



# high-pressure booster pumps



\*HPS Series is UL 778 Listed for Indoor/Outdoor Use.



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

### APPLICATIONS

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

### SPECIFICATIONS

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

Signature 2000®

## HP/HPS SERIES

### FEATURES

**Patented Stage System** – The proven SignaSeal™ staging system utilizes a patented ceramic wear surface that, when incorporated with Sta-Rite’s “true” independent floating impellers, dominates with 1<sup>st</sup>-in-class performance, superior sand handling and thrust management staging system.

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

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

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

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

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

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

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

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

Signature 2000® is a registered trademark of Sta-Rite Industries, Inc. SignaSeal™ is a trademark of Sta-Rite Industries, Inc.

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



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## ORDERING INFORMATION

Catalog Number		GPM	HP	Phase	Stages	Pipe Tapping Sizes		Motor Voltage	Shipping Wt. (lbs.)
Cast Iron	Stainless Steel					Inlet	Outlet		
HP7C	HPS7C	7	1/2	1	9	3/4"	3/4"	115/230	48
HP7C3	HPS7C3		1/2	3	9	3/4"	3/4"	208-230/460	45
HP7D	HPS7D		3/4	1	12	3/4"	3/4"	115/230	48
HP7D3	HPS7D3		3/4	3	12	3/4"	3/4"	208-230/460	45
HP7E	HPS7E		1	1	16	3/4"	3/4"	115/230	51
HP7E3	HPS7E3		1	3	16	3/4"	3/4"	208-230/460	48
HP10C	HPS10C	10	1/2	1	6	3/4"	3/4"	115/230	45
HP10C3	HPS10C3		1/2	3	6	3/4"	3/4"	208-230/460	42
HP10D	HPS10D		3/4	1	8	3/4"	3/4"	115/230	46
HP10D3	HPS10D3		3/4	3	8	3/4"	3/4"	208-230/460	43
HP10E	HPS10E		1	1	10	3/4"	3/4"	115/230	50
HP10E3	HPS10E3		1	3	10	3/4"	3/4"	208-230/460	47
HP10F	HPS10F		1-1/2	1	14	3/4"	3/4"	115/230*	58
HP10F3	HPS10F3		1-1/2	3	14	3/4"	3/4"	208-230/460	53
HP10G	HPS10G		2	1	16	3/4"	3/4"	115/230*	63
HP10G3	HPS10G3		2	3	16	3/4"	3/4"	208-230/460	59
HP20E	HPS20E	20	1	1	7	1"	1"	115/230	49
HP20E3	HPS20E3		1	3	7	1"	1"	208-230/460	46
HP20F	HPS20F		1-1/2	1	9	1"	1"	115/230*	57
HP20F3	HPS20F3		1-1/2	3	9	1"	1"	208-230/460	52
HP20G	HPS20G		2	1	11	1"	1"	115/230*	62
HP20G3	HPS20G3		2	3	11	1"	1"	208-230/460	58
HP20H	HPS20H		3	1	15	1"	1"	208-230	59
HP20H3	HPS20H3		3	3	15	1"	1"	200-230/460	55
HP30E	HPS30E	30	1	1	5	1-1/4"	1-1/4"	115/230	47
HP30E3	HPS30E3		1	3	5	1-1/4"	1-1/4"	208-230/460	44
HP30F	HPS30F		1-1/2	1	6	1-1/4"	1-1/4"	115/230*	54
HP30F3	HPS30F3		1-1/2	3	6	1-1/4"	1-1/4"	208-230/460	49
HP30G	HPS30G		2	1	7	1-1/4"	1-1/4"	115/230*	57
HP30G3	HPS30G3		2	3	7	1-1/4"	1-1/4"	208-230/460	53
HP30H	HPS30H		3	1	11	1-1/4"	1-1/4"	208-230	59
HP30H3	HPS30H3		3	3	11	1-1/4"	1-1/4"	200-230/460	55

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

\*HPS models 230V only.

## ORDERING INFORMATION

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

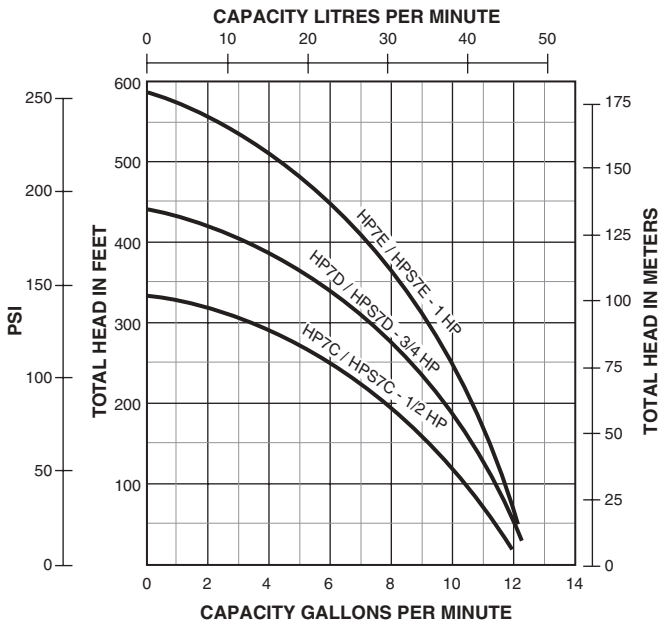
\*To select proper discharge accessories for your pump, add incoming pressure to pump output pressure, to determine total discharge pressure.

**Example:** Incoming pressure 20 PSI + pump output pressure (HP7C at 0 GPM, 300') 87 PSI = Total 150 PSI at discharge = 150 PSI rated discharge accessories

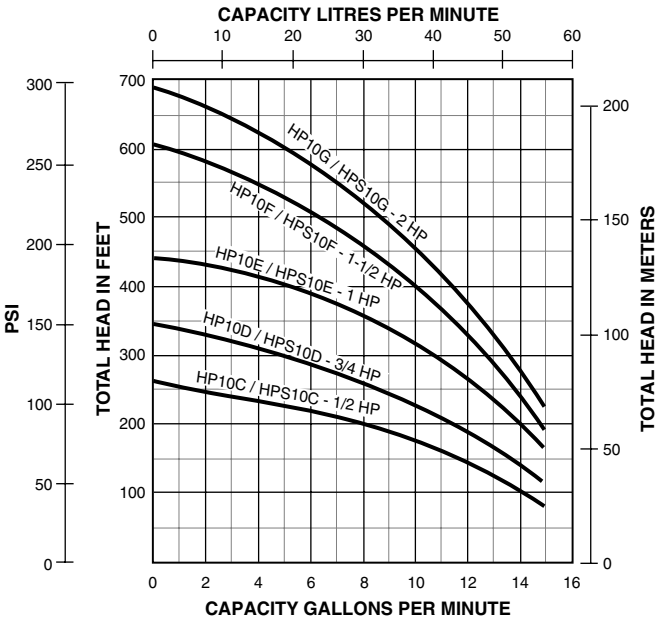


# high-pressure booster pumps

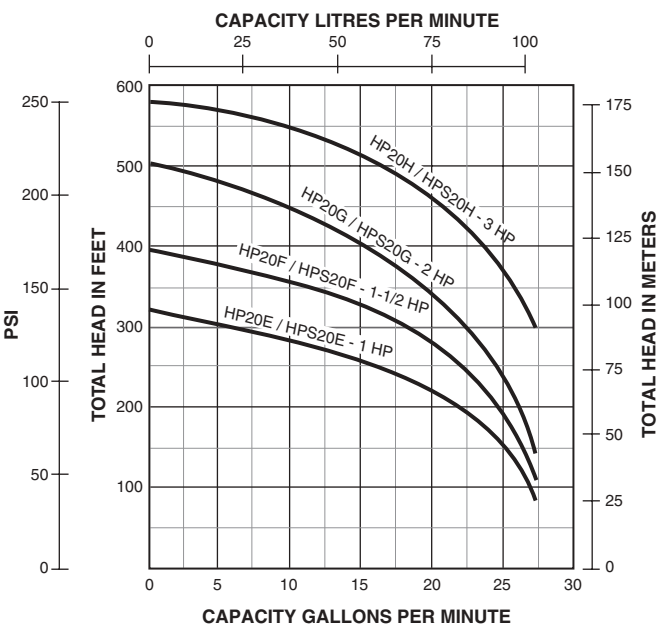
## PUMP PERFORMANCE - 7 GPM



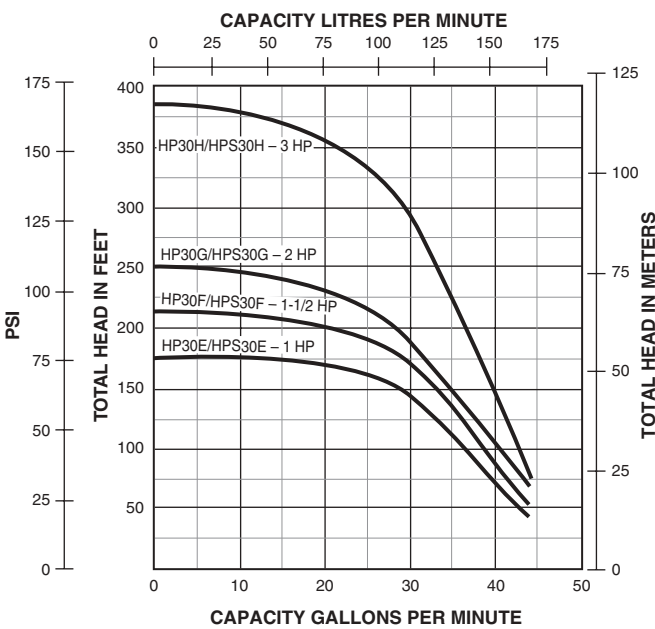
## PUMP PERFORMANCE - 10 GPM



## PUMP PERFORMANCE - 20 GPM



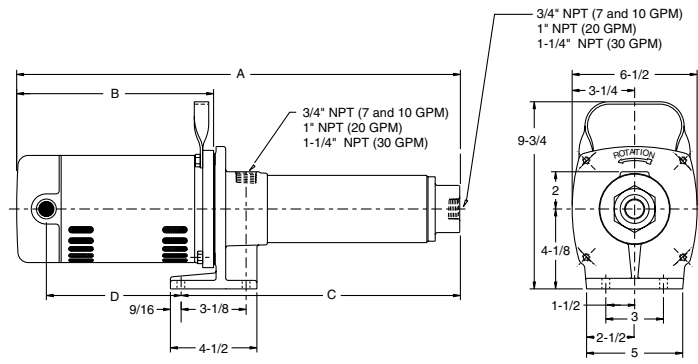
## PUMP PERFORMANCE - 30 GPM





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## OUTLINE DIMENSIONS



## DIMENSIONS IN INCHES

CAST IRON					
Catalog Number	HP	A	B	C	D
HP7C	1/2	24.28	10.38	15.76	6.68
HP7C3	1/2	26.41	9.88	18.39	6.68
HP7D	3/4	27.41	10.88	18.39	7.69
HP7D3	3/4	30.41	10.38	21.89	7.28
HP7E	1	31.91	11.88	21.89	8.69
HP7E3	1	22.15	10.88	13.13	7.68
HP10C	1/2	22.87	11.60	13.13	8.44
HP10C3	1/2	21.15	9.88	13.13	6.68
HP10D	3/4	24.99	11.97	14.88	8.81
HP10D3	3/4	25.15	10.38	16.63	7.28
HP10E	1	27.80	13.03	16.63	9.87
HP10E3	1	24.78	10.88	15.76	7.68
HP10F	1-1/2	31.18	13.78	19.26	10.31
HP10FG	1-1/2	31.91	11.88	21.89	8.69
HP10G	2	36.44	13.78	24.52	10.62
HP10G3	2	32.66	12.63	21.89	9.44
HP20E	1	26.85	13.03	15.68	9.87
HP20E3	1	26.93	10.88	17.91	7.68
HP20F	1-1/2	29.83	13.78	17.91	10.31
HP20F3	1-1/2	30.16	11.88	20.14	8.69
HP20G	2	32.06	13.78	20.14	10.62
HP20G3	2	26.53	12.63	15.76	9.44
HP20H	3	36.80	14.05	24.47	11.12
HP20H3	3	34.67	11.92	24.47	8.97
HP30E	1	25.08	11.88	14.92	8.69
HP30E3	1	24.08	10.88	14.92	7.69
HP30F	1-1/2	27.26	12.63	16.35	9.44
HP30F3	1-1/2	26.51	11.88	16.35	8.69
HP30G	2	28.49	12.42	17.79	9.47
HP30G3	2	28.70	12.63	17.79	9.44
HP30H	3	35.86	14.05	23.53	11.12
HP30H3	3	33.73	11.92	23.53	8.97

STAINLESS STEEL					
Catalog Number	HP	A	B	C	D
HPS7C	1/2	25.39	11.60	15.65	8.44
HPS7C3	1/2	26.27	9.88	18.25	6.68
HPS7D	3/4	28.36	11.97	18.25	8.81
HPS7D3	3/4	26.77	10.38	18.25	7.28
HPS7E	1	31.89	11.97	21.78	8.81
HPS7E3	1	30.80	10.88	21.78	11.94
HPS10C	1/2	22.76	11.60	13.02	8.44
HPS10C3	1/2	22.79	9.88	14.77	6.68
HPS10D	3/4	24.88	11.97	14.77	8.81
HPS10D3	3/4	25.04	10.38	16.52	7.28
HPS10E	1	27.69	13.03	16.52	9.87
HPS10E3	1	29.05	10.88	20.03	7.68
HPS10F	1-1/2	31.95	13.78	20.03	10.31
HPS10F3	1-1/2	31.80	11.88	21.78	8.69
HPS10G	2	33.70	13.78	21.78	10.62
HPS10G3	2	27.22	12.63	16.45	9.44
HPS20E	1	26.74	13.03	15.57	9.87
HPS20E3	1	26.82	10.88	17.80	7.68
HPS20F	1-1/2	29.72	13.78	17.80	10.31
HPS20F3	1-1/2	30.05	11.88	20.03	8.69
HPS20G	2	31.95	13.78	20.03	10.62
HPS20G3	2	26.42	12.63	15.65	9.44
HPS20H	3	36.80	14.05	24.47	11.12
HPS20H3	3	34.67	11.92	24.47	8.97
HPS30E	1	26.23	13.03	14.92	9.87
HPS30E3	1	24.08	10.88	14.92	7.69
HPS30F	1-1/2	28.10	13.47	16.35	10.31
HPS30F3	1-1/2	26.51	11.88	16.35	8.69
HPS30G	2	29.85	13.78	17.79	10.62
HPS30G3	2	28.70	12.63	17.79	9.44
HPS30H	3	35.86	14.05	23.53	11.12
HPS30H3	3	33.73	11.92	23.53	8.97