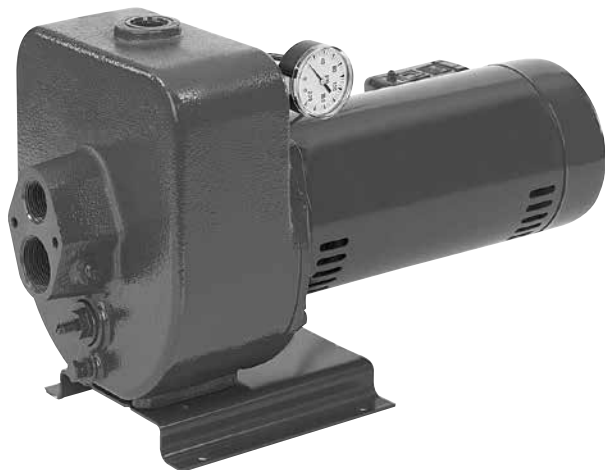


# STA-RITE® HMS Series

Cast iron, horizontal multi-stage



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

## APPLICATIONS

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

## SPECIFICATIONS

**Body:** One-piece rugged cast iron

**Pump and Motor Shaft:** 416 stainless steel

**Impeller:** Polycarbonate

**Diffuser:** Corrosion-resistant cast iron

**Pressure Switch Pre-Set:** 30-50 PSI

**Suction Ports:** Drive-over-Suction

## FEATURES

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

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

**Precision-Machined Diffusers:** Assure faster priming.

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

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

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

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

**Balanced Rotor:** Diecast under high pressures for uniform performance and greater efficiency...dynamically balanced.

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

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

## ORDERING INFORMATION

CATALOG NUMBER	HP	DESCRIPTION	PIPE TAPPING SIZES			STAGES	MOTOR VOLTAGE	APPROX. WT. LBS.
			SUCT.	DRIVE	DISCH.			
HMSD	3/4	Deep Well Jet	1-1/4"	1"	1"	2	115/230	50
HMSE	1	Deep Well Jet	1-1/4"	1"	1"	2	115/230	80
HMSF	1-1/2	Deep Well Jet	1-1/4"	1"	1"	2	115/230	85

## AUTOMATIC PRESSURE REGULATOR – DEEP WELL

CATALOG NUMBER	DESCRIPTION	APPLICATION	APPROX. WT. LBS.
PKG 107	Regulator, tubing, pipe plug and compression fitting	Required for ALL deep well installations	4

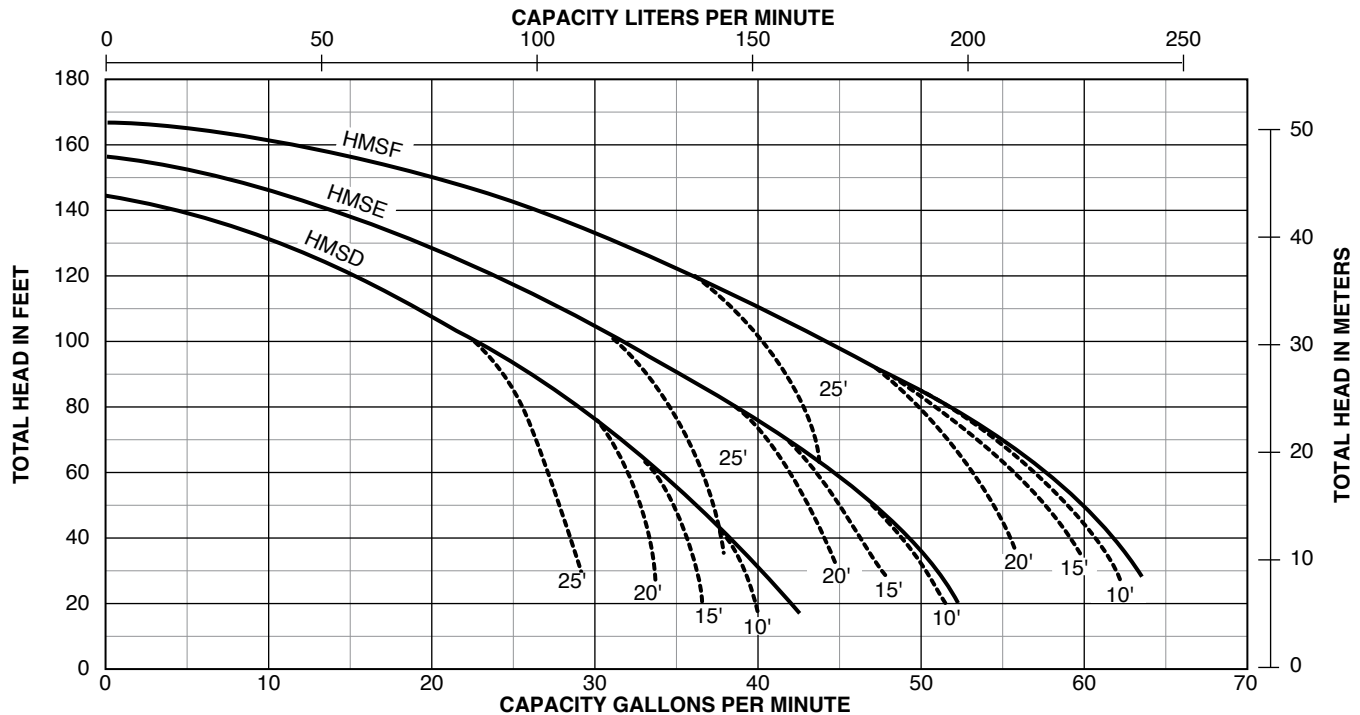
Order pump and pressure regulator, if required, from ordering information tables above.

A Jet Package and the Automatic Pressure Regulator, described above, are required on all deep well installations.

# STA-RITE® HMS Series

Cast iron, horizontal multi-stage

## PUMP PERFORMANCE: 10 GPM



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

## PUMP PERFORMANCE (Capacity in gallons per minute) CENTRIFUGAL APPLICATION

CATALOG NUMBER	HP	TOTAL SUCTION LIFT FT.	DISCHARGE PRESSURE PSI					SHUT-OFF PRESSURE PSI
			20'	30'	40'	50'	60'	
HMSD	3/4	5	37	30	24	15		60
		10	35	29	21	13		60
		15	33	27	19	9		60
		20	32	26	17	6		60
		25	31	24	15			60
HMSE	1	5	47	40	33	24	10	65
		10	46	38	31	21	7	65
		15	44	36	28	18		65
		20	42	35	26	15		65
		25	41	33	24	12		65
HMSF	1-1/2	5	60	53	46	36	23	68
		10	58	52	43	33	21	68
		15	56	49	41	30	16	68
		20	55	47	39	27	12	68
		25	54	41	36	25		68

Tested and rated in accordance with Water Systems Council Standards.

NOTE: Pumps installed with a Pro-Source® tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure. PKG 107 Regulator, tubing, pipe plug and compression fitting is required for all DEEP WELL installations.

# STA-RITE® HMS Series

Cast iron, horizontal multi-stage

PUMP PERFORMANCE: SHALLOW WELL						TOTAL SUCTION LIFT FT.				
CATALOG NUMBER	HP	JET* NUMBER	USES VENTURI	USES NOZZLE	DISCH. PRESS. PSI	5'	10'	15'	20'	25'
HMSD	3/4	PKG 1 - 29SD	N32P-66B	J34P-41	20	9.6	8.2	7.0	5.8	3.9
					30	9.1	7.9	6.5	5.6	3.9
					40	8.8	7.7	6.3	5.6	3.9
					50	8.5	7.6	6.2	5.6	3.9
					60	7.7	7.3	6.2	5.6	3.9
					70	5.5	5.1	4.7	4.2	3.6
					80	3.5	3.1	2.8	2.3	1.9
					Shut-off	102	96	96	96	90
HMSE	1	PKG 1 - 10SD	N32P-67B	J34P-44	20	13.0	11.2	9.8	7.8	5.8
					30	12.5	11.0	9.5	7.6	5.7
					40	12.2	10.9	9.4	7.6	5.7
					50	12.1	10.8	9.2	7.6	5.7
					60	12.0	10.8	9.2	7.6	5.7
					70	10.2	9.6	8.6	7.4	5.7
					80	7.4	6.8	6.2	5.5	4.8
					Shut-off	108	108	108	102	102
HMSF	1-1/2	PKG 1 - 10SD	N32P-67B	J34P-44	20	15.9	13.3	12.2	9.6	7.0
					30	15.6	13.2	12.2	9.5	7.0
					40	15.3	13.1	12.1	9.4	6.9
					50	14.9	13.0	11.9	9.3	6.8
					60	14.4	12.9	11.7	9.2	6.7
					70	13.7	12.7	11.5	9.0	6.6
					80	12.6	12.1	10.8	8.7	6.4
					90	9.5	8.5	7.8	7.2	5.7
					100	5.9	5.0	4.4	3.8	3.2
					Shut-off	120	120	114	114	108

\* Order Jet Package separately.

Tested and rated in accordance with Water Systems Council Standards.

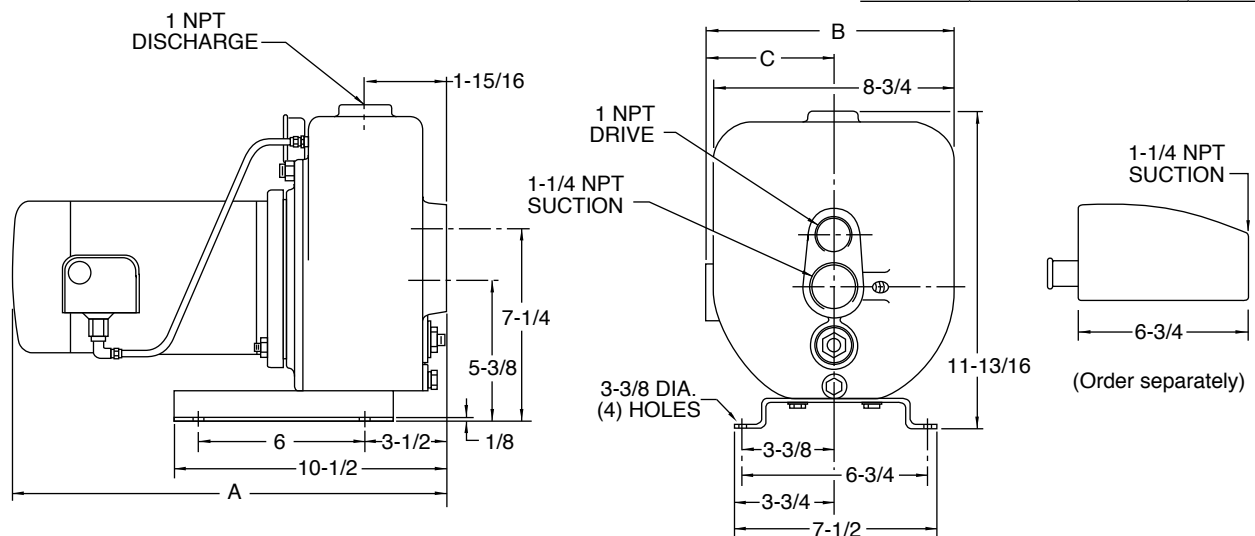
NOTE: Pumps installed with a Pro-Source® tank require a 100 PSI relief valve.

Pumps installed with a conventional tank require a 75 PSI relief valve.

Relief valve must be capable of relieving entire flow of pump at relief pressure.

## OUTLINE DIMENSIONS

CAT. NO.	A	B	C
HMSD	16-7/8	9-1/2	5-1/8
HMSE	17-3/4	9-1/2	5-1/8
HMSF	18-1/4	10	5-5/8



Dimensions (in inches) are for estimating purposes only.

# STA-RITE® HMS Series

Cast iron, horizontal multi-stage

## PUMP PERFORMANCE (Capacity in gallons per minute) DEEP WELL 2" SINGLE PIPE: 40 PSI

CAT. NO.	HP	JET NO.	USES VENTURI	USES NOZZLE	PUMPING DEPTH IN FEET															
					20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	150'	160'	
HMSD	3/4	13AP	J32P-26	J34P-44	12.0	10.8	9.6	8.1	6.9	5.5										
		22AP	J32P-22	J34P-43					7.9	6.7	5.5	4.7	3.9	3.0						
		8AP	J32P-18	J34P-42									4.0	3.6	3.1	2.7	2.2			
HMSE	1	5AP	J32P-29	J34P-41	16.3	15.6	14.1	12.0	9.9	8.2	6.0									
		4AP	J32P-24	J34P-41					8.9	7.9	7.0	5.8	4.7	3.6	2.5					
		19AP	J32P-20	J34P-43										4.0	3.2	2.3	1.8	1.3		
HMSF	1-1/2	15AP	J32P-33	J34P-41	20.0	18.5	17.0	13.6	10.4	7.6	5.0									
		9CP	J32P-26	J34P-41					10.6	9.2	8.0	6.0	4.5	3.7	3.0	2.2				
		23AP	J32P-20	J34P-44											4.3	3.5	2.7	2.4	2.0	

## DEEP WELL 3" SINGLE PIPE: 40 PSI

HMSD	3/4	17CP	J32P-29	J34P-44	12.8	11.5	10.2	8.9	7.6	6.1									
		18CP	J32P-24	J34P-44					7.8	6.9	6.0	5.3	4.5	3.6					
		16CP	Factory Installed										5.0	4.4	3.9	3.4	3.0	2.5	2.0
HMSE	1	7CP	J32P-32	J34P-41	17.8	16.2	14.6	13.0	11.4	9.6	7.7								
		9CP	J32P-26	J34P-41					10.7	9.8	9.0	7.9	6.7	5.8	5.0	4.1			
HMSF	1-1/2	10CP	J32P-38	J34P-45	21.7	19.7	17.9	15.9	14.0	11.0	8.0								
		9CP	J32P-26	J34P-41					11.1	10.8	10.6	9.7	8.9	7.5	6.5	5.5			
		19CP	Factory Installed	J34P-41											6.9	6.1	5.3	4.6	4.1

## DEEP WELL 4" DOUBLE PIPE: 40 PSI

HMSD	3/4	CK2	J32P-29	J34P-44	12.8	11.5	10.2	8.9	7.6	6.1									
		CK2	J32P-24	J34P-44					7.8	6.9	6.0	5.3	4.5	3.6					
		15SD	Factory Installed										5.0	4.4	3.9	3.4	3.0	2.5	2.0
HMSE	1	CK3	J32P-32	J34P-41	17.8	16.2	14.6	13.0	11.4	9.6	7.7								
		CK3	J32P-26	J34P-41					10.7	9.8	9.0	7.9	6.7	5.8	5.0	4.1			
		CK1	J32P-20	J34P-43										5.0	4.5	3.9	3.5	3.0	
HMSF	1-1/2	CK4	J32P-38	J34P-45	21.7	19.7	17.9	15.9	14.0	11.0	8.0								
		CK3	J32P-26	J34P-41					11.1	10.8	10.6	9.7	8.9	7.5	6.5	5.5			
		4SD	Factory Installed												6.9	6.1	5.3	4.6	4.1

Tested and rated in accordance with Water Systems Council Standards.

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

## AUTOMATIC PRESSURE REGULATOR – DEEP WELL

CATALOG NUMBER	DESCRIPTION	APPLICATION	APPROX. WT. LBS.
PKG 107	Regulator, tubing, pipe plug and compression fitting	Required for ALL deep well installations	4



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

CANADA: 490 PINEBUSH ROAD, UNIT 4, CAMBRIDGE, ONTARIO N1T 0A5 PH: 800-363-7867 ORDERS FAX: 888-606-5484

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