Series FDC

Double Check Backflow Preventer (1/2", 3/4", 1", 1 1/4", 1 1/2" & 2")



- Installation Instructions
- Service and Maintenance
- Testing Procedure

Double check backflow preventers are for use on potable water lines where a health hazard does not exist in the event of 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. 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.
- 5. 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.
- 6. Vertical assemblies can be installed when the inlet and outlet piping are flowing upward.

Placing in Service:

Placing the unit in operation after proper installation is complete.

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



Service and Maintenance:

Check Valve Removal

- Close the inlet and outlet ball valves. Open No. 2, 3 and 4 test cocks to reduce remaining 1. pressure in the assembly. Test cock No. 1 will remain closed. Keep test cocks open until reassembly.
- 2. Remove cover by unthreading with appropriates wrench.
- Remove the check valve spacer by pulling up from opening. 3.
- Remove the inlet check valve assembly by pulling it in the direction of flow until free from 4. the body and then lift out.
- Remove the outlet check valve assembly by grasping the flattened nut on the end of the 5. check assembly with pliers. Then pull in the opposite direction of flow until it is free from the body and lift out by hand.

Maintenance

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

Testing Procedure:

Open the inlet ball valve and close the outlet ball valve. Flush all test cocks prior to testing.

Test functioning of first check assembly.

Connect the high side hose of gauge to the 2^{nd} test cock. Connect the low side hose of the gauge to the 3^{rd} test cock. Open the 2^{nd} and 3^{rd} test cocks. Bleed the high and low side of the 1. test gauge. If pressure differential reading is above 1 psi, then the check is considered good. Close test cocks and remove hoses.

Test functioning of second check assembly.

Connect the high side hose of gauge to the 3^{rd} test cock. Connect the low side hose of the gauge to the 4^{th} test cock. Open the 3^{rd} and 4^{th} test cocks. Bleed the high and low side of the 1. test gauge. If pressure differential reading is above 1 psi, then the check is considered good. Close test cocks and remove hoses.

The test is complete and the device is ready for service.

CALIFORNIA PROPOSITION 65 WARNING

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

(Installer: California law requires that this warning be given to the consumer)

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, misupplication or improper installation of the product.

