1-2-3 Easy Guide to Pump & Tank Selection

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.

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.

TANK CHART

NOTE: For depths greater than 250 feet, consult tech support.
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 1¼” 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
- 1¼” 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 1¼” suction pipe. May be used in wells 2½” 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
- 1¼” 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
- 1¼” suction piping
- Foot valve
- 1” pressure return piping

**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

HOTLINE 888.956.0000  www.RedLionProducts.com