75

Check Valves - Stainless Steel					
Description	Inlet	Outlet	Case Qty.	Order No.	Wt. (lbs)
Flomatic™ 4221LSS2	1-1/4" MNPT	1" FNPT	49	91985317	1.4
Flomatic™ 4242SS2	1-1/4" MNPT	1-1/4" FNPT	49	91985309	1.5

Check Valves - Ductile Iron					
Description	Inlet	Outlet	Carton Qty.	Order No.	Wt. (lbs)
Simmons #658SB	2" MNPT	2" FNPT	1	91982157	3.5
Simmons #660SB	3" MNPT	3" FNPT	1	91981266	10
Simmons #661SB	4" MNPT	4" FNPT	1	91980334	21

Flomatic™ Poppet with Removable Ring (Patent Pending)		
Description	Order No.	Wt. (lbs)
Flomatic™ Poppet with Removable Ring	91985259R	0.1
T-Handle Poppet Wrench	305710008	1

Flomatic™ VFD Check Valve with Removable Ring (Patent Pending)		
Description	Order No.	Wt. (lbs)
Flomatic™ VFD Check Valve with Removable Ring	305614000	0.1
T-Handle Wrench for VFD Check Valve	101218901	1

Reducer Bushing					
Description	Inlet	Outlet	PSI Rating	Order No.	Wt.
White PVC Bushing	1-1/4" MNPT	1" FNPT	200 PSI	31031008R	0.2

NOTES: Flomatic™ is a trademark of the Danfoss Corporation.



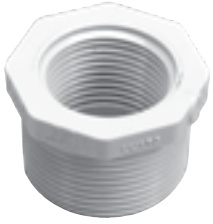
Check Valves



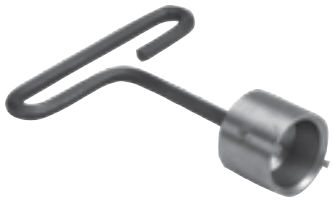
VFD-style Check Valve



Poppet



Reducer Bushing



T-Handle Poppet Wrench



REFERENCES - FRICTION LOSS

PVC SCHEDULE 80 IPS PLASTIC IN 100' OF PIPE

Pipe Size	1/2"		3/4"		1"		1-1/4"		1-1/2"		2"		2-1/2"		3"		4"	
GPM	Head Loss	Vel (ft/s)	Head Loss	Vel (ft/s)	Head Loss	Vel (ft/s)	Head Loss	Vel (ft/s)	Head Loss	Vel (ft/s)	Head Loss	Vel (ft/s)	Head Loss	Vel (ft/s)	Head Loss	Vel (ft/s)	Head Loss	Vel (ft/s)
1	1.87	1.37	0.42	0.74	0.12	0.45	0.03	0.25	0.01	0.18								
2	6.74	2.74	1.52	1.48	0.44	0.89	0.11	0.50	0.05	0.36	0.01	0.22						
3	14.29	4.11	3.21	2.23	0.93	1.34	0.23	0.75	0.10	0.54	0.03	0.33	0.01	0.23				
4	24.34	5.48	5.47	2.97	1.59	1.78	0.39	1.00	0.18	0.73	0.05	0.43	0.02	0.30				
5	36.79	6.85	8.27	3.71	2.40	2.23	0.59	1.25	0.27	0.91	0.08	0.54	0.03	0.38	0.01	0.24		
6	51.57	8.22	11.59	4.45	3.36	2.68	0.82	1.50	0.38	1.09	0.11	0.65	0.04	0.45	0.02	0.29		
7	68.61	9.59	15.43	5.19	4.47	3.12	1.09	1.75	0.50	1.27	0.14	0.76	0.06	0.53	0.02	0.34		
8	87.86	10.96	19.75	5.94	5.73	3.57	1.40	2.00	0.64	1.45	0.18	0.87	0.08	0.61	0.03	0.39		
9	109.27	12.33	24.57	6.68	7.12	4.01	1.74	2.25	0.80	1.63	0.23	0.98	0.01	0.68	0.03	0.44		
10	132.82	13.70	29.86	7.42	8.66	4.46	2.12	2.50	0.97	1.82	0.28	1.09	0.12	0.76	0.04	0.49		
11			35.63	8.16	10.33	4.91	2.53	2.75	1.16	2.00	0.33	1.20	0.14	0.83	0.05	0.53		
12			41.86	8.90	12.14	5.35	2.97	3.00	1.36	2.18	0.39	1.30	0.16	0.91	0.06	0.58		
14			55.69	10.39	16.15	6.24	3.95	3.50	1.81	2.54	0.52	1.52	0.22	1.06	0.07	0.68		
16			71.31	11.87	20.68	7.14	5.06	4.00	2.32	2.90	0.67	1.74	0.28	1.21	0.09	0.78		
18			88.69	13.36	25.72	8.03	6.30	4.50	2.89	3.27	0.83	1.96	0.34	1.36	0.12	0.87		
20			107.80	14.84	31.26	8.92	7.65	5.00	3.51	3.63	1.01	2.17	0.42	1.51	0.14	0.97	0.04	0.56
22					37.29	9.81	9.13	5.50	4.19	3.99	1.20	2.39	0.50	1.67	0.17	1.07	0.04	0.61
24					43.81	10.70	10.72	6.00	4.92	4.36	1.41	2.61	0.59	1.82	0.20	1.17	0.05	0.67
26					50.81	11.60	12.44	6.50	5.71	4.72	1.64	2.83	0.68	1.97	0.23	1.26	0.06	0.73
28					58.29	12.49	14.27	7.00	6.55	5.08	1.88	3.04	0.78	2.12	0.26	1.36	0.07	0.78
30					66.23	13.38	16.21	7.50	7.44	5.45	2.13	3.26	0.89	2.27	0.30	1.46	0.08	0.84
35							21.57	8.75	9.89	6.35	2.84	3.80	1.18	2.65	0.40	1.70	0.10	0.98
40							27.62	10.00	12.67	7.26	3.63	4.35	1.51	3.03	0.51	1.94	0.13	1.12
45	6" Pipe						34.36	11.25	15.76	8.17	4.52	4.89	1.88	3.41	0.64	2.19	0.17	1.26
50	0.03	0.62					41.76	12.51	19.16	9.08	5.49	5.44	2.28	3.78	0.77	2.43	0.20	1.40
55	0.03	0.68					49.82	13.76	22.85	9.99	6.55	5.98	2.72	4.16	0.92	2.67	0.24	1.53
60	0.04	0.74					58.53	15.01	26.85	10.89	7.70	6.52	3.20	4.54	1.09	2.91	0.28	1.67
65	0.04	0.80							31.14	11.80	8.93	7.07	3.71	4.92	1.26	3.16	0.33	1.81
70	0.05	0.86							35.72	12.71	10.24	7.61	4.25	5.30	1.45	3.40	0.38	1.95
75	0.06	0.92							40.59	13.62	11.64	8.15	4.83	5.68	1.64	3.64	0.43	2.09
80	0.07	0.98							45.74	14.52	13.12	8.70	5.45	6.06	1.85	3.89	0.48	2.23
85	0.07	1.05							51.18	15.43	14.68	9.24	6.09	6.43	2.07	4.13	0.54	2.37
90	0.08	1.11							56.89	16.34	16.32	9.78	6.77	6.81	2.30	4.37	0.60	2.51
95	0.09	1.17							62.88	17.25	18.03	10.33	7.49	7.19	2.54	4.61	0.66	2.65
100	0.01	1.23							69.15	18.16	19.83	10.87	8.23	7.57	2.80	4.86	0.73	2.79
125	0.15	1.54									29.98	13.59	12.45	9.46	4.23	6.07	1.01	3.49
150	0.21	1.85									42.02	16.31	17.45	11.35	5.93	7.29	1.54	4.19
175	0.28	2.15											23.21	13.25	7.89	8.50	2.05	4.88

NOTES: Suction Velocities should not exceed 8 feet per second. Calculated using Williams and Hazen formula using C = 150.

Schaefer

REFERENCES - FRICTION LOSS

WATER IN 100' OF STEEL PIPE

GPM	Pipe Size 1/2" - Actual Size 0.622			Pipe Size 3/4" - Actual Size 0.824			Pipe Size 1" - Actual Size 1.049			Pipe Size 1-1/4" - Actual Size 1.38			Pipe Size 1-1/2" - Actual Size 1.61		
	Friction	Vel. (ft/sec)	Vel. Head (ft)	Friction	Vel. (ft/sec)	Vel. Head (ft)	Friction	Vel. (ft/sec)	Vel. Head (ft)	Friction	Vel. (ft/sec)	Vel. Head (ft)	Friction	Vel. (ft/sec)	Vel. Head (ft)
1	2.099	1.056	0.017	0.534	0.602	0.006	0.165	0.371	0.002	0.043	0.215	0.001	0.021	0.158	0.000
2	7.577	2.112	0.069	1.929	1.203	0.023	0.596	0.742	0.009	0.157	0.429	0.003	0.074	0.315	0.002
3	16.056	3.168	0.156	4.087	1.805	0.051	1.263	1.114	0.019	0.332	0.644	0.006	0.157	0.473	0.003
4	27.354	4.223	0.277	6.962	2.407	0.090	2.151	1.485	0.034	0.566	0.858	0.011	0.268	0.630	0.006
5	41.352	5.279	0.433	10.525	3.008	0.141	3.252	1.856	0.054	0.856	1.073	0.018	0.404	0.788	0.001
6	57.961	6.335	0.624	14.753	3.610	0.203	4.558	2.227	0.077	1.200	1.287	0.026	0.567	0.946	0.014
7	77.112	7.391	0.849	19.628	4.211	0.276	6.064	2.599	0.105	1.597	1.502	0.035	0.754	1.103	0.019
8	98.747	8.447	1.109	25.134	4.813	0.360	7.765	2.970	0.137	2.045	1.716	0.046	0.966	1.261	0.025
9	122.817	9.503	1.404	31.261	5.415	0.456	9.657	3.341	0.173	2.543	1.931	0.058	1.201	1.418	0.031
10	149.280	10.559	1.733	37.997	6.016	0.563	11.738	3.712	0.214	3.091	2.145	0.072	1.460	1.576	0.039
11	178.099	11.615	2.097	45.332	6.618	0.681	14.004	4.083	0.259	3.688	2.360	0.087	1.742	1.734	0.047
12	209.241	12.670	2.495	53.259	7.220	0.810	16.453	4.455	0.308	4.333	2.574	0.103	2.047	1.891	0.056
13	242.675	13.726	2.928	61.769	7.821	0.951	19.082	4.826	0.362	5.025	2.789	0.121	2.374	2.049	0.065
14	278.376	14.782	3.396	70.856	8.423	1.103	21.889	5.197	0.420	5.764	3.003	0.140	2.723	2.206	0.076
15	316.317	15.838	3.899	80.513	9.025	1.266	24.873	5.568	0.482	6.550	3.218	0.161	3.094	2.364	0.087
16				90.735	9.626	1.440	28.031	5.940	0.548	7.381	3.432	0.183	3.487	2.521	0.099
17				101.517	10.228	1.626	31.362	6.311	0.619	8.258	3.647	0.207	3.901	2.679	0.112
18				112.852	10.829	1.823	34.863	6.682	0.694	9.181	3.861	0.232	4.337	2.837	0.125
19				124.738	11.431	2.031	38.535	7.053	0.773	10.148	4.076	0.258	4.793	2.994	0.139
20				137.168	12.033	2.250	42.375	7.425	0.857	11.159	4.290	0.286	5.271	3.152	0.154
21				150.140	12.634	2.481	46.383	7.796	0.945	12.214	4.505	0.315	5.769	3.309	0.170
22				163.649	13.236	2.723	50.556	8.167	1.037	13.313	4.719	0.346	6.288	3.467	0.187
23				177.691	13.838	2.976	54.894	8.538	1.133	14.455	4.934	0.378	6.828	3.625	0.204
24				192.263	14.439	3.241	59.396	8.909	1.234	15.641	5.148	0.412	7.388	3.782	0.222
25				207.363	15.041	3.516	64.061	9.281	1.339	16.869	5.363	0.447	7.968	3.940	0.241
26				222.985	15.643	3.803	68.887	9.652	1.448	18.140	5.577	0.483	8.569	4.097	0.261
27				239.128	16.244	4.101	73.874	10.023	1.561	19.453	5.792	0.521	9.189	4.255	0.281
28				255.789	16.846	4.411	79.021	10.394	1.679	20.809	6.006	0.561	9.829	4.413	0.303
29				272.965	17.448	4.731	84.327	10.766	1.801	22.206	6.221	0.601	10.489	4.570	0.325
30				290.652	18.049	5.063	89.791	11.137	1.928	23.645	6.435	0.644	11.169	4.728	0.347
32							101.191	11.879	2.193	26.647	6.864	0.732	12.587	5.043	0.395
34							113.215	12.622	2.476	29.813	7.293	0.827	14.082	5.358	0.446
36							125.857	13.364	2.776	33.142	7.722	0.927	15.655	5.673	0.500
38							139.112	14.107	3.093	36.633	8.151	1.033	17.304	5.989	0.557
40							152.975	14.849	3.427	40.283	8.580	1.144	19.028	6.304	0.618
42							167.442	15.592	3.778	44.093	9.009	1.261	20.827	6.619	0.681
44							182.507	16.334	4.147	48.060	9.438	1.384	22.701	6.934	0.747
46							198.168	17.076	4.532	52.184	9.867	1.513	24.649	7.249	0.817
48							214.420	17.819	4.935	56.463	10.296	1.648	26.671	7.564	0.889
50							231.259	18.561	5.355	60.898	10.725	1.788	28.765	7.880	0.965
55							275.904	20.417	6.479	72.654	11.798	2.163	34.319	8.668	1.168
60							324.147	22.274	7.711	85.358	12.870	2.574	40.319	9.456	1.390
65							375.943	24.130	9.049	98.997	13.943	3.021	46.762	10.244	1.631
70							431.249	25.986	10.495	113.561	15.015	3.504	53.641	11.032	1.891
75							490.027	27.842	12.048	129.039	16.088	4.023	60.952	11.820	2.171
80							552.241	29.698	13.708	145.422	17.160	4.577	68.691	12.607	2.470
85							617.860	31.554	15.475	162.701	18.233	5.167	76.853	13.395	2.789
90							686.852	33.410	17.349	180.869	19.305	5.793	85.435	14.183	3.127
95							759.190	35.267	19.331	199.918	20.378	6.454	94.433	14.971	3.484
100							834.846	37.123	21.419	219.840	21.450	7.151	103.843	15.759	3.860
110										262.281	23.595	8.653	123.890	17.335	4.671
120										308.142	25.740	10.298	145.553	18.911	5.559
130										357.380	27.885	12.086	168.811	20.487	6.524
140										409.955	30.030	14.016	193.645	22.063	7.566
150										465.831	32.175	16.090	220.039	23.639	8.685

NOTES: Suction Velocities should not exceed 8 feet per second.



REFERENCES - FRICTION LOSS

WATER IN 100' OF STEEL PIPE

GPM	Pipe Size 2" - Actual Size 2.067			Pipe Size 2-1/2" - Actual Size 2.469			Pipe Size 3" - Actual Size 3.068			Pipe Size 3-1/2" - Actual Size 3.548		
	Friction	Vel. (ft/sec)	Vel. Head (ft)	Friction	Vel. (ft/sec)	Vel. Head (ft)	Friction	Vel. (ft/sec)	Vel. Head (ft)	Friction	Vel. (ft/sec)	Vel. Head (ft)
2	0.022	0.191	0.001									
3	0.047	0.287	0.001	0.020	0.201	0.001						
4	0.079	0.383	0.002	0.033	0.268	0.001						
5	0.120	0.478	0.004	0.051	0.335	0.002	0.018	0.217	0.001	0.009	0.162	0.000
6	0.168	0.574	0.005	0.071	0.402	0.003	0.025	0.260	0.001	0.012	0.195	0.001
7	0.224	0.670	0.007	0.094	0.469	0.003	0.033	0.304	0.001	0.016	0.227	0.001
8	0.286	0.765	0.009	0.121	0.536	0.004	0.042	0.347	0.002	0.021	0.260	0.001
9	0.356	0.861	0.012	0.150	0.603	0.006	0.052	0.391	0.002	0.026	0.292	0.001
10	0.433	0.957	0.014	0.182	0.670	0.007	0.063	0.434	0.003	0.031	0.325	0.002
11	0.516	1.052	0.017	0.218	0.737	0.008	0.076	0.477	0.004	0.037	0.357	0.002
12	0.607	1.148	0.020	0.256	0.804	0.010	0.089	0.521	0.004	0.044	0.389	0.002
13	0.704	1.244	0.024	0.296	0.871	0.012	0.103	0.564	0.005	0.051	0.422	0.003
14	0.807	1.339	0.028	0.340	0.938	0.014	0.118	0.608	0.006	0.058	0.454	0.003
15	0.917	1.435	0.032	0.386	1.005	0.016	0.134	0.651	0.007	0.066	0.487	0.004
16	1.034	1.531	0.036	0.435	1.072	0.018	0.151	0.694	0.007	0.075	0.519	0.004
17	1.157	1.626	0.041	0.487	1.139	0.020	0.169	0.738	0.008	0.083	0.552	0.005
18	1.286	1.722	0.046	0.542	1.206	0.023	0.188	0.781	0.009	0.093	0.584	0.005
19	1.421	1.818	0.051	0.599	1.273	0.025	0.208	0.825	0.011	0.103	0.617	0.006
20	1.563	1.913	0.057	0.658	1.340	0.028	0.229	0.868	0.012	0.113	0.649	0.007
21	1.711	2.009	0.063	0.720	1.407	0.031	0.250	0.911	0.013	0.123	0.681	0.007
22	1.865	2.105	0.069	0.785	1.474	0.034	0.273	0.955	0.014	0.135	0.714	0.008
23	2.025	2.200	0.075	0.853	1.541	0.037	0.296	0.998	0.015	0.146	0.746	0.009
24	2.191	2.296	0.082	0.923	1.608	0.040	0.321	1.042	0.017	0.158	0.779	0.009
25	2.363	2.391	0.089	0.995	1.675	0.044	0.346	1.085	0.018	0.171	0.811	0.010
26	2.541	2.487	0.096	1.070	1.742	0.047	0.372	1.128	0.020	0.183	0.844	0.011
27	2.724	2.583	0.104	1.148	1.809	0.051	0.399	1.172	0.021	0.197	0.876	0.012
28	2.914	2.678	0.112	1.227	1.876	0.055	0.427	1.215	0.023	0.210	0.909	0.013
29	3.110	2.774	0.120	1.310	1.943	0.059	0.455	1.259	0.025	0.224	0.941	0.014
30	3.312	2.870	0.128	1.395	2.010	0.063	0.485	1.302	0.026	0.239	0.974	0.015
32	3.732	3.061	0.146	1.572	2.144	0.071	0.546	1.389	0.030	0.269	1.038	0.017
34	4.175	3.252	0.164	1.759	2.278	0.081	0.611	1.476	0.034	0.301	1.103	0.019
36	4.642	3.444	0.184	1.955	2.412	0.090	0.679	1.562	0.038	0.335	1.168	0.021
38	5.130	3.635	0.205	2.161	2.546	0.101	0.751	1.649	0.042	0.370	1.233	0.024
40	5.642	3.826	0.228	2.376	2.680	0.112	0.826	1.736	0.047	0.407	1.298	0.026
42	6.175	4.018	0.251	2.601	2.814	0.123	0.904	1.823	0.052	0.446	1.363	0.029
44	6.731	4.209	0.275	2.835	2.948	0.135	0.985	1.910	0.057	0.486	1.428	0.032
46	7.308	4.400	0.301	3.078	3.083	0.148	1.070	1.996	0.062	0.527	1.493	0.035
48	7.908	4.592	0.328	3.331	3.217	0.161	1.158	2.083	0.067	0.571	1.558	0.038
50	8.529	4.783	0.356	3.592	3.351	0.174	1.248	2.170	0.073	0.616	1.623	0.041
55	10.175	5.261	0.430	4.286	3.686	0.211	1.490	2.387	0.089	0.734	1.785	0.050
60	11.955	5.740	0.512	5.035	4.021	0.251	1.750	2.604	0.105	0.863	1.947	0.059
65	13.865	6.218	0.601	5.840	4.356	0.295	2.030	2.821	0.124	1.001	2.109	0.069
70	15.905	6.696	0.697	6.699	4.691	0.342	2.328	3.038	0.143	1.148	2.272	0.080
75	18.072	7.174	0.800	7.612	5.026	0.393	2.646	3.255	0.165	1.304	2.434	0.092
80	20.367	7.653	0.910	8.578	5.361	0.447	2.981	3.472	0.187	1.470	2.596	0.105
85	22.787	8.131	1.028	9.598	5.696	0.504	3.336	3.689	0.212	1.644	2.758	0.118
90	25.331	8.609	1.152	10.669	6.031	0.565	3.708	3.906	0.237	1.828	2.921	0.133
95	27.999	9.088	1.284	11.793	6.366	0.630	4.099	4.123	0.264	2.021	3.083	0.148
100	30.789	9.566	1.422	12.968	6.701	0.698	4.507	4.340	0.293	2.222	3.245	0.164
110	36.733	10.523	1.721	15.472	7.371	0.845	5.377	4.774	0.354	2.651	3.570	0.198
120	43.156	11.479	2.048	18.177	8.041	1.005	6.317	5.208	0.422	3.114	3.894	0.236
130	50.052	12.436	2.404	21.081	8.711	1.180	7.327	5.642	0.495	3.612	4.219	0.277
140	57.416	13.392	2.788	24.183	9.382	1.368	8.405	6.076	0.574	4.144	4.543	0.321
150	65.241	14.349	3.200	27.479	10.052	1.570	9.550	6.510	0.659	4.708	4.868	0.368

NOTES: Suction Velocities should not exceed 8 feet per second.

REFERENCES - PIPE FITTINGS

CONNECTIONS

Friction losses in terms of equivalent lengths of standard pipe					
Pipe Size	Standard 90° Elbow	Long Radius Elbow	45° Elbow	Tee	Return Bend
1/2"	1.5	1.1	0.77	3.4	3.8
3/4"	2.2	1.4	1	4.5	5
1"	2.7	1.7	1.3	5.8	6.1
1-1/4"	3.7	2.4	1.6	7.8	8.5
1-1/2"	4.3	2.8	2	9	10
2"	5.5	3.5	2.5	11	13
2-1/2"	6.5	4.2	3	14	15
3"	8.1	5.1	3.8	17	18
3-1/2"	9.5	6	4.4	19	21
4"	11	7	5	22	24
4-1/2"	12	7.9	5.6	24	27
5"	14	8.9	6.1	27	31
6"	16	11	7.7	33	37

VALVES

Friction losses in terms of equivalent lengths of standard pipe				
Pipe Size	Gate Valve Open	Globe Valve Open	Angle Valve Open	Swing Check Valve
1/2"	0.35	16	8.4	4
3/4"	0.47	22	12	5
1"	0.6	27	15	7
1-1/4"	0.8	37	18	9
1-1/2"	0.95	44	22	11
2"	1.2	57	28	13
2-1/2"	1.4	66	33	16
3"	1.7	85	42	20
3-1/2"	2	99	50	
4"	2.3	110	58	26
4-1/2"	2.6	130	61	
5"	2.9	140	70	33
6"	3.5	160	83	39



REFERENCES - PRESSURE LOSS

SWING CHECK VALVES

Flow GPM	Pressure Loss (PSI)/Valve Size							
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
2	0.2							
3	.05							
6	1.0	0.3						
8	1.7	0.5						
10	2.6	0.8	0.3					
12	3.6	1.1	0.5					
14	4.8	1.5	0.6					
16		2.0	0.9					
18		2.4	1.0					
20		3.0	1.2	0.4				
22		3.5	1.4	0.5				
24		4.1	1.7	0.6				
26		4.8	2.0	0.7	0.4			
28			2.2	0.8	0.5			
30			2.5	0.9	0.5			
32			2.9	1.1	0.6			
34			3.2	1.2	0.6			
36			3.6	1.3	0.7			
38			3.9	1.5	0.8			
40			4.3	1.6	0.8	0.3		
42			4.7	1.7	0.9	0.3		
44				1.9	1.0	0.4		
46				2.1	1.1	0.4		
48				2.2	1.2	0.5		
50				2.4	1.3	0.5		
55				2.9	1.5	0.6		
60				3.4	1.8	0.7		
65				3.9	2.0	0.8		
70				4.5	2.4	0.9	0.4	
75					2.7	1.0	0.5	
80					3.0	1.2	0.6	
90					3.7	1.5	0.7	
100					4.6	1.8	0.9	0.4
120						2.5	1.2	0.5
140						3.3	1.6	0.7

BRONZE GATE VALVES

Flow GPM	Pressure Loss (PSI)/Valve Size								
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
1									
2	.01								
5	.06	.02							
8	.16	.05	.02						
10	.24	.08	.03	.01					
15		.17	.06	.02	.01				
20		.31	.11	.03	.02				
30			.24	.07	.04	.01			
40			.43	.13	.07	.02	.01		
50			.67	.21	.11	.04	.02		
60				.30	.15	.05	.03	.01	
80				.54	.28	.10	.05	.02	
100					.43	.15	.07	.03	
120					.62	.22	.10	.04	.02
140					.85	.30	.14	.06	
160						.40	.18	.07	.03

Schaefer

REFERENCES - PRESSURE LOSS

WATER METERS AWWA STANDARD

Flow GPM	Pressure Loss (Normal Size)						
	5/8"	3/4"	1"	1-1/2"	2"	3"	4"
1	0.2	0.1					
2	0.3	0.2					
3	0.4	0.3					
4	0.6	0.5	0.1				
5	0.9	0.6	0.2				
6	1.3	0.7	0.3				
7	1.8	0.8	0.4				
8	2.3	1.0	0.5				
9	3.0	1.3	0.6				
10	3.7	1.6	0.7				
11	4.4	1.9	0.8				
12	5.1	2.2	0.9				
13	6.1	2.6	1.0				
14	7.2	3.1	1.1				
15	8.3	3.6	1.2				
16	9.4	4.1	1.4	0.4			
17	10.7	4.6	1.6	0.5			
18	12.0	5.2	1.8	0.6			
19	13.4	5.8	2.0	0.7			
20	15.0	6.5	2.2	0.8			
22		7.9	2.8	1.0			
24		9.5	3.4	1.2			
26		11.2	4.0	1.4			
28		13.0	4.6	1.6			
30		15.0	5.3	1.8	0.7		
32			6.0	2.1	0.8		
34			6.9	2.4	0.9		
36			7.8	2.7	1.0		
38			8.7	3.0	1.2		
40			9.6	3.3	1.3		
42			10.6	3.6	1.4		
44			11.7	3.9	1.5		
46			12.8	4.2	1.6		
48			13.9	4.5	1.7		
50			15.0	4.9	1.9		
52				5.3	2.1		
54				5.7	2.2		
56				6.2	2.3		
58				6.7	2.5		
60				7.2	2.7	1.0	
65				8.3	3.2	1.1	
70				9.8	3.7	1.3	
75				11.3	4.3	1.5	
80				12.8	4.9	1.6	0.7
90				16.1	6.2	2.0	0.8
100				20.0	7.8	2.5	0.9
110					9.5	2.9	1.0
120					11.3	3.4	1.2
130					13.0	3.9	1.4
140					15.1	4.5	1.6
150					17.3	5.1	1.8



REFERENCES - PRESSURE TANK SIZING

PROPER SYSTEM LIFE MINIMUM TANK VOLUMES

Pump Capacity		Minimum Drawdown	Total Tank Volume (Gallons)								
			Switch Setting (PSI)								
			20-40			30-50			40-60		
GPH	GPM	Gallons	A	B	C	A	B	C	A	B	C
240	4	4	10	15	25	15	15	40	15	15	55
300	5	5	15	15	30	15	20	50	20	20	70
360	6	6	15	20	40	20	20	60	20	25	85
420	7	7	20	20	45	35	25	70	25	30	100
480	8	8	20	25	50	35	25	80	30	30	110
540	9	9	25	25	60	30	30	90	35	35	125
600	10	10	30	30	65	30	35	100	40	40	140
660	11	12	35	35	80	40	40	120	45	45	165
720	12	13	35	40	85	40	45	130	50	50	180
780	13	15	40	45	100	50	50	150	55	60	210
840	14	17	45	50	110	55	55	170	65	65	235
900	15	19	50	55	125	60	65	190	70	75	265
960	16	20	55	55	160	65	65	200	75	75	280
1020	17	23	6	65	150	75	75	230	85	90	320
1080	18	25	70	70	160	80	85	250	95	95	350
1140	19	27	75	75	175	85	90	270	100	105	375
1200	20	30	80	85	195	95	100	300	110	115	415
1260	21	33	90	90	215	105	110	330	125	125	460
1320	22	36	100	100	235	115	120	360	135	135	500
1380	23	38	105	105	345	125	125	380	140	145	530
1440	24	41	110	115	365	135	135	410	155	155	570
1500	25	44	120	120	385	140	145	440	165	165	610
1560	26	47	130	130	305	150	155	470	175	180	655
1620	27	50	135	140	325	160	165	500	185	190	700
1680	28	53	145	145	345	170	175	530	200	200	735
1740	29	57	155	160	370	185	185	570	215	215	790
1800	30	60	165	165	390	195	195	600	225	225	835

NOTES: A = Bladder or Diaphragm Tank Design; B = Floating Wafer Tank Design; C = Plain Steel Tank Design

REFERENCES - REFERENCE TABLES

EQUIVALENT VALUES OF PRESSURE

Inches of Mercury	Feet of Water	PSI
1	1.13	0.49
2	2.26	0.98
3	3.39	1.47
4	4.52	1.95
5	5.65	2.44
6	6.78	2.93
7	7.91	3.42
8	9.04	3.91
9	10.17	4.4
10	11.3	4.89
11	12.45	5.39
12	13.57	5.87
13	14.7	6.37
14	15.82	6.86
15	16.96	7.35
16	18.09	7.84
17	19.22	8.33
18	20.35	8.82
19	21.75	9.31
20	22.6	9.8
21	23.78	10.3
22	24.88	10.8
23	26	11.28
24	27.15	11.75
25	26.26	12.25
26	29.4	12.73
27	30.52	13.23
28	31.65	13.73
29	32.8	14.22
29.929	33.947	14.697

PROPERTIES OF WATER

Water Temperature (°F)	Water Pressure (ft)
60	0.59
70	0.84
80	1.17
90	1.61
100	2.19
110	2.94
120	3.91
130	5.14
140	6.67
150	8.58
160	10.9
170	13.8
180	17.3
190	21.6
200	26.6
210	32.6
212	34

ATMOSPHERIC PRESSURE AT VARIOUS ELEVATIONS

Altitude	Atmospheric Pressure		
Feet Above Sea Level	Pounds per Square Inch (PSI)	Feet of Water	Inches of Mercury
Sea Level	14.7	33.8	29.9
500	14.4	33.3	29.4
1000	14.2	32.6	28.8
2000	13.7	31.4	27.8
3000	13.2	30.3	26.8
4000	12.7	29.2	25.8
5000	12.2	28.2	24.9
6000	11.8	27.1	24
7000	11.3	26.1	23.1
8000	10.9	25.1	22.2
9000	10.5	24.2	21.4
10000	10.1	23.2	20.6



MENU

REFERENCES - CONVERSIONS

HEAD

To Convert From	To	Multiply By
PSI	Feet	2.31
PSI	Inches of Mercury	2.04
Feet	PSI	0.433
Feet	Meters	0.305
Feet	Inches of Mercury	0.885
Inches of Mercury	Feet of Water	1.132
Meters	Feet	3.28
Kilograms per sq. in	PSI	14.22
ATM	PSI	14.7
ATM	Feet of Water	34
ATM	Meters of Water	10.35

VOLUME

To Convert From	To	Multiply By
Gallons	Liters	3.785
Gallons	Cubic Inches	231
Gallons	Cubic Feet	0.137
Gallons	Cubic Meters	0.004
Liters	Gallons	0.264
Barrel (Oil)	Gallons	42
Cubic Feet	Gallons	7.48
Cubic Feet	Cubic Meters	0.028
Acre Foot	Cubic Feet	43560
Acre Foot	Gallons	325829
Acre Inch	Cubic Feet	3630
Acre Inch	Gallons	27100

CAPACITY

To Convert From	To	Multiply By
Gallons Per Minute	Liters/Sec.	0.063
Gallons Per Minute	Liters/Hr.	227.1
Gallons Per Minute	Cubic Meters/Hr.	0.227
Gallons Per Minute	Cubic Feet/Sec.	0.002
Gallons Per Minute	Pounds Per Hour	500
Cubic Meters/Hr.	Gallons Per Minute	4.402
Cubic Meters/Hr.	Liters/Sec.	0.278
Cubic Feet/Sec.	Gallons Per Minute	448.831
Acre Foot	Gallons	325.85
Acre Foot per Day	Gallons Per Minute	227
Acre Inch per Hour	Gallons Per Minute	454
Liter per Second	Gallons Per Minute	15.85
Miner's Inch (ID,KS,NE, NM,ND,SD,UT,WA)	Gallons Per Minute	9
Miner's Inch (AZ, CA, MT, NV, OR)	Gallons Per Minute	11.22

NOTES: 1,000,000 US gal./day = 695 US gal./minute

HORSEPOWER

To Convert From	To	Multiply By
hp	Kilowatts	0.746
hp	Ft lbs per minute	33000
hp	Ft lbs per second	550
Kilowatts	hp	1.341

LENGTH

To Convert From	To	Multiply By
Inches	Centimeters	2.54
Meters	Feet	3.28
Miles	Feet	5280
Rods	Feet	16.5

WEIGHT

To Convert From	To	Multiply By
Gallons	Pounds	8.33
Cubic Feet of Water	Pounds	62.35
Kilograms	Pounds	2.2

TEMPERATURE

To Convert From	To	Multiply By
Fahrenheit	Celsius	5/9 X (°F - 32)
Celsius	Fahrenheit	9/5 X (°C + 32)

REFERENCES - 2- OR 3-WIRE CABLE, 60 HZ

SERVICE ENTRANCE TO MOTOR MAXIMUM LENGTH

Motor Rating			60 °C Insulation - AWG Copper Wire Size (ft)												
Volts	HP	kW	14	12	10	8	6	4	3	2	1	0	00	000	0000
115	1/2	.37	100	160	250	390	620	960	1190	1460	1780	2160	2630	3140	3770
230	1/2	.37	400	650	1020	1610	2510	3880	4810	5880	7170	8720			
	3/4	.55	300	480	760	1200	1870	2890	3580	4370	5330	6470	7870		
	1	.75	250	400	630	990	1540	2380	2960	3610	4410	5360	6520		
	1.5	1.1	190	310	480	770	1200	1870	2320	2850	3500	4280	5240		
	2	1.5	150	250	390	620	970	1530	1910	2360	2930	3620	4480		
	3	2.2	120	190	300	470	750	1190	1490	1850	2320	2890	3610		
	5	3.7	0	0	180	280	450	710	890	1110	1390	1740	2170	2680	
	7.5	5.5	0	0	0	200	310	490	610	750	930	1140	1410	1720	
	10	7.5	0	0	0	0	250	390	490	600	750	930	1160	1430	1760
	15	11	0	0	0	0	170	270	340	430	530	660	820	1020	1260

Motor Rating			75 °C Insulation - AWG Copper Wire Size (ft)												
Volts	HP	kW	14	12	10	8	6	4	3	2	1	0	00	000	0000
115	1/2	.37	100	160	250	390	620	960	1190	1460	1780	2160	2630	3140	3770
230	1/2	.37	400	650	1020	1610	2510	3880	4810	5880	7170	8720			
	3/4	.55	300	480	760	1200	1870	2890	3580	4370	5330	6470	7870	9380	
	1	.75	250	400	630	990	1540	2380	2960	3610	4410	5360	6520	7780	9350
	1.5	1.1	190	310	480	770	1200	1870	2320	2850	3500	4280	5240	6300	7620
	2	1.5	150	250	390	620	970	1530	1910	2360	2930	3620	4480	5470	6700
	3	2.2	120	190	300	470	750	1190	1490	1850	2320	2890	3610	4470	5550
	5	3.7	0	110	180	280	450	710	890	1110	1390	1740	2170	2680	3330
	7.5	5.5	0	0	120	200	310	490	610	750	930	1140	1410	1720	2100
	10	7.5	0	0	0	160	250	390	490	600	750	930	1160	1430	1760
	15	11	0	0	0	0	170	270	340	430	530	660	820	1020	1260

1 Foot = .3048 Meter

Lengths in **BOLD** only meet the US National Electrical Code ampacity requirements for individual conductors 60 °C or 75 °C in free air or water, not in magnetic enclosures, conduit or direct buried. Lengths NOT in bold meet the NEC ampacity requirements for either individual conductors or jacketed 60 °C or 75 °C cable and can be in conduit- or direct-buried. Flat molded and web/ribbon cable are considered jacketed cable. If any other cable is used, the NEC and local codes should be observed.

Cable lengths allow for a 5% voltage drop running at maximum nameplate amperes. If 3% voltage drop is desired, multiply lengths by 0.6 to get maximum cable length. The portion of the total cable length, which is between the supply and single-phase control box with a line contactor, should not exceed 25% of total maximum allowable to ensure reliable contactor operation. Single-phase control boxes without line contactors may be connected at any point in the total cable length.

Values are based on copper wire. If aluminum wire is used, it must be two sizes larger than copper wire and oxidation inhibitors must be used on connections. **EXAMPLE:** #12 copper wire = #10 aluminum wire. Contact Franklin Electric for 90 °C cable lengths.



WARRANTY INFORMATION

LIMITED WARRANTY*

Except as set forth in an Extended Warranty, for twelve (12) months from the date of installation, but in no event more than twenty-four (24) months from the date of manufacture, Franklin hereby warrants to the purchaser ("Purchaser") of Franklin's products that, for the applicable warranty period, the products purchased will (i) be free from defects in workmanship and material at the time of shipment, (ii) perform consistently with samples previously supplied and (iii) conform to the specifications published or agreed to in writing between the purchaser and Franklin. This limited warranty extends only to products purchased directly from Franklin. If a product is purchased other than from a distributor or directly from Franklin, such product must be installed by a Franklin Certified Installer for this limited warranty to apply. This limited warranty is not assignable or transferable to any subsequent purchaser or user.

a. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESS, OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR FRANKLIN'S BREACH OF ITS OBLIGATIONS HEREUNDER, INCLUDING BREACH OF ANY EXPRESS OR IMPLIED WARRANTY OR OTHERWISE, UNLESS PROVIDED ON THE FACE HEREOF OR IN A WRITTEN INSTRUMENT MADE PART OF THIS LIMITED WARRANTY, SHALL BE FOR THE PURCHASE PRICE PAID TO FRANKLIN FOR THE NONCONFORMING OR DEFECTIVE PRODUCT OR FOR THE REPAIR OR REPLACEMENT OF NONCONFORMING OR DEFECTIVE PRODUCT, AT FRANKLIN'S ELECTION. ANY FRANKLIN PRODUCT WHICH FRANKLIN DETERMINES TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE, AT FRANKLIN'S SOLE OPTION, REPAIRED, REPLACED, OR A REFUND OF THE PURCHASE PRICE PAID. Some states do not allow limitations on how long an implied warranty lasts, therefore, the limitations and exclusions relating to the products may not apply.

b. WITHOUT LIMITING THE GENERALITY OF THE EXCLUSIONS OF THIS LIMITED WARRANTY, FRANKLIN SHALL NOT BE LIABLE TO THE PURCHASER OR ANY THIRD PARTY FOR ANY AND ALL (i) INCIDENTAL EXPENSES OR OTHER CHARGES, COSTS, EXPENSES (INCLUDING COSTS OF INSPECTION, TESTING, STORAGE, OR TRANSPORTATION) OR (ii) DAMAGES, INCLUDING CONSEQUENTIAL, SPECIAL DAMAGES, PUNITIVE OR INDIRECT DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS, LOST TIME AND LOST BUSINESS OPPORTUNITIES, REGARDLESS OF WHETHER FRANKLIN IS OR IS SHOWN TO BE AT FAULT, AND REGARDLESS OF WHETHER THERE IS OR THERE IS SHOWN TO HAVE BEEN A DEFECT IN MATERIALS OR WORKMANSHIP, NEGLIGENCE IN MANUFACTURE OR DESIGN, OR A FAILURE TO WARN.

c. Franklin's liability arising out of the sale or delivery of its products, or their use, whether based upon warranty contract, negligence, or otherwise, shall not in any case exceed the cost of repair or replacement of the product and, upon expiration of any applicable warranty period, any and all such liability shall terminate.

d. Without limiting the generality of the exclusions of this limited warranty, Franklin does not warrant the adequacy of any specifications provided directly or indirectly by a purchaser or that Franklin's products will perform in accordance with such specifications. This limited warranty does not apply to any products that have been subject to misuse (including use in a manner inconsistent with the design of the product), abuse, neglect, accident or improper installation or maintenance, or to products that have been altered or repaired by any person or entity other than Franklin or its authorized representatives.

e. Unless otherwise specified in an Extended Warranty authorized by Franklin for a specific product or product line, this limited warranty does not apply to performance caused by abrasive materials, corrosion due to aggressive conditions or improper voltage supply.

f. With respect to motors and pumps, the following conditions automatically void this limited warranty:

1. Mud or sand deposits which indicate that the motor has been submerged in mud or sand.
2. Physical damage as evidenced by bent shaft, broken or chipped castings, or broken or bent thrust parts.
3. Sand damage as indicated by abrasive wear of motor seals or splines.
4. Lightning damage (often referred to as high voltage surge damage).
5. Electrical failures due to the use of non-approved overload protection.
6. Unauthorized disassembly.

WARRANTY INFORMATION

LOST OR DAMAGED GOODS

Every carrier used by Franklin Electric, Inc. is required to verify and sign for the condition of and the number of pieces that are released to them for delivery. Our control and responsibility for any shipment ceases when the carrier signs the Bill of Lading. When you sign the Bill of Lading, you legally assume responsibility of the shipment being delivered. Please, thoroughly inspect each shipment immediately upon arrival.

If cartons, packages, or crates are received in short or damaged condition, it is important that you notify the driver and insist on a notation of the loss or damage across the face of the freight bill. Failure to do this could negate any opportunity you have to file a claim. Claims for short or damaged material must be filed in writing with the carrier immediately after delivery.

If concealed loss or damage is discovered, notify the carrier at once and request an inspection. It is also important that you do not discard the shipping carton or container. A concealed damage report should be made within ten (10) days of delivery of the shipment. The carrier's agent will make an inspection, and usually will grant a concealed damage notation. If you give the carrier a clear receipt for the goods that have been damaged in transit, you do so at your own risk and expense.

Due to frequent damage of heavy UPS shipments, Franklin Electric, Inc. does not ship orders over 75 lbs by UPS unless customer agrees to take full responsibility.



NOTES

NOTES



NOTES



Franklin Electric