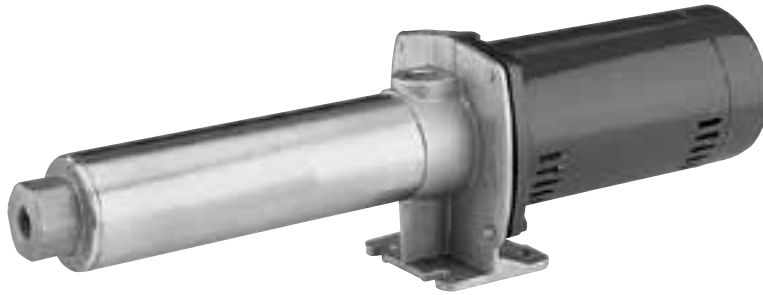


# STA-RITE® HP/HPS Series

Signature 2000® booster pump



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

## APPLICATIONS

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

## SPECIFICATIONS

**Max. Inlet Pressure:** 80 PSI  
**Max. Working Pressure:** 315 PSI  
**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

## FEATURES

**SignaSeal Staging System:** The proven SignaSeal staging system utilizes a ceramic wear surface that, when incorporated with Sta-Rite's "true" independent floating impellers, dominates with 1st-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:** Diecast 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.

**TEFC Models available.** Contact Customer Service.

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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
HP20HG	HPS20HG		2-1/2	1	13	1"	1"	115/230*	58
HP20HG3	HPS20HG3		2-1/2	3	13	1"	1"	208-230/460	54
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
HP30HG	HPS30HG		2-1/2	1	9	1"	1"	115/230*	69
HP30HG3	HPS30HG3		2-1/2	3	9	1"	1"	208-230/460	54
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
<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

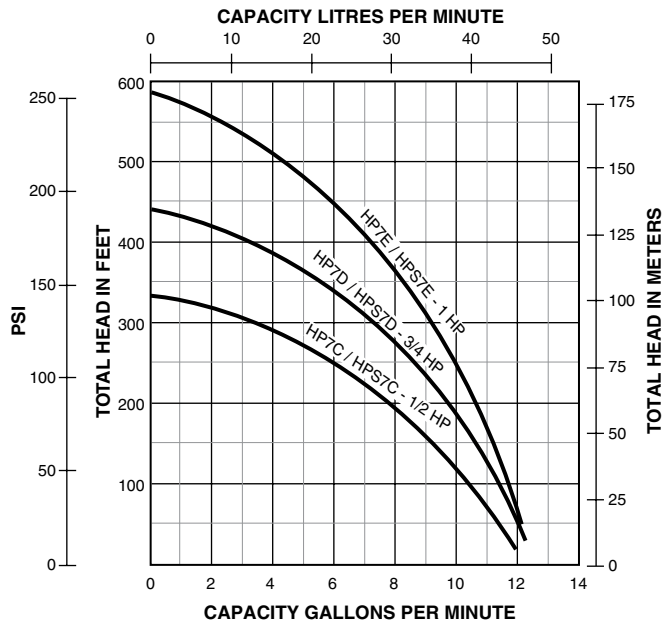
\*To select proper discharge accessories for your pump, add incoming pressure to pump output pressure, to determine total discharge pressure.

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

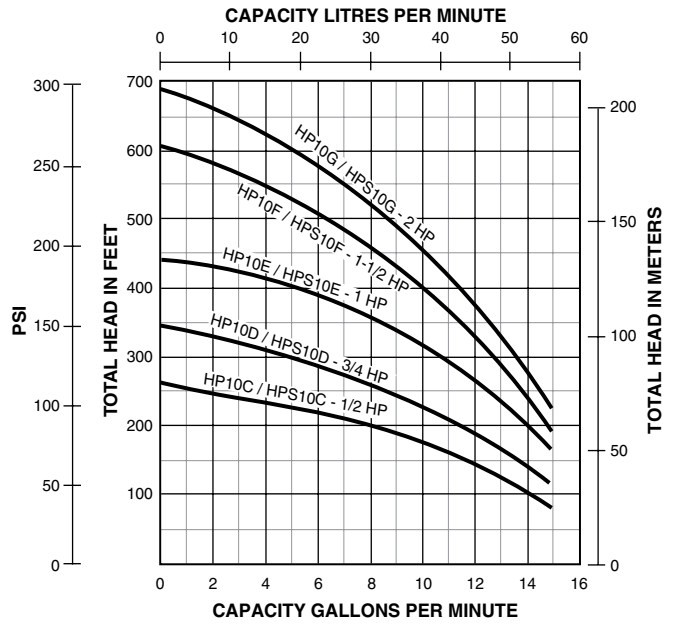
# STA-RITE® HP/HPS Series

Signature 2000® booster pump

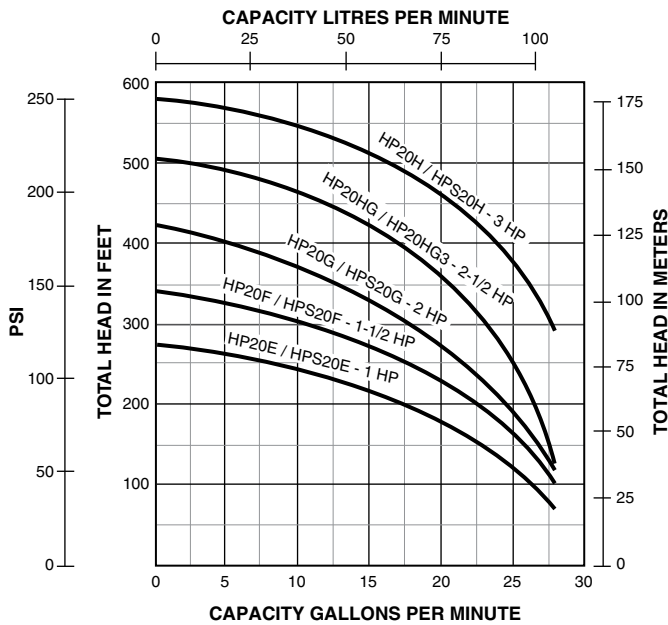
## PUMP PERFORMANCE: 7 GPM



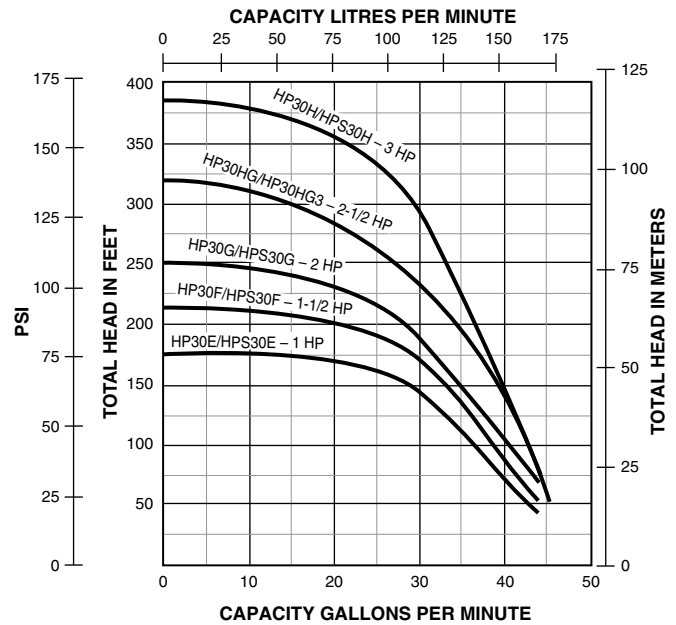
## PUMP PERFORMANCE: 10 GPM



## PUMP PERFORMANCE: 20 GPM



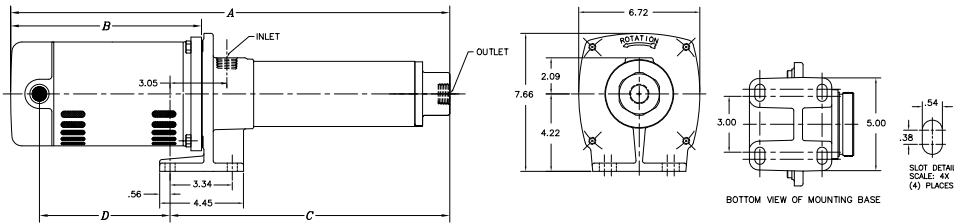
## PUMP PERFORMANCE: 30 GPM



# STA-RITE® HP/HPS Series

Signature 2000® booster pump

## OUTLINE DIMENSIONS



### DIMENSIONS: CAST IRON (IN INCHES)

Catalog Number	HP	A	B	C	D
HP7C	1/2	24.60	10.38	15.76	6.88
HP7C3	1/2	23.34	9.12	15.76	7.88
HP7D	3/4	27.73	10.88	18.39	7.88
HP7D3	3/4	27.22	10.38	18.39	7.47
HP7E	1	32.23	11.88	21.89	8.88
HP7E3	1	31.23	10.88	21.89	7.88
HP10C	1/2	23.19	11.60	13.13	8.63
HP10C3	1/2	20.71	9.12	13.13	6.88
HP10D	3/4	25.31	11.97	14.88	9.00
HP10D3	3/4	23.71	10.38	14.88	7.47
HP10E	1	28.12	13.03	16.63	10.06
HP10E3	1	25.97	10.88	16.63	7.88
HP10F	1-1/2	32.07	13.47	20.14	10.50
HP10F3	1-1/2	30.47	11.88	20.14	8.88
HP10G	2	34.13	13.78	21.89	10.81
HP10G3	2	32.97	12.63	21.89	9.63
HP20E	1	26.02	11.88	15.68	8.88
HP20E3	1	25.02	10.88	15.68	7.88
HP20F	1-1/2	29.84	13.47	17.91	10.50
HP20F3	1-1/2	28.24	11.88	17.91	8.88
HP20G	2	32.38	13.78	20.14	10.81
HP20G3	2	31.22	12.63	20.14	9.63
HP20HG	2-1/2	33.82	13.18	22.36	10.25
HP20HG3	2-1/2	33.84	13.20	22.36	10.28
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
HP30HG	2-1/2	32.24	13.18	20.78	10.25
HP30HG3	2-1/2	32.26	13.20	20.78	10.28
HP30H	3	35.86	14.05	23.53	11.12
HP30H3	3	33.73	11.92	23.53	8.97

### DIMENSIONS: STAINLESS STEEL (IN INCHES)

Catalog Number	HP	A	B	C	D
HPS7C	1/2	25.82	11.60	15.76	8.63
HPS7C3	1/2	23.84	9.12	15.76	6.88
HPS7D	3/4	28.82	11.97	18.39	9.00
HPS7D3	3/4	27.22	10.38	18.39	7.47
HPS7E	1	33.38	13.03	21.89	10.06
HPS7E3	1	31.23	10.88	21.89	7.88
HPS10C	1/2	23.19	11.60	13.13	8.63
HPS10C3	1/2	20.71	9.12	13.13	6.88
HPS10D	3/4	25.31	11.97	14.88	9.00
HPS10D3	3/4	23.71	10.38	14.88	7.47
HPS10E	1	28.12	13.03	16.63	10.06
HPS10E3	1	25.97	10.88	16.63	7.88
HPS10F	1-1/2	32.07	13.47	20.14	10.50
HPS10F3	1-1/2	30.47	11.88	20.14	8.88
HPS10G	2	34.13	13.78	21.89	10.81
HPS10G3	2	32.97	12.63	21.89	9.63
HPS20E	1	26.05	13.03	14.56	10.06
HPS20E3	1	23.90	10.88	14.56	7.88
HPS20F	1-1/2	29.84	13.47	17.91	10.50
HPS20F3	1-1/2	28.24	11.88	17.91	8.88
HPS20G	2	32.38	13.78	20.14	10.81
HPS20G3	2	31.22	12.63	20.14	9.63
HPS20HG	2-1/2	33.82	13.18	22.36	10.28
HPS20HG3	2-1/2	33.84	13.20	22.36	10.28
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
HPS30HG	2-1/2	32.24	13.18	20.78	10.28
HPS30HG3	2-1/2	32.26	13.20	20.78	10.28
HPS30H	3	35.86	14.05	23.53	11.12
HPS30H3	3	33.73	11.92	23.53	8.97



293 WRIGHT STREET, DELAVAN, WI 53115 WWW.STA-RITE.COM PH: 888-782-7483 ORDERS FAX: 800-426-9446

Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice.

S5609WS (05/22/13)