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## 1 DEPTH TO THE PUMPING WATER LEVEL

- 0 – 25 feet Shallow well or convertible jet pump, install in shallow (single pipe) configuration.
- 25 – 90 feet Convertible jet pump, installed in deep (two pipe) configuration or deep well submersible pump.
- 90 – 250 feet Deep well submersible pump.
- 250+ feet Call pump hotline: 1-888-956-0000

**"Pumping water level"** is the depth to the water while the well is being pumped. It is usually deeper than the depth to the water when the pump is not running. For a lake or cistern installation, it is the depth to the surface of the water.

For **Jet pumps**, it is the vertical distance from the pumping water level to the suction opening of the pump.

For **Submersible pumps**, it is the vertical distance from the pumping water level to the point of water usage.

For new installation that information is available on the **Well Driller's Report**. For replacement installations, use the equivalent style and horsepower pump, providing it was suitable when it was operational.

**NOTE:** A foot valve or check valve is required for proper operation of any system. The suction line must extend at least 5 feet below the pumping water level and be at least 10 feet above the well bottom.

## 2 HOW MUCH WATER IS REQUIRED

The gpm (gallons per minute) of the pump must equal the total number of fixtures. Fixtures include all faucets, toilets and water consuming appliances (don't include water treatment appliances, such as a hot water tank or water filter). Example: a house with one full bathroom (sink, tub/shower, toilet), kitchen sink, basement sink, outside faucet, washing machine and dishwasher would require 8 gpm.

## 3 MINIMUM WELL DIAMETER

2½" – Jet pumps in shallow well applications (depth less than 25 feet) should be installed using 1¼" suction piping with a foot valve.

4" – Convertible jet pumps used in deep well applications (depth greater than 25 feet) and deep well submersible pumps.

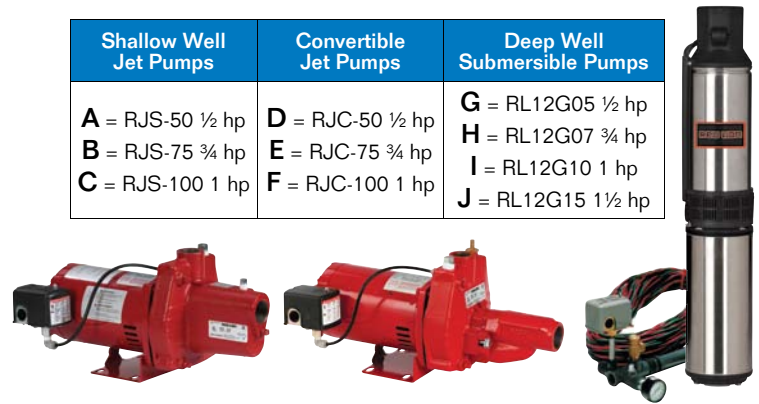
## PUMP CHART

Read across the top of the chart for correct Pumping Water Level in Feet. Read down the side for correct Flow Required (gpm). The letter(s) correspond to the minimum recommended pump options. Higher horsepower models of the same categories may be substituted for jet pumps.

Flow Required (gpm)	Pumping Water Level in Feet								
	5	15	25	50	80	100	150	200	250
3	A,D	A,D	A,D,G	D,G	D,G	G	G,H	H,I	I
4	A,D	A,D	A,D,G	D,G	E,G	G,H	G,H	H,I	I
5	A,D	A,D	A,E,G	D,G	F,G	G,H	G,H	H,I	I
6	A,D	A,D	B,E,G	D,G	G	G,H	H	I	I
7	A,D	A,D	B,E,G	F,G	G,H	G,H	H	I	I
8	A,D	A,E	C,F,G	G	G,H	G,H	H	I	I
9	A,D	A,E	C,G	G	G,H	G,H	I	I	J
10	A,D	B,E	C,G	G,H	G,H	G,H	I	I	J
11	A,E	B,E	G	G,H	H	H	I	J	J
12	A,E	C,E	G	G,H	H	H	I,J	J	J
13	B,E	C,F	G	G,H	H,I	I,J	J	J	J
14	B,E	C,F	G	I	I,J	J	J	J	J
15	B,E	C		I	J				
16	C,E	C							
17	C,E	C							

**NOTE:** For depths greater than 250 feet, consult tech support.

Shallow Well Jet Pumps	Convertible Jet Pumps	Deep Well Submersible Pumps
<b>A</b> = RJS-50 ½ hp	<b>D</b> = RJC-50 ½ hp	<b>G</b> = RL12G05 ½ hp
<b>B</b> = RJS-75 ¾ hp	<b>E</b> = RJC-75 ¾ hp	<b>H</b> = RL12G07 ¾ hp
<b>C</b> = RJS-100 1 hp	<b>F</b> = RJC-100 1 hp	<b>I</b> = RL12G10 1 hp
		<b>J</b> = RL12G15 1½ hp

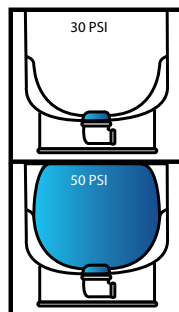


## TANK CHART

**NOTE:** Refer to Step 2 above.

The easy way to size a tank is take the gpm system requirement that you determined in Step 2, multiply by 3 and go to the next largest tank size.

**Example:** 8 gpm x 3 = 24 gallons – therefore use an RL33 tank.



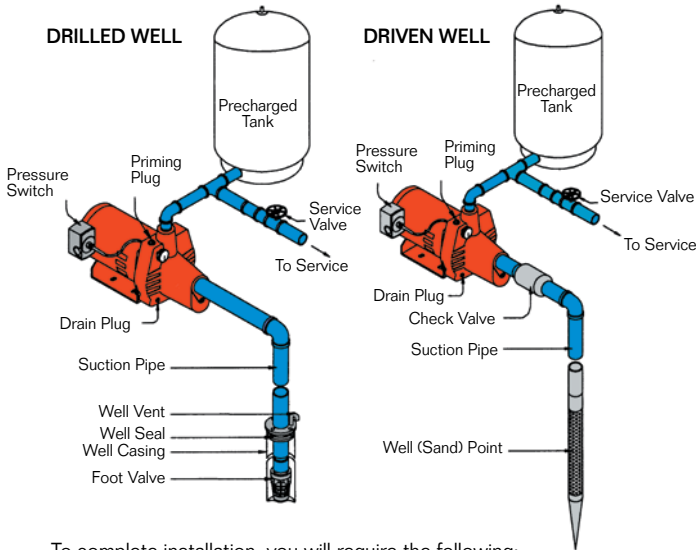
Model #	Total Tank Volume (gal)	Drawdown @ 30/50 PSI (gal)
RL2	2.1	0.65
RL4	4.8	1.4
RL6H	5.3	1.8
RL8	8.5	2.6
RL14H	14	4.3
RL14	14	4.3
RL20	20	6.2
RL33	33	10.3
RL44	44	13.6
RL81	81	25.1
RL119	119	36.8

# Typical Installations

## SHALLOW WELL JET PUMP

### Down to 25 Feet

Suitable for applications where the pumping water level does not exceed 25 feet. Requires a single 1 1/4" suction pipe. May be used in well 2" or larger in diameter.



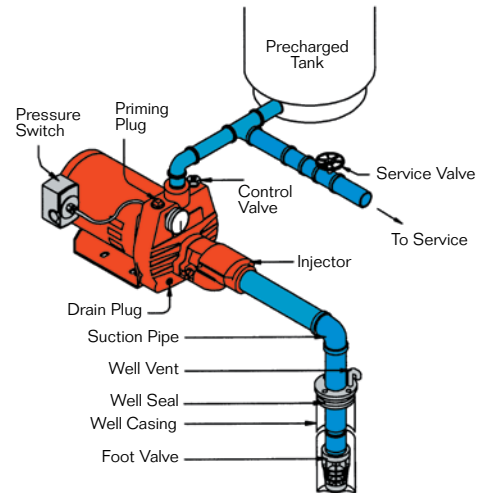
To complete installation, you will require the following:

- Jet pump
- Pressure tank
- Pump to tank fittings
- 1 1/4" suction piping
- Foot valve or check valve

## CONVERTIBLE JET PUMP

### Shallow Well Configuration – Down to 25 Feet

Suitable for applications where the pumping water level does not exceed 25 feet. Requires a single 1 1/4" suction pipe. May be used in wells 2 1/2" or larger in diameter.



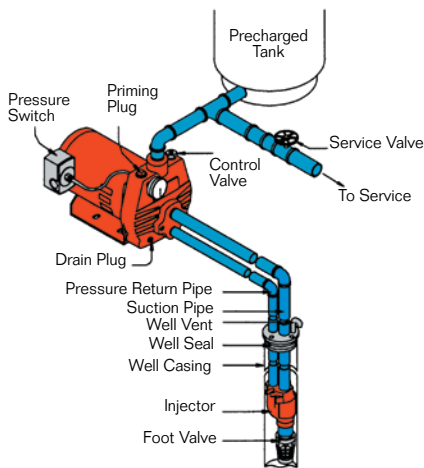
To complete installation, you will require the following:

- Jet pump which includes: pressure switch, flow control valve and injector (installed on the pump)
- Pressure tank
- Pump to tank fittings
- 1 1/4" suction piping
- Foot valve or check valve (for driven well)

## CONVERTIBLE JET PUMP

### Deep Well Configuration – Down to 90 Feet

Suitable for applications where the pumping water level does not exceed 90 feet. Requires a double suction pipe. May be used in wells 4" or larger in diameter.



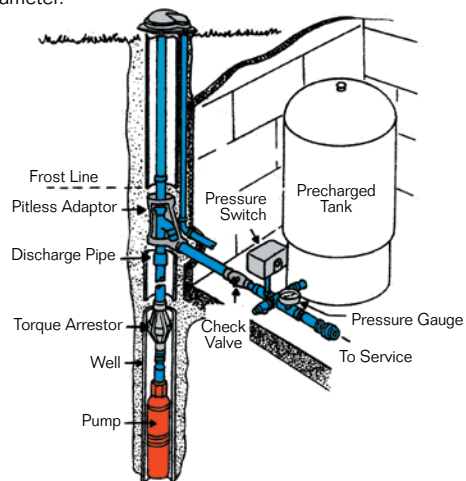
To complete installation, you will require the following:

- Jet pump which includes: pressure switch, flow control valve and injector (installed on the pump)
- Pressure tank
- Pump to tank fittings
- 1 1/4" suction piping and 1" pressure return piping
- Foot valve

## DEEP WELL SUBMERSIBLE PUMP

### Down to 250 Feet

Suitable for applications where the pumping water level does not exceed 250 feet. Requires a double suction pipe. May be used in wells 4" or larger in diameter.



To complete installation, you will require the following:

- Submersible pump sub pac which includes pressure switch, pressure gauge, service tee, relief valve, sub cable and built-in check valve
- Pressure tank
- Torque arrestor
- Well seal or pitless adaptor
- 1" discharge piping