### **TECHNICAL BROCHURE**

**BJRD** 

### **FEATURES**

**Convertible:** May be used on shallow or deep well applications using appropriate Goulds Pumps fittings.

#### Serviceable:

- Back pullout design allows disassembly of pump for service without disturbing piping.
- Corrosion resistant, engineered plastic tubing and fittings are easily removed for cleaning. Premium O-ring design, fittings need only be hand tight to seal.

Impeller: F.D.A. compliant, glass filled Noryl®. Corrosion and abrasion resistant.

**Diffuser (Guidevane):** F.D.A. compliant, injection molded, food grade, glass filled Lexan\* for durability and abrasion resistance.

**Powered for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits. Can be operated continuously without damage.

Corrosion Resistant: Electro-coat paint is baked on.

**Excellent Air Handling Ability:** After initial priming the pump has the ability to re-prime itself even when air enters the system. Pumping resumes once the water level rises above the foot valve.

Basic Pump Unit: Includes pump and motor, pressure switch with tubing and fittings.

Water system tank required on all systems.

#### AGENCY LISTINGS



Canadian Standards Association File #LR38549





CONVERTIBLE JET PUMPS 1/2, 3/4 AND 1 HP - 60 HZ



# Goulds Water Technology

# **Residential Water Systems**

#### **APPLICATIONS**

Specifically designed for:

- Homes
- Farms
- Cottages
- Booster service

#### **SPECIFICATIONS**

#### Pump:

- Pipe connections:
  - 1" NPT discharge
  - 1¼" NPT suction
  - 1" NPT pressure
- Pressure switch: AS4 preset at 30-50 PSI

#### **Motor:**

- Standard NEMA service factors
- 60 Hz
- ½ 1 HP 115/230 V 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

#### ADDITIONAL COMPONENTS REQUIRED

- **Deep Well Package:** Choose either a twin pipe or packer style.
  - Twin pipe includes jet body, nozzle, venturi and foot valve.
  - Packer includes packer body, nozzle, venturi and built-in check valve.

**NOTE:** Packer systems also require an AWJ2 packer adapter on the wellhead.

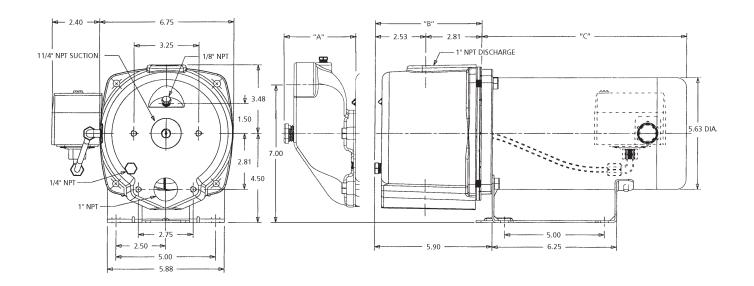
• Deep well systems require a pressure control valve.

**NOTE:** You must have JDW or AV22KIT to make the pressure switch connection.

#### PERFORMANCE RATINGS - SHALLOW WELL Require pump and shallow well package shown below.

HP/Order No.		½ HP - JRD5					¾ HP - JRD7			1 HP - JRD10				
Shallow Well Package (includes the components below)		1	FH5JRD			FH7				FH10				
Adapter		4K62					4K62				4K62			
Nozzle		AN018					AN018				AN018			
Venturi	AD3731					AD3536				AD3538				
	Discharge Pressure - PSI					Discharge Pressure - PSI				Discharge Pressure - PSI				
Total Suction Lift (feet)	20	30	40	50	Max.	30	40	50	Max. Shut-off	30	40	50	60	Max.
Liit (leet)	Gallons per minute (PSI)					Gallo	Gallons per minute (PSI)							Shut-off (PSI)
5	12.3	12.0	9.0	4.0	63	19.0	16.5	10.5	69	22.0	21.0	15.0	8.0	72
10	11.0	10.8	7.6	3.0	62	16.0	14.5	9.0	67	18.5	18.0	12.5	6.5	70
15	9.2	9.0	6.5	2.5	60	13.5	13.0	7.0	65	16.0	15.5	11.0	5.0	68
20	7.6	7.5	5.5	1.5	57	12.0	11.5	5.5	63	13.3	13.0	9.0	3.0	65
25	5.7	5.5	4.0	0.6	55	9.0	8.7	4.0	60	9.6	9.0	7.0	1.5	63

# Residential Water Systems



## **DIMENSIONS AND WEIGHTS - PUMP, MOTOR AND SHALLOW WELL ADAPTER**

Order No.	НР		(Inches)	Height (Ir	Wt. (lbs.)				
Order No.	пг	Opt. SW Adapter "A"	"B"	"C" Max.	Width	Shallow Well	Deep Well	WV L. (IDS.)	
JRD5	1/2			10.81				37	
JRD7	3/4	3.31	5.34	11.56	9.15	8.41	8.0	42	
JRD10	1			11.81				47	

Do not use for construction purposes.

#### TWIN PIPE PERFORMANCE RATINGS

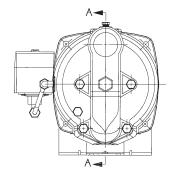
HP/Or	der No.		1/2	HP - JF	RD5		¾ HP - JRD7				1 HP - JRD10					
Well Casing Min. I.D. (in.)		3	4		41/2	4		4½		4		41/2				
Pressure	Pressure Size (in.)		1			11/4	1			11/4		1			11/4	
Suction			11/4			1½	11⁄4			1½		11⁄4			11/2	
② Jet Assembly Package		FT3-09	FT4-13	FT4-31	FT4-08	FT5-14	FT4-14	FT4-34	FT4-18	FT5-47	FT5-48	FT4-44	FT4-43	FT4-18	FT5-49	FT5-11
Jet Bod	ly (Only)	AT3	AT3 AT4 AT5				AT4		A	Γ5	AT4			AT5		
Nozzle		AN015 AN017 AN016 AN015 AN018			AN018	AN017	AN017 AN016 AN018				AN017 AN016			AN019	AN018	
Venturi		AD722	AD726	AD723	AD720	AD724	AD729	AD725	AD722	AD730	AD725	AD730	AD727	AD722	AD732	AD727
Control Setting		30								31	33	35	30	32		
	Feet				Gal	lons Pe	r Minut	e (GPM)	30-50 P	SI Press	ure Swit	ch Setti	ng			
	30	6.4	11.7	10.0			13.3			14.3		14.5			16.3	
<u>ح</u> ا	40	5.7	10.7	8.0			13.2			14.2		14.3			16.3	
mb	50	4.3	9.3	6.8			11.3			13.0		12.3			15.3	
sse ner	60			6.2	4.7		8.8	8.0		11.5		9.8	9.5		13.0	
Jet Assembly Submergence 5 Feet)	70			5.0	4.2	5.0		7.0		9.8	8.3		8.0		10.8	
	80				3.3	4.3		5.7			7.3		6.3	5.3	8.7	8.8
h to d on	90				2.8	3.7		4.2	4.5		6.3			5.2		7.5
Depth (Based	100								3.7		5.3			4.7		6.2
De (Ba	110								3.0		4.3			3.8		4.8
	120															3.8

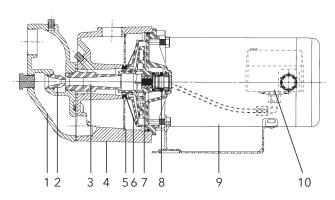
② Jet Assembly Package includes: Jet Body, Venturi, Nozzle, Foot Valve. Important: An offset of 50 feet will result in a decrease of about 25% from ratings as shown.

#### PACKER SYSTEM PERFORMANCE RATINGS

HP/Order I	No.		½ HP - JRD5		3/4 HP	- JRD7	1 HP -	JRD10			
Well Casing	g	2									
Suction Pipe	e Size (in.)	11⁄4									
① Jet Asse Package		FP2-13	FP2-13 FP2-31 FP2		FP2-40	FP2-40 FP2-47		FP2-43			
Jet Body (C	Only)		AP2		<i>A</i>	AP2	Д	P2			
Nozzle		AN017	AN016	AN015	AN	1015	AN016				
Venturi		AD726	AD723	AD720	AD727	AD723	AD729	AD725			
Control Valve Setting (PSI)		30		30	32	35	36				
	Feet	Gallons Per Minute (GPM) 30-50 PSI Pressure Switch Setting									
	30	10.7	8.5		11.8		14.2				
<u>&gt; 8</u>	40	9.5	7.3		11.5		12.5				
Jet Assembly Submergence 5 Feet)	50	8.3	6.7		9.8		11.5				
ssel nerg t)	60		5.8	4.3	7.7	6.7	9.3	7.8			
Jet Ass Subme 5 Feet)	70			3.8		6.0		7.7			
Jet Sub 5 Fe	80			3.2		4.3		6.3			
Depth to (Based on of	90					3.7		4.8			
	100							3.7			
	110										
	120										

① Jet Assembly Package includes: Jet Body, Venturi, Nozzle, Built-in Check Valve, Leather Crimps, Spacer and Fitting. Important: An offset of 50 feet will result in a decrease of about 25% from ratings as shown.





#### **COMPONENTS**

Item No.	Description
1	Shallow well adapter
2	Nozzle
3	Venturi
4	Cast iron casing
5	Separator plate
6	Diffuser (Guidevane)
7	Impeller
8	Mechanical seal
9	Motor
10	Pressure switch



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