

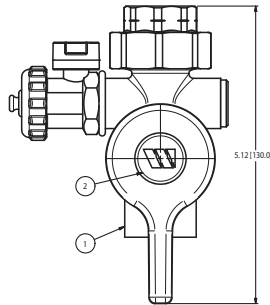
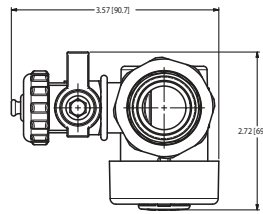
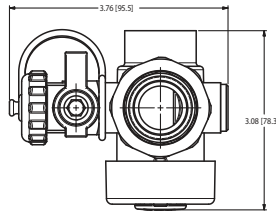
## INTRODUCTION

### **WARNING**

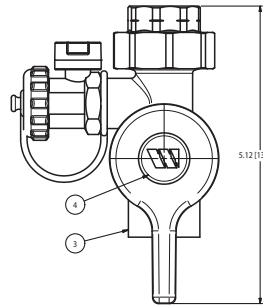
Please follow these installation instructions carefully in order to avoid a safety hazard and/or injury.

- Before connecting any components, be sure to read all of the tankless water heater manufacturer's installation instructions. Failure to follow instructions below can result in serious injury, death, and/or property damage.

## VALVE DIMENSIONS



**HOT VALVE  
(RED handle)**



**COLD AND RECIRCULATION VALVE  
(BLUE handle)**

## Dimensions — Weights

SIZE	VALVE TYPE	CONNECTIONS	DIMENSIONS						WEIGHT			
			Height		hgt. body		Width		Depth		lbs.	kg.
in.			in.	mm	in.	mm	in.	mm	in.	mm		
3/4"	HOT	Union x F-NPT	5.12	130	4.00	102	3.08	78	3.76	96	1.25	0.57
3/4"	RECIRC	Union x F-NPT	5.12	130	4.00	102	5.37	136	3.76	96	1.65	0.75
3/4"	COLD	Union x F-NPT	5.12	130	4.00	102	2.72	69	3.57	91	1.1	0.50

### Navien Plumb Easy Valve Set (V2) Includes:

- One (1) Hot Water Service Valve with Red Handle Plug
- One (1) Cold Water Service Valve with Blue Handle Plug
- One (1) Recirculation Water Service Valve with Orange Handle Plug (3-Valve Kits Only)
- One (1) Pressure Relief Valve certified to ANSI Z21.22

### ATTENTION

After installation, please leave this Instruction Sheet near the water heater or boiler for future reference whenever maintenance or service is required.

### IMPORTANT

Check with governing authorities for local installation codes and requirements.

## PREPARE FOR INSTALLATION

- Identify all components and orientations before starting the installation.
- Before attaching any components to the tankless water heater, attach the PRESSURE RELIEF VALVE to the HOT WATER SERVICE VALVE.
  - Apply thread sealant to the exposed threads of the pressure relief valve.
  - Thread the pressure relief valve into the 3/4" port on the side of the hot water valve and hand tighten. Using a wrench, tighten the pressure relief valve until the discharge on the pressure relief valve is positioned downward on the isolation valve, as shown in Figure 1.

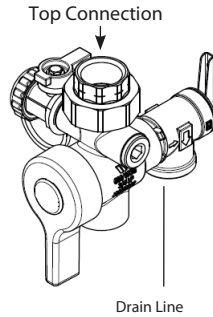


Figure 1: Hot Water Service Valve  
(with Pressure Relief Valve)

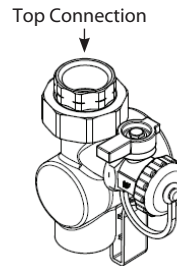


Figure 2: Cold Water Service Valve

## INSTALLATION

- Install the COLD WATER SERVICE VALVE (Figure 2) onto the cold water inlet of the tankless water heater.
  - Locate the cold water threaded inlet on the tankless water heater and apply thread sealant to the threads.
  - Slightly loosen the union nut on the top of the cold water valve so that the union tailpiece rotates freely.
  - Holding the cold water valve beneath the cold water inlet, thread the union tailpiece onto the inlet and hand tighten. Using a wrench, tighten the union tailpiece. Next, position the cold water valve with (1) the purge port pointing in an accessible location and (2) adequate clearance for operation of the main valve handle, then hand tighten the union nut.
  - Tighten the union nut with a wrench, making sure that the valve does not rotate out of position.
- Install the HOT WATER SERVICE VALVE onto the hot water outlet of the tankless water heater.
  - **⚠ WARNING:** Do NOT install a shutoff valve between the tankless water heater and pressure relief valve.
  - Locate the hot water threaded outlet on the tankless water heater and apply thread sealant to the threads.
  - Repeat the steps used to complete the installation of the COLD WATER SERVICE VALVE.
- Connect the water supply line and pressure relief drain line.
  - Attach the HOT water supply line to the 3/4" threaded connection on the HOT WATER VALVE using thread sealant on the threads of the water fitting.
  - Attach the COLD water supply line to the 3/4" threaded connection on the COLD WATER VALVE using thread sealant on the threads of the water fitting.
  - Attach the drain line to the pressure relief valve and run the piping per local code requirements.
- Start-up & Normal Operation
  - Before turning on the supply water to the heater, make sure that all valve handles on both the hot & cold valves are closed (perpendicular to the main valve bodies) and ensure that the purge port valve caps are tightened down. **NOTE:** THE VALVE CAP WILL NOT STOP EXCESSIVE WATER FLOW.
  - For water heater start-up, refer to the Navien water heater owners' manual.
  - During normal operation, the main water valves are open when the main valve handle is parallel with the main valve body and closed when the main valve handle is perpendicular to the main valve body.
  - For the purge port valves, the purge port valve is open when the slot is parallel with the purge port valve body and closed when the slot is perpendicular to the purge port valve.

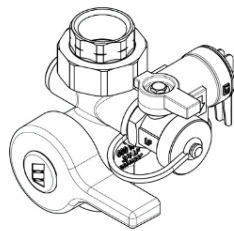
## INSPECTION AND MAINTENANCE

- See tag attached to the pressure relief valve for details.

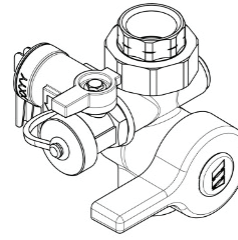
**⚠ WARNING:** Hot water may be present in the system. Use extreme caution when servicing the water heater. Hot water can cause personal injury, death, and/or property damage.

## HOT WATER VALVE FIELD CONFIGURATION

- The Navien Plumb Easy Valve V2 hot water valve assembly can be field configured to better fit certain installations. The hot water valve is factory configured to position the main valve on the right with the drain valve facing forward as shown in Illustration 1. The valve can be field configured to position the relief valve on the left, the main valve handle on the right with the drain port facing forward as shown in Illustration 2.
- Field configure the hot water valve as follows:
  - With the valve in the closed position, note the valve handle is facing in the same direction as the drain port.
  - Remove the red handle retainer plug by prying it out with a small screwdriver, then remove the handle by pulling straight off. With the handle detached, remove the LEFT stop plate from the rotor stub.
  - Install the RIGHT stop plate on the keyed rotor stub (it can only be installed in the correct position), then reinstall the main valve handle facing the opposite direction away from the drain port. Once the handle is into place, reinstall the red handle retainer plug.
  - Remove the drain valve assembly and the secondary drain port plug from the valve body.
  - Re-install the drain valve assembly in the opposite port so it is facing the same direction as the closed valve handle. Re-install the plug in the unused drain port.



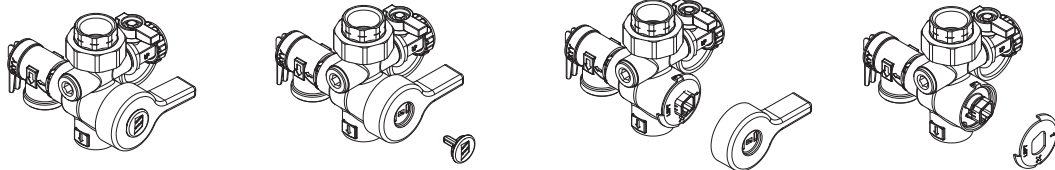
**Illustration 1 -  
Factory Configuration**



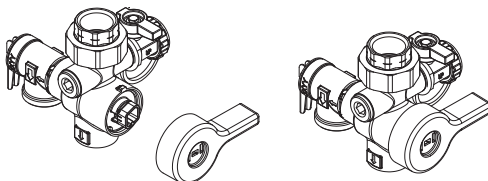
**Illustration 2 -  
Field Configured**

## CASCADE (MODULAR) INSTALLATIONS

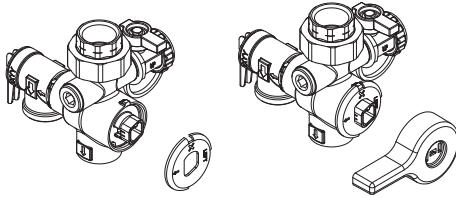
- When used for cascade (multi-unit) installations, the hot water valve assembly can be field configured to provide hydraulic isolation of the water heaters that require service or repair while other units remain in operation. To provide hydraulic isolation from a pressurized hot water supply main, the pressure-activated seal must be rotated 180° from the bottom port to the upper port as follows:
  - With the valve in the closed position (handle facing forwards), remove the handle plug, handle (red), and stop plate.



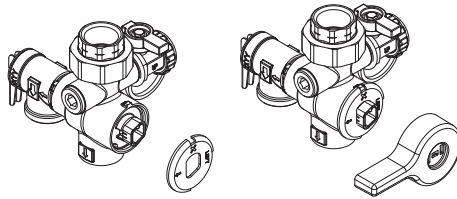
- Place the handle back on the rotor hub and rotate 180° so the handle is facing to the rear .



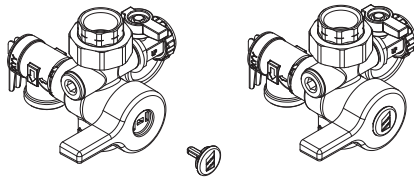
- Remove the handle and re-install the stop plate aligning the notch (marked with an X) with the nub on the body.



- Remove the drain valve assembly and the secondary drain port plug from the valve body.



- Re-install the handle (facing to the rear) and handle plug. The valve will now provide hydraulic isolation from a pressurized hot water supply main and be locked closed to prevent operation of the water heater.



- To unlock the hydraulic isolation and place the water heater back into operation, apply the following procedures in reverse.

## LIMITED WARRANTY

- Navien, Inc. warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, Navien will, at its option, replace or recondition the product without charge.