

Max Pressure – 175 PSI (12 BAR)

Max Temperature - 140°F (60°C)



Basic Installation Instructions

CAUTION: Installation of Backflow Preventers must be performed by qualified, licensed personnel. Faulty installation could result in an improperly functioning device.

NOTE: CHECK WITH GOVERNING AUTHORITIES FOR LOCAL INSTALLATION REQUIREMENTS.

The installer should be sure the proper device has been selected for the particular installation.

The Flomatic Model SDC Single Detector Check Valves are for use on potable water lines where a health hazard would not exist in the event of a backflow situation.

Proper performance is dependent upon following these installation instructions and prevailing governmental and industry standards and codes. Failure to do so, according to Flomatic Corporations' Limited Warranty "releases Danfoss Flomatic of any liability that it might otherwise have with respect to that device". Such failure could also result in an improperly functioning device.

Damage to the device could result wherever water hammer and/or water thermal expansion could create excessive line pressure. Where this could occur, shock arrestors and/or pressure relief valves should be installed downstream of the device.

If installation is in a pit or vault, the SDC valve must never be submerged in water, this could cause a cross-connection. Make sure that the pit or vault always remains dry by providing ample drainage; consult local codes.

1. Before installing a Model SDC Single Detector Check Valve, flush the lines thoroughly to remove all debris, chips and other foreign matter. If required a strainer should be placed upstream of the Single Detector Check Valve. **CAUTION: Do not use a strainer in seldom used emergency water lines such as fire lines.**

2. Provide adequate space around the installed unit so that the valve will be accessible for testing and servicing.

3. Install the SDC valve at least 12" above the surrounding floor level.

4. Always consult local codes for installation methods, approvals and guidelines.

Outdoor Installation

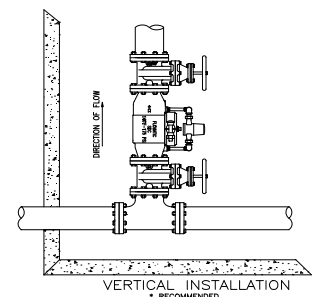
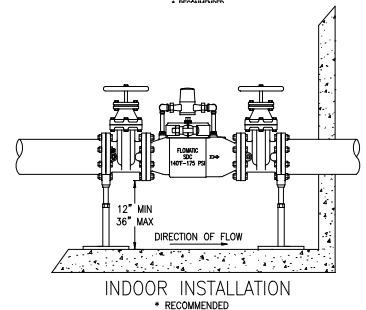
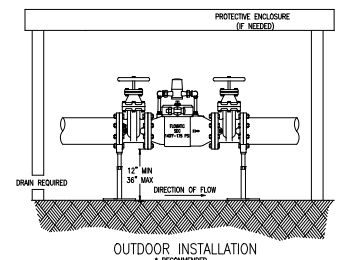
Model SDC Single Detector Check Valve may be installed outdoors only if the device is protected against any freezing conditions. Exposure to freezing conditions will result in improper function or damage to the device. The installation location must be kept above 32°F (6°C). All the basic installation instructions apply.

Indoor Installations

Indoor installation is preferred in areas that are subject to freezing conditions. All the basic installation instructions apply to such installations.

Vertical Installations

Vertical installation of Single Detector Valves is acceptable in applications where inlet and outlet piping are flowing vertically UPWARDS. All the basic installation instructions apply to such installations.



Placing the Device in Service

After the installation of a Model SDC unit has been completed, place the unit in service as follows:

1. Start with both shut-off valves closed. Slowly open the inlet shut-off valve until the SDC Single Detector Check Valve is completely pressurized.
2. Slowly open the downstream shut-off valve. The Model SDC Single Detector Check Valve is now in service.

NOTE: Annual inspection, testing & cleaning of valves / system is required. This will help to insure maximum life and proper function.

MAINTENANCE INSTRUCTIONS

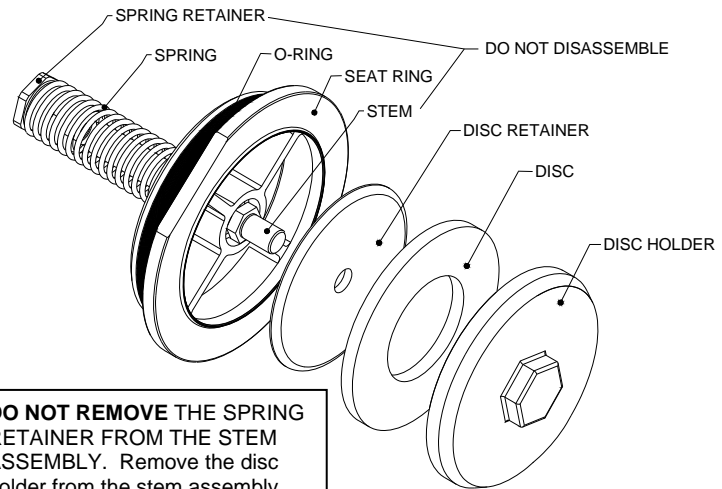
The Flomatic Model SDC Single Detector Check Valve must be inspected and maintained by licensed personnel at least once a year or more frequently as specified by local codes. Replace any worn or damaged parts as needed with only Flomatic parts. Backflow prevention valves should be thoroughly flushed after backflow conditions occur to prevent any type of corrosive deterioration to its components. Failure to do so could result in malfunction of the device.

1. General

- A. Clean all parts thoroughly with water after disassembly.
- B. Carefully inspect silicone discs and o-rings for damage.
- C. Ensure proper operation after reassembly.

2. Servicing Check Valves

- A. Close inlet & outlet shut-off valves
- B. Remove the cover nuts/bolts & gasket from the grooved coupling around the access cover.
- C. Grasp on to the exposed ends of the check valve retainer, which secures the check and squeeze ends together to remove from groove.
- D. Remove the check valve assembly. Separate the disc holder from the assembly to expose the seat ring.
- E. Inspect check valve seat ring, disc and o-ring for debris and damage. If the reverse side of the disc is unused, the disc can be inverted and used TEMPORARILY until a new disc is obtained.
- F. Inspect the valve cavity and seat areas. Flush with water to remove debris.
- G. Lubricate the o-ring and reinstall the check in the body. Squeeze ends of retainer together and insert into groove.
- H. Lubricate the gasket lips and gasket outside surface of the grooved coupling with FDA approved lubricant. Make sure the gasket is centered between the groove and does not become pinched while installing the coupling.
- I. Place the valve back in service.



NOTE: Check valves can only be installed in one configuration, they are not reversible.

TROUBLESHOOTING:		
Problem	Possible Causes	Corrective Action
1. Leaking Check Valves	1. Debris on seat or seat ring 2. Damaged seat area 3. Damaged seat o-ring	1. Clean seat area 2. Replace check assembly 3. Replace seat o-ring
2. Low or No Flow	1. Device installed backwards 2. Gate valve not fully open 3. Low supply pressure	1. Verify flow direction arrow 2. Turn handles counterclockwise 3. Attach pressure gage to verify pressure

3 Year Limited Warranty: Flomatic valves are guaranteed against defects of materials or workmanship when used for the services recommended. If in any recommended service, a defect develops due to material or workmanship, and the device is returned, freight prepaid, to Flomatic Corporation within 36 months from the date of purchase, it will be repaired or replaced free of charge. Flomatic Corporations' liability shall be limited to our agreement to repair or replace the valve only.