

# HVAC Lugged Butterfly Valve

## Non-Potable Water

### INSTALLATION NOTES

#### Location

The valve should not be placed too close to other valves, elbows, etc. as its performance may be affected. It is recommended that the valve have a minimum of six pipe diameters upstream and four pipe diameters downstream between it and other valves, elbows, etc. in the piping system.

#### Gaskets

When mated to flat faced flanges, Dura butterfly valves do not require a gasket. If the mating flange has a raised face, a gasket may be required to ensure adequate sealing and to prevent the flange from damaging the normal rubber seal. Ensure all mating surfaces are clean and smooth before installation.

#### Welded Flanges

Wait for pipe and flanges to cool before installing the valve. Never complete the welding (after tacking) with the valve between flanges as heat transfer will cause severe seat damage.

#### Maintenance

It is recommended that bolt tightness is checked one week after installation. For systems with significant temperature changes, the bolt tightness should be regularly checked.

### INSTALLATION INSTRUCTIONS

**Step 1:** Dura butterfly valves are bi-directional and can be installed in a vertical or horizontal position. Check that the existing pipe sizes match the inlet and outlet sizes of the unit being installed. If pipeline strain is a concern with larger butterfly valves and accessories, additional support may be necessary.

**Step 2:** Special flange gaskets are not required because the extruded portion of the seat functions as a gasket.

**Step 3:** Make sure the butterfly valve disc is within the seat (approx. 5-10° open)

**Step 4:** Align the pipework and spread the flanges enough to allow the valve body to be easily inserted between the flanges without contacting the pipe flanges. Place the butterfly valve into position. The bolt holes on the lugged valves should be aligned with the flange bolting.

**NOTE:** The valve liner forms part of the flange sealing mechanism, as such for end of line applications we recommend the installation of either a blank flange or annulus style flange to ensure the valve liner is adequately supported after installation.

**Step 5:** Tapped lugged valves are installed between the flanges with small cap screws on the inlet and the outlet of the valve.

**Step 6:** Install lubricated flange bolts and hand tighten.

**Step 7:** Open valve slowly to ensure the disc does not make contact with the piping or the flanges. Close the valve slowly.

**Step 8:** Fully open valve and tighten flange bolts as per below directions.

**Step 9:** Repeat a full close to full open rotation of the disc to ensure proper clearances.

### FLANGE BOLTING SEQUENCE

Ensure that bolts are lubricated before assembly and tightened in a cross pattern (both 1, 2, 3, then 4 as shown at right) sequence to achieve an even seal pressure across the flange.

