

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.

AGENCY LISTINGS



Canadian Standards Association



Underwriters Laboratories®

APPLICATIONS

Specifically designed for:

- Homes, Farms, Cottages, Booster service

SPECIFICATIONS

Pump

- Pipe connections:
1 1/4" NPT suction, 1" NPT discharge,
1" NPT drive (pressure).
- Pressure switch:
3/4 – 1 1/2 HP, AS4; 2 HP, AS10,
both preset (30-50 PSI).

Motor

- NEMA standard
- 3/4-1 1/2 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

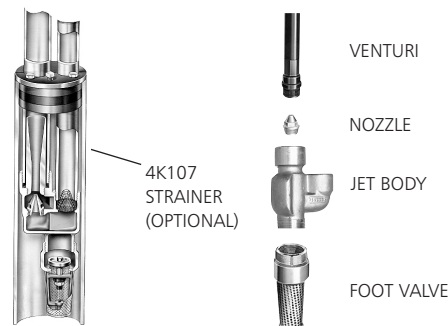
MODEL INFORMATION

CSA Listed Order No.	U.L. Listed (Indoor use) ① Order No.	HP	Stages
HSJ07N	HSJ07NUL	3/4	2
HSJ10N	HSJ10NUL	1	2
HSJ15N	HSJ15NUL	1 1/2	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	Pipe	1"											
Suction	Size (in.)	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



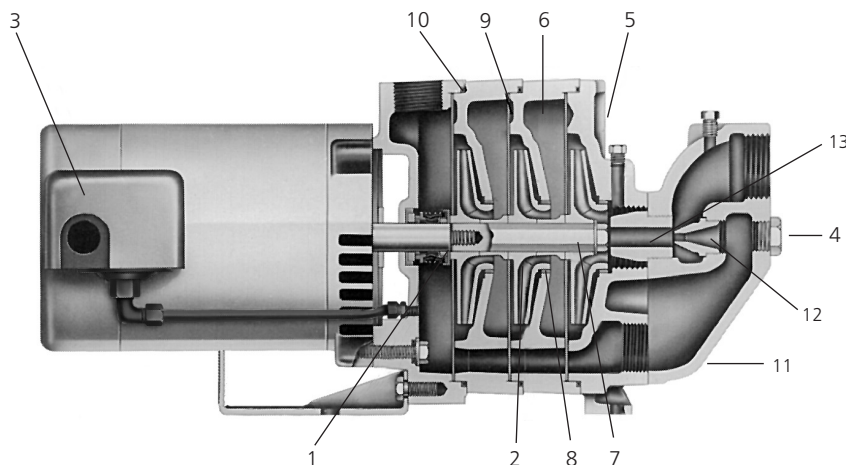
PERFORMANCE RATINGS — PACKER SYSTEM

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	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

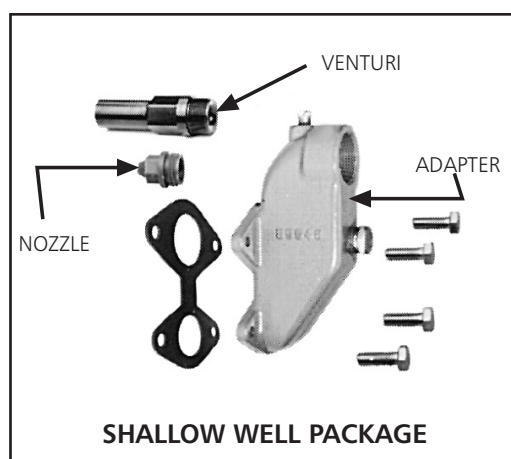
Item No.	Description
1	Mechanical seal
2	Impeller
3	Pressure switch
4	Nozzle clean-out plug
5	Casing
6	Intermediate stage
7	Hex shaft extension
8	Wear ring
9	Cover plate
10	O-rings
11	Shallow Well Adapter
12	Nozzle
13	Venturi

DIMENSIONS AND WEIGHTS

HP/Model	¾-HSJ07N	1-HSJ10N	1½-HSJ15N	2-HSJ20N
Weight	53	58	72	75
Length ^①	15	16	17	19
Width	8	8	8	8
Height	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.



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

We're 12,000 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. 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, backed by a legacy of innovation.

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Xylem, Inc.
2881 East Bayard Street Ext., Suite A
Seneca Falls, NY 13148
Phone: (800) 453-6777
Fax: (888) 322-5877
www.xyleminc.com/brands/gouldswatertechnology

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