

### PRODUCT OVERVIEW

These instructions apply to Type 2 installations, where no permanent surface tank is used and the system is primed using a temporary elevated priming tank or barrel. Note that not all fittings, valves, or Y fitting are included (these need to be sourced by the user). Type 2 connection is designed as an open loop system where the water produced from the well exits from the T/Y fitting.

A T fitting may also be used in cases where a Y fitting is not available however the Y fitting is preferred for best operation. The T/Y fitting MUST face up and be piped 3 feet from the outlet (ASSY D) of the wellhead. The piping from (ASSY D) to the T/Y Fitting (ASSY G) must be 1 1/2 inch, the T/Y Fitting should also be 1 1/2 inch. Piping diameter of 1/4 inch from the outlet of the T/Y (ASSY G) fitting to the pump inlet (ASSY B) is sufficient.

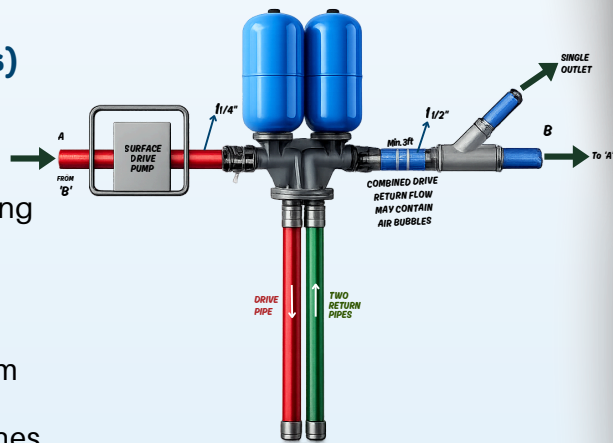
### System Description (Type 2 – Tankless)

- Surface pump (fuel, electric, or solar driven)
- FlexExtend submersible installed in the well
- Well head with pressure relief valve
- Angle T/Y fitting with valve (ASSY "G") for priming
- Surface pump inlet/suction valve (ASSY "B")
- Temporary elevated priming tank or barrel

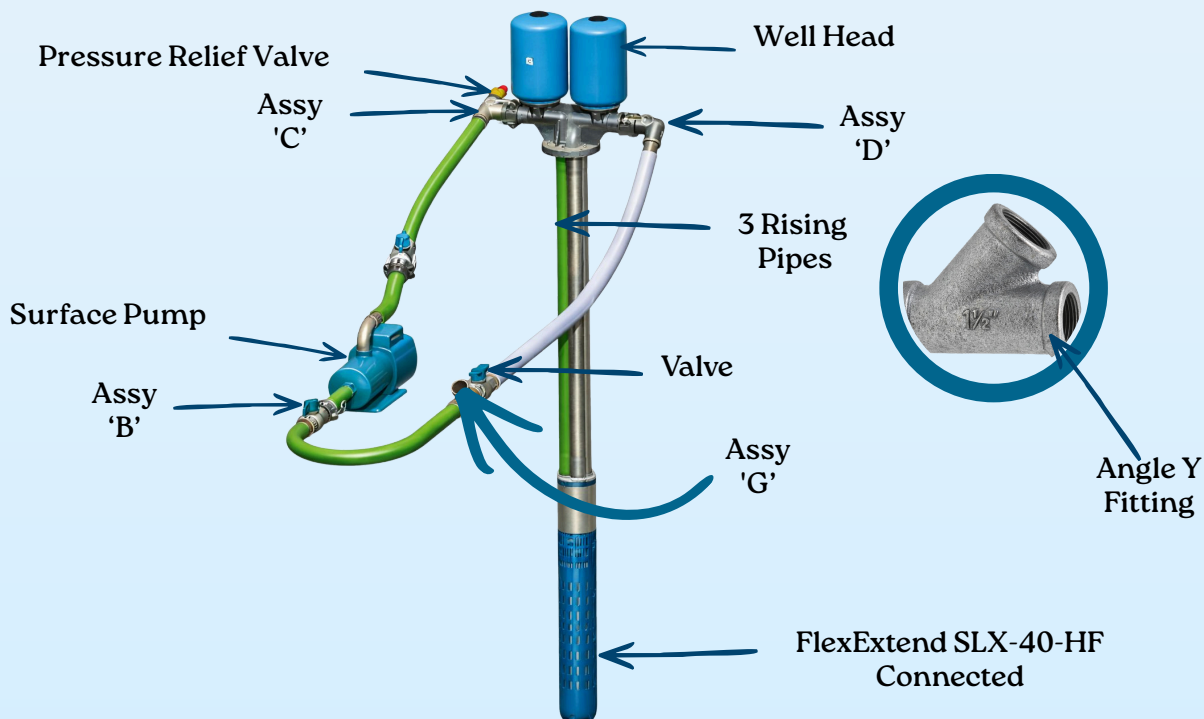
### Priming Requirements

- Temporary priming tank or barrel with minimum 150 US gallons
- Bottom of priming tank must be at least 12 inches (300 mm) above the highest point of the system
- Clean water only

**!** Important: Air trapped in the system will prevent circulation. Proper priming is essential.



Advanced Hydraulic Architecture. This schematic details the closed-loop, pressure-stabilized design with dedicated drive/return paths.



**Note:** The well head should always be located above the surface pump if possible. The system will still run fine if this is not possible, but displacing air through the surface pump during priming may be more difficult, requiring the camlock (quick-release) fittings at ASSY C and the inlet to the well head (ASSY "D") to be opened in addition to the steps in the instructions below.

**Note:** If available, the angle T/Y-fitting outlet maybe connected to a standard mains water faucet instead for filling/priming the system.

## - Key System Components:

### Step 1 - Initial Valve Positions

- Ensure the following valves are closed:
- Valve at ASSY "B" (surface pump inlet / suction port)
- Valve at ASSY "G" (angle T/Y fitting near the well head)

### Step 2 - Connect Temporary Priming Tank

- Connect a hose from the temporary priming tank or barrel to the outlet point at the angle T/Y fitting (ASSY "G")
- Tank must contain at least 150 US gallons
- Tank bottom must be raised above the system
- Ensure hose connections are airtight

### Step 3 - Prepare Well Head Outlet

- Open the camlock (quick-release) fitting attached to the 1½" light-grey hose at the Well Head outlet (ASSY "D").
- Keep the camlock at the level of the well head or higher

### Step 4 - Fill the Grey Hose

- Slowly open the valve at ASSY "G"
- Allow water from the priming tank to flow into the system
- Fill the light-grey hose completely
- Continue until water flows steadily out of the open camlock at ASSY "D"

### Step 5 - Trap Water in the Grey Hose

- Close the valve at ASSY "G", leaving the camlock open.
- Take care that water remains in the grey hose and no air is drawn back into the system

### Step 6 - Manage Discharge

If required:

- Attach a hose to the open camlock at the well head, or
- Place a bucket beneath the outlet
- This prevents water from freely spilling onto the ground.

### Step 7 - Fill the Entire Circuit

- Slowly open the valve at ASSY "B" (surface pump inlet).
- Allow water to flow through the surface pump
- Water will move down and up the vertical pipes
- Air will be displaced through the open camlock

Continue until water flows continuously from the camlock with no air bubbles. This may take several minutes.

### Step 8 - Close the Well Head Outlet

Close the camlock (ASSY "D"), ensuring no air enters the system while closing.

### Step 9 - Bleed the Surface Pump

If the surface pump has a priming screw:

- Open it slightly to allow trapped air to escape
- Close once water appears

### Step 10 - Bleed the Pressure Relief Valve

At the well head:

- Twist the red cap on the pressure relief valve to force it open
- Allow air to escape
- Repeat several times if necessary, pausing between attempts to allow air bubbles to rise

### Step 11 - Re-open ASSY "G"

Slowly open the valve at ASSY "G".

### Step 12 - Start the Surface Pump

Start the surface pump slowly.

- Allow it to run for several minutes
- The system may operate erratically at first
- Air will continue to be expelled back into the priming tank or through the outlet

This is normal during initial priming.

### Step 13 - Confirm Successful Priming

Successful priming is indicated by:

- Water level rising in the priming tank, or
- Steady water flow from the system outlet

Allow the system to run for several minutes, then switch off the surface pump. The system is now fully primed.

### Step 14 - Repeat if Necessary

If water delivery does not begin:

- Repeat Steps 4 through 13

The most common cause is air trapped in the system or surface pump.

**Note:** For instructions on how to install the FlexExtend and connect it to the wellhead, refer the the standard installation guide provided with the FlexExtend kit.