

**NOW NSF LISTED!!**

*Still Built  
in the USA...*



**DRINKING WATER  
NSF/ANSI 61 & 372**

Basic Convertible Pump

# HSJ

MULTI-STAGE CONVERTIBLE JET PUMPS - 60 HZ



### FEATURES

**High Capacity and Pressure:** Specifically designed to deliver high capacities at greater pressures.

**Stainless Steel Pump Shaft:** Hex design provides positive drive for impellers and eliminates clearance adjustments.

**Easy to Service:** Can be taken apart for service by removing four bolts.

**Corrosion Resistant:** Glass filled thermoplastic impellers. Stainless steel wear rings and coverplates. Electrocoat paint process applied inside and out and then baked on.

**Powered for Continuous Operation:** Pump is designed for continuous operation. All ratings are within the motor manufacturer's recommended working limits.

**Convertible:** Designed for use on shallow or deep well applications using appropriate Goulds Water Technology fittings. See the performance charts on the following pages for fitting order numbers.

**NSF Listed:** The first NSF listed jet pumps in the industry. All jet pumps and shallow well components only, deep well components are not listed.

### AGENCY LISTINGS



Canadian Standards Association



Underwriters Laboratories<sup>®</sup>



DRINKING WATER  
NSF/ANSI 61 & 372

### APPLICATIONS

Specifically designed for:

- Homes, Farms, Cottages, Booster service

### SPECIFICATIONS

#### Pump

- Pipe connections:  
1 ¼" NPT suction, 1" NPT discharge,  
1" NPT drive (pressure).
- Pressure switch:  
¾ - 1 ½ HP, AS4; 2 HP, AS10,  
both preset (30-50 PSI).

#### Motor

- NEMA standard
- ¾-1 ½ HP - 115/230 V
- 2 HP - 230 V only
- 60 Hz, capacitor start
- Single phase, 3500 RPM
- Built-in overload with automatic reset
- Stainless steel shaft
- Rotation: clockwise when viewed from motor end

Maximum temperature: 140°F

### SYSTEM COMPONENTS

- Basic Pump Unit: Includes pump, motor, pressure switch, tubing, fittings, pressure gauge and bushing.
- Shallow Well Package: Includes adapter, nozzle, venturi, bolts, gasket and pipe plugs.
- Deep Well Jet Assembly Package: Twin Pipe includes: jet body, nozzle, venturi and foot valve. Packer includes: jet body with built-in check valve, nozzle and venturi.

Additional Accessories Required:

- Packer System - well casing adapter AWJ2 (2") and turned coupling 64655 or AWCJ3 (3").
- For Deep Well Systems - a pressure control valve such as an AV22KIT or AV22 plus a JDW tubing kit.



**AV22**

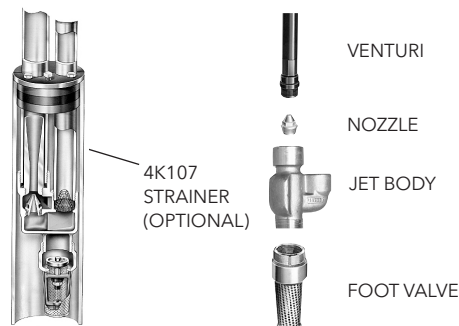
### MODEL INFORMATION

CSA Listed Order No.	U.L. Listed (Indoor use) ① Order No.	HP	Stages
HSJ07N	HSJ07NUL	¾	2
HSJ10N	HSJ10NUL	1	2
HSJ15N	HSJ15NUL	1½	3
HSJ20N	HSJ20NUL	2	3

### PERFORMANCE RATINGS - SHALLOW WELL SYSTEM

HP/Model	¾ HP - HSJ07N					1 HP - HSJ10N					1½ HP - HSJ15N					2 HP - HSJ20N								
Shallow Well Package	FHSJ07					FHSJ10					FHSJ15					FHSJ20								
Adapter	4K62										4K62													
Nozzle	ANO12					ANO12					ANO12					ANO12								
Venturi	AD3432					AD3437					AD3439					AD3448								
Discharge Pressure - PSI											Discharge Pressure - PSI													
Total Suction Lift (feet)	30	40	50	60	Max. Shut off (PSI)	30	40	50	60	Max. Shut off (PSI)	30	40	50	60	70	80	Max. Shut off (PSI)	30	40	50	60	70	80	Max. Shut off (PSI)
	Gallons per minute					Gallons per minute					Gallons per minute					Gallons per minute								
5'	18.5	18.3	14.6	8.0	76	22.8	22.7	19.8	12.2	79	22.8	22.8	22.8	21.7	17.0	11.2	104	28.2	28.0	25.8	22.7	21.2	16.2	105
10'	15.9	15.8	12.7	6.7	74	20.7	20.3	17.5	10.3	77	20.7	20.7	20.7	20.0	16.3	9.0	102	24.8	24.7	24.2	23.3	18.7	13.7	103
15'	13.8	13.8	11.0	5.6	71	18.0	17.8	15.2	9.2	74	18.0	18.0	18.0	17.7	14.2	-	99	21.3	21.3	20.8	20.7	18.7	13.7	101
20'	13.8	11.3	9.2	-	68	14.5	14.3	12.8	-	71	15.0	15.0	15.0	15.0	12.0	-	97	18.0	17.7	17.5	17.0	16.2	10.8	98
25'	8.6	8.6	5.7	-	65	11.5	11.4	8.3	-	68	11.2	11.2	11.2	11.0	-	-	95	12.3	12.0	11.9	11.7	10.5	-	95

### Deep Well Twin Pipe System



### PERFORMANCE RATINGS – TWIN PIPE SYSTEMS - 4" WELL

HP/Model	¾ HP - HSJ07N			1 HP - HSJ10N			1½ HP - HSJ15N			2 HP - HSJ20N			
Jet Assembly Package ①	FT4-48	FT4-47	FT4-06	FT4-47	FT4-24	FT4-08	FT4-45	FT4-30	FT4-29	FT4-45	FT4-30	FT4-29	
Pressure Suction	Pipe Size (in.)												
	1"						1¼"						
Nozzle	AN012	AN013	AN014	AN013	AN015		AN013						
Venturi	AD727	AD724	AD720	AD724		AD720	AD726	AD722	AD719	AD726	AD722	AD719	
Pressure Control Valve Setting (PSI) ②	37	40		43		62	65	67	76	78	80		
Depth to Jet Assembly (based on submergence of 5 feet)	Feet	Gallons Per Minute (GPM) 30-50 Pressure Switch Setting											
	30	15.1			16.0			13.0			13.0		
	40	13.5			15.2			13.0			13.0		
	50	11.8			14.7			13.0			13.0		
	60	10.7			13.7			12.8			12.8		
	70	8.5	9.0		11.7	11.7		12.2			12.8		
	80		7.5			10.5		10.6			12.0		
	90		6.2	6.2		9.0		9.2	9.3		11.3		
	100			5.8		7.5			9.0		9.5	9.5	
	110			5.0		6.3	6.0		8.0			9.4	
	120			4.6			5.0		7.0			8.5	
	130			4.0			4.3		6.2	5.8		7.7	
	140						4.0			5.6		6.8	
	150						3.5			5.2		6.0	5.7
	160									4.7			5.5
	170									4.2			5.3
180									3.7			5.0	
190									3.2			4.5	
200												3.8	

**NOTE:** An offset of 50 feet will result in a decrease of about 25% from ratings as shown.

① Jet assembly package includes jet body (AT4), venturi, nozzle and foot valve.

② Deep well jet pumps require a pressure control device on the discharge to provide back pressure to the jet assembly. Failure to control the amount of discharge by adjusting the back pressure (pressure control valve setting) will cause the pump to lose prime. On pumps with low control valve settings, up to 40 psi, a simple ball valve or AV15 will work. On systems with control valve settings of 40 - 80 psi an AV22, AV22KIT or AV21 is required. They measure the pressure on the outbound side so that the high pressure does not open the 30-50 psi switch and turn the pump off.

### Deep Well Packer System



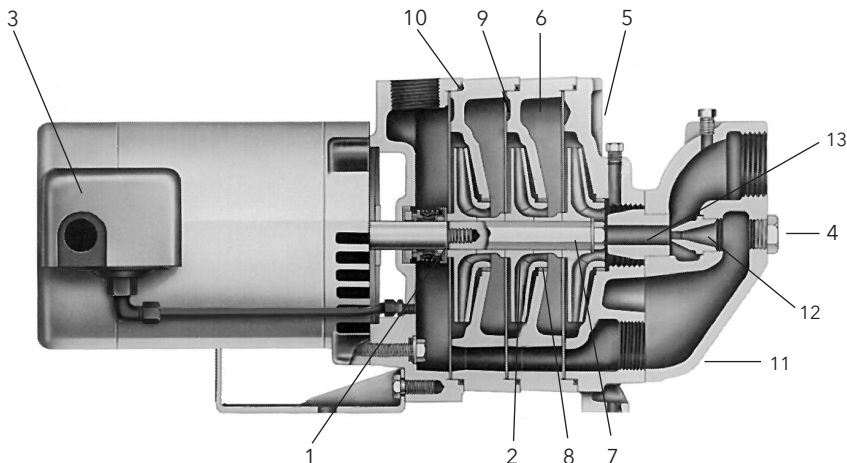
#### PERFORMANCE RATINGS – PACKER SYSTEM

HP/Model	¾ HP - HSJ07N					1 HP - HSJ10N					1½ HP - HSJ15N					2 HP - HSJ20N						
Well Casing (in.)	2		3			2		3			2		3			2		3				
Suction Pipe Size (in.)	1¼		1½			1¼		1½			1¼		1½			1¼		1½				
Jet Assembly Package ①	FP2-51	FP2-50	FP2-06	FP3-40	FP3-42	FP2-50	FP2-07	FP2-08	FP3-40	FP3-49	FP2-49	FP2-30	FP2-29	FP3-47	FP3-46	FP3-34	FP2-49	FP2-30	FP2-29	FP3-47	FP3-46	FP3-34
Jet Body (Only)	AP2		AP3			AP2		AP3			AP2		AP3			AP2		AP3				
Nozzle	AN012	AN013	AN014	AN013	AN014	AN013	AN014	AN015	AN013	AN015	AN013											
Venturi	AD727	AD724	AD720	AD724	AD722	AD724		AD720	AD724	AD723	AD726	AD722	AD719	AD727	AD722	AD719	AD726	AD722	AD719	AD727	AD722	AD719
Pressure ② Control Valve Setting (PSI)	40		36	40		45		40	43	62	65	67	62	64	66	76	78	80	75	78	80	
Depth to Jet Assembly (based on submergence of 5 feet)	Feet	Gallons Per Minute (GPM) 30-50 Pressure Switch Setting																				
	30	14.9			15.3		15.8			16.3		13.0			14.7			13.0			14.7	
	40	13.1			13.5		14.0			16.0		13.0			14.5			13.0			14.7	
	50	11.6			12.5		12.5			15.5		12.9			14.3			13.0			14.7	
	60	10.5			12.2		11.2	11.3		14.2		12.7			14.3			13.0			14.5	
	70	8.4	8.8		11.8			10.0		12.5		11.8			14.2			12.8			14.5	
	80		7.6		10.2	8.5		8.7		10.0		10.2			12.2			11.8			13.5	
	90		6.0	6.2		7.8		7.3		8.3	9.0	8.3	9.1		10.0			10.5			12.7	
	100			5.7		6.9		5.5			8.2		8.3		7.8	9.1		8.5	9.1		10.5	
	110			4.3		6.0		4.2	4.8		7.3		7.3			8.8			8.9		8.3	9.1
	120			3.8		5.3			4.0		6.7		6.2			7.6			7.9			9.1
	130			2.2		4.5				3.5		5.8		5.4	5.6	6.9			6.9			8.8
	140									3.0		4.8			5.3	6.2			6.0			8.2
	150									2.4		4.1			4.8	5.4	5.6		5.2	5.6		7.3
	160														4.3		5.5			5.4		6.5
170														3.6		5.0			4.9		5.7	
180														3.0		4.7			4.3		5.6	
190															4.3				3.8		5.5	
200															3.8				3.3		5.3	
210															3.3						4.8	
220																					4.5	
230																					4.0	

**NOTE:** An offset of 50 feet will result in a decrease of about 25% from ratings as shown. Special turned (diameter) couplings are required on 2" packer systems, order no. 64655 in Jet and Sub price book.

① Jet Assembly Package includes jet body, AP2 or AP3; built-in check valve, nozzle and venturi.

② Deep well jet pumps require a pressure control device on the discharge to provide back pressure to the jet assembly. Failure to control the amount of discharge by adjusting the back pressure (pressure control valve setting) will cause the pump to lose prime. On pumps with low control valve settings, up to 40 psi, a simple ball valve or AV15 will work. On systems with control valve settings of 40 - 80 psi an AV22, AV22KIT or AV21 is required. They measure the pressure on the outbound side so that the high pressure does not open the 30-50 psi switch and turn the pump off.



**Shallow Well Model**

### COMPONENTS

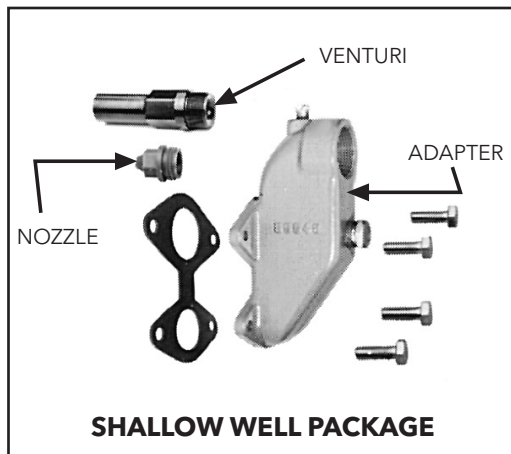
Item #	Description	Material
1	Mechanical Seal	Carbon/Ceramic/ Buna/SS
2	Impeller	Glass Filled Engineered Composite
3	Pressure Switch	Various
4	Plug	Carbon Steel
5	Casing	Cast Iron
6	Intermediate Stage	Cast Iron
7	Hex Shaft Extension	Stainless Steel
8	Wear Ring	Stainless Steel
9	Cover Plate	Stainless Steel
10	O-Rings	Buna-N
11	Shallow Well Adapter	Cast Iron
12	Nozzle	Delrin
13	Venturi	Polypropylene
14	Motor Adapter	Cast Iron

### DIMENSIONS AND WEIGHTS

HP/Model	¾-HSJ07N	1-HSJ10N	1½-HSJ15N	2-HSJ20N
<b>Weight</b>	53	58	72	75
<b>Length</b> <sup>①</sup>	15	16	17	19
<b>Width</b>	8	8	8	8
<b>Height</b>	9	9	9	9

(All dimensions are in inches and weights in lbs. Do not use for construction purposes.)

① Add 4" for shallow well adapter.



**SHALLOW WELL PACKAGE**

# Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

**For more information on how Xylem can help you, go to [www.xylem.com](http://www.xylem.com)**



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