# **TECHNICAL BROCHURE**

BVJ R1



#### **FEATURES**

**High Capacity:** Specifically designed to deliver water at high capacities.

**Easy to Service:** Can be taken apart for service by removal of four bolts. Pipes do not have to be disturbed when service is required.

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

**Corrosion-Resistant:** Electrocoat paint process is applied inside and out and then baked on.

Adjustable Automatic Pressure Control Valve: Guarantees maximum capacity at all times. By-pass check valve equalizes pressure in entire system and helps prevent loss of prime.

**Easy to Prime:** The VJ series incorporates a vent at the highest point of the casing, including the mechanical seal chamber, for a more thorough air purging, and fast, efficient priming.

**VJ** 60 HZ VERTICAL JET PUMPS DEEP WELL





# Goulds Water Technology

#### **APPLICATIONS**

Specifically designed for:

- Homes
- Farms
- Cottages

#### SPECIFICATIONS

#### Pump

- Pipe connection:
  - 1" NPT drive (pressure)
  - 1¼" NPT suction
- 1" NPT discharge.

Pressure switch: AS4, preset (30-50 PSI).

### Motor

- NEMA standard.
- 1/2-1 HP, 115/230 V, 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

### **REQUIRED SYSTEM COMPONENTS**

- Basic Pump Unit: Includes pump, motor, pressure switch, tubing, fittings, pressure gauge, bushing and pressure control valve (AV21).
- 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. See Performance Charts on following pages for Jet Assembly package order numbers.

## ADDITIONAL ACCESSORIES REQUIRED

For Packer: well casing adapter AWD2 (2") or AWD3 (3"). Must be ordered separately.

## AGENCY LISTINGS



Canadian Standards Association

Underwriters Laboratories (1)

HP/Model Well Casing Min. I.D. (In.)		½ HP-VJ05     ¾ HP-VJ07     1HP-VJ10										
		4										
Pressure Pipe		1										
Suction	Size In.	11⁄4										
Jet Asser Package		FT4-46	FT4-08	FT4-47	FT4-46	FT4-06	FT4-14	FT4-09				
Jet Body	(only)			·	AT4	·						
Nozzle		AN014	AN015	AN013 AN		J014	AN017	AN015				
Venturi		AD722	AD720	AD724	AD722	AD720	AD729	AD721				
Control Valve Setting (PSI) ②		23		34		40	34	36				
	Feet	Gallons per Minute 30-50 Pressure Switch Setting										
et)	30	12.2		15.2			18.8					
5 fe	40	11.7		13.2			16.7					
of !	50	10.0		11.7			15.0					
Depth to Jet Assembly (based on submergence of 5 feet)	60	8.2	8.3	9.7	10.0		12.7					
	70		5.8		8.3		10.0					
	80		5.0		7.1		7.9					
	90		3.8		5.8	5.8	5.3	5.8				
	100					5.0		5.0				
	110					3.8		4.6				
	120							3.3				

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

0 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. The AV21 measures the pressure on the outbound side so that the high pressure does not open the 30-50 psi switch and turn the pump off.

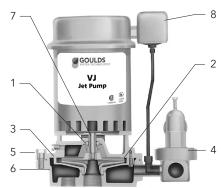
### **PERFORMANCE RATINGS - TWIN PIPE SYSTEMS**

# Goulds Water Technology

# **Residential Water Systems**

#### COMPONENTS

Item No.	Description						
1	Mechanical seal						
2	Impeller						
3	Diffuser (Guidevane)						
4	Pressure control valve						
5	Motor adapter						
6	Casing						
7	Stainless steel shaft						
8	Pressure switch						



#### **DIMENSIONS AND WEIGHTS**

HP/Model	1⁄2-VJ05	¾-VJ07	1-VJ10						
Weight	50	53	56						
Length	12¾								
Width	12¾								
Height	13½	14¼	14¾						

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

#### **MODEL INFORMATION**

CSA Listed Order No.	U.L. Listed (Indoor use) <sup>①</sup> Order No.	HP		
VJ05	VJ05UL	1/2		
VJ07	VJ07UL	3⁄4		
VJ10	VJ10UL	1		

#### **PERFORMANCE RATINGS - PACKER SYSTEM**

HP/Model		1⁄2 HP-VJ05				3⁄4 HP-VJ07					1HP-VJ10				
Well Casing (In.)		2 3		3	2			3		2			3		
Suction	Pipe Size In.	11⁄4 11⁄2		1⁄2	11⁄4			11⁄2		11⁄4		1½			
Jet Assembly Package ①		FP2-38	FP2-08	FP3-42	FP3-09	FP2-50	FP2-47	FP2-09	FP3-40	FP3-43	FP2-48	FP2-43	FP2-08	FP3-40	FP3-49
Jet Body (only)		AP2 AP3		AP2		AP3		AP2		AP3					
Nozzle		AN014	AN015	AN014	AN016	AN013	AN	015	AN013	AN014	AN016		AN015		
Venturi		AD722	AD720	AD722	AD721	AD724	AD723	AD721	AD724	AD721	AD729	AD725	AD720	AD724	AD723
Control Valve ② Setting (PSI)		23			34			36			34	36			
	Feet	Gallons per Minute 30-50 Pressure Switch Setting													
Depth to Jet Assembly (based on submergence of 5 feet)	30	12.2		12.5		15.2			15.8		18.8			18.8	
	40	10.8		11.3		13.2			13.7		16.7			16.7	
	50	9.0		10.0		11.3			11.7		14.2			15.0	
	60	7.5	7.7	8.2	8.3	9.3	10.3		10.0	10.3	11.7	11.0		12.5	
	70		5.5		6.8		8.7			9.6		9.3		10.0	
	80		4.6		5.8		6.8			8.2		7.7		8.3	
	90		3.4		4.3		5.3			6.7		5.7		6.3	6.5
	100				3.5		4.0	4.2		5.4		4.6	4.6		5.8
	110							3.3		4.3			3.3		5.0
	120							2.3		3.3			2.9		4.2
	130									2.9					3.3
	140														2.9

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. The AV21 measures the pressure on the outbound side so that the high pressure does not open the 30-50 psi switch and turn the pump off.

# Xylem |'zīləm|

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

We're a global team 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.

#### For more information on how Xylem can help you, go to www.xyleminc.com



Xylem Inc. 2881 East Bayard Street Ext., Suite A Seneca Falls, NY 13148 Phone: (866) 325-4210 Fax: (888) 322-5877 www.gouldswatertechnology.com

Goulds is a registered trademark of Goulds Pumps, Inc. and is used under license. © 2016 Xylem Inc. BVJ R1 February 2016