# *SILENT CHECK VALVES*

## INSTALLATION & MAINTENANCE INSTRUCTIONS

### General:

Stayflow wafer style and globe style center guided check valves are spring loaded single disc valves used to prevent backflow, while also minimizing the effects of water hammer due to the reversal of fluid flow operating smoothly and silently.

### Application:

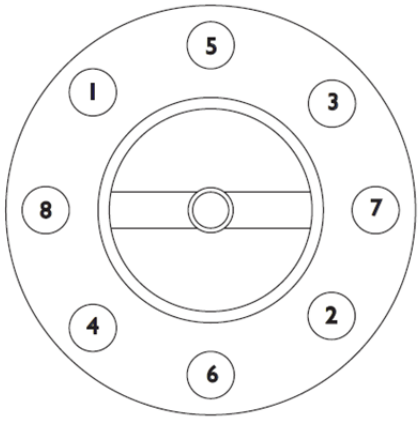
1. The valve can be installed either horizontally or vertically, with the flow arrow pointing in the direction of flow when the system is in operation. Consult factory if installing in vertical down flow applications.
2. Damage to the valve or internal leakage may result if pipe flanges other than those with standard flat faces conforming to ANSI B16.5 are used. **The mating flange inside diameter and gasket must overlap the valve seat to provide proper seat retention.** See “Maximum Allowable Inside Diameter of Flange” table below.
3. Center guided spring loaded check valves are designed for fluid applications. They are not designed for use in applications that include particulate matter or suspended solids.
4. Check clearances when installing on a butterfly valve. The Butterfly Valve must be installed on the discharging side only. The wafer style valves are not compatible with Butterfly Valves.
5. Do **NOT** mount the intake side of the check valve on any type of elastomeric seat or gasket.

### Installation:

1. Inspect valve for shipping damage, insure all parts are intact.
2. **The mating flange inside diameter and gasket must overlap the valve seat to provide proper seat retention.**
3. 1/16” thick full face gasket is recommended, centering the gasket is important to prevent internal valve leakage.
4. Bolt diameter to be in accordance with ANSI B16.5, Table 7 for 150 lb. Flanges and Table 8 for 300 lb. Flanges
5. Do not lift valve by the trim
6. Flow arrow must point in the direction of flow when system is operating.
7. The valve and adjacent piping must be supported and aligned to prevent stress from being transferred to the valve's flanges.
8. The torqueing of the flange bolts should be done in several graduated steps, using the number sequence shown in the figure below. This even loading of the flange bolts will eliminate concentrated stresses which could fracture the valve's flanges

Note: The mating companion flange ID must overlap the valve seat. This is required to provide proper seat retention.

| MAXIMUM ALLOWABLE ID OF FLANGE | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Valve Size** | 2.5 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 |
| **Flange ID (in)** | 2.94 | 3.57 | 4.57 | 5.66 | 6.72 | 8.72 | 10.9 | 12.9 | 14.1 | 16.2 | 18.2 | 20.2 | 24.3 |




**Bolting Pattern**

**Testing:**

Valve may be one-time pressure tested to 1-1/2 times the product's maximum operating pressure. Do not exceed maximum pressure or temperature during operation.

**Precautions:**

Do NOT inspect the seat area of the valve by removing the piping from the inlet side of the valve when back pressure is present. This will result in the seat and trim of the valve being damaged.

**Storage:**

Store valves with flow arrows pointing upwards.

**Maintenance:**

Silent check valves have no serviceable parts and do not require maintenance. Stayflow recommends periodic inspection.