

Series FRP

Reduced Pressure Zone Assemblies
(2 1/2", 3", 4", 6", 8" & 10")



- **Installation Instructions**
- **Service and Maintenance**
- **Testing Procedure**

Reduced Pressure Zone Assemblies are to protect potable water supply from hazardous materials during a backflow situation.

Installation Instructions:

1. Installation and selection of the proper device should be performed by qualified, licensed personnel.
2. Consult all local codes for proper installation requirements and restrictions.
3. The device must have adequate clearance for accessibility to perform maintenance and testing.
4. The device must be located where discharge from the relief valve is acceptable.
NOTE: The air gap is designed to handle periodic discharge. A proper floor drain may need to be installed to handle full discharge during certain backflow conditions.
5. Prior to installation, the lines must be thoroughly flushed to remove any debris and foreign material. Debris in the lines can cause check valves to become fouled and require disassembly and cleaning of the device.
6. The device must be protected from freezing conditions and excessive pressure increases. Excessive line pressure can be caused by thermal expansion and or water hammer. Shock arrestors, check valves and/or pressure relief valves should be installed down stream of the device to protect excessive pressure.
7. Flange Bolt Torque; 2-1/2" & 3" is 70 ft-lbs, 4" is 75 ft-lbs, 6" & 8" is 130 ft-lbs, & 10" is 180 ft-lbs.

Placing in Service:

Placing the unit in operation after proper installation is complete.

1. Start with the inlet and outlet shut off valves closed.
2. Slowly open the inlet shut off valve to pressurize the backflow preventer device.
3. Vent trapped air within the device by bleeding #2, #3 and #4 test cocks.
4. Slowly open outlet shut off valve.
5. Test the device after it is properly installed. If device fails the test, check and clean all the rubber and seats from debris. Reinstall and place unit back in service, retest the device.



Service and Maintenance:

Check Valve Removal

1. Close the inlet and outlet shut off valves. Open No. 2, 3 and 4 test cocks to reduce remaining pressure in the assembly. Test cock No. 1 will remain closed. Keep test cocks open until reassembly.
2. Remove cover by removing coupling on the lid.
3. Remove 1st check valve by compressing and pulling out the check valve retainer. Insert a screwdriver into the tabs on the front of the check valve and pull check valve in the direction of flow until it is free from the body then lift out.
4. To remove 2nd check valve, compress the retainer spring and remove the spring half of the retainer. Remove the retainer half remaining. Remove the retainer spacer. Grasp check valve from the spring and pull in the opposite direction of flow until check valve is free from the body then lift out.

Relief Valve Removal

1. Close the inlet and outlet shut off valves. Open No. 2, 3 and 4 test cocks to reduce remaining pressure in the assembly. Test cock No. 1 will remain closed. Keep test cocks open until reassembly.
2. Remove pressure line from the Relief Valve.
3. Cover has slight spring pressure. Firmly hold cover and remove the Cover Bolts and Cover. The Relief Valve Assembly will pull out from the body.

Maintenance

1. Rinse all parts thoroughly with water after disassembly.
2. Carefully inspect rubber seals, seats and o-rings for damage and debris.
3. Apply Dow Corning 111 Valve Lubricant & Seal to the O-Rings before reinstallation.
4. Refer to BEECO FRV4 Assembly for FRV installation guidance.
5. Test the device after reassembly to ensure proper operation.

Testing Procedure:

Testing should be performed by qualified, licensed personnel. Testing procedure should be performed per local codes and guidelines.

LIMITED WARRANTY: Beeco warrants each product against defects in material and workmanship for a period of one year from the date of original shipment. In the event of such defects within the warranty period, Beeco will, at its option, replace or recondition the product without charge. This shall constitute the exclusive remedy for breach of warranty, and Beeco shall not be responsible for any incidental or consequential damages, including without limitation, damages of other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemicals, or any other circumstances over which Beeco has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product.

