



## Metraflex Foot Valve - Silent Check Valve

### OPERATION, INSTALLATION AND MAINTENANCE INSTRUCTIONS

**General:** Metraflex Foot Valves are center guided 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. The Metraflex Foot Valve features a stainless steel screen to prevent large debris from being drawn into the intake of your pump. It has an elastomer seal under the disc to form a bubble tight seal so water will not drain from intake pipe.

#### **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 Metraflex If installing in vertical down flow applications.
2. 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.
3. Check clearances when installing on a butterfly valve. The Butterfly Valve must be installed on the discharging side only.

#### **Installation:**

1. Inspect valve for shipping damage, insure all parts are intact.
2. 1/16" thick full face gasket is recommended, centering the gasket is important to prevent internal valve leakage.
3. Bolt diameter to be in accordance with ANSI B16.5, Table 7 for 150 lb. Flanges and Table 8 for 300 lb. Flanges
4. Do not lift valve by the trim
5. Flow arrow must point in the direction of flow when system is operating.
6. The torqueing of the flange bolts should be done in several graduated steps, using the number sequence shown in Figure 1. This even loading of the flange bolts will eliminate concentrated stresses which could fracture the valve's flanges
7. Install valve so the inlet is completely submerged under water. Deeper is better to prevent any air from being sucked into the system.

#### **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.

#### **Storage:**

Store valves with flow arrows pointing upwards.

#### **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.

