



Installation, Operating & Maintenance Instructions

Butterfly Valves

Installation Considerations:

- 1. Piping and Flange Compatibility** - The Colton CIWB and CILB series butterfly valves are designed for installation between all types of ANSI 125 or 150 lb. flanges. The disc will clear the adjacent inside diameter of most types of piping, including Schedule 40, lined pipe, heavy wall, etc. If there is any doubt, compare our published disc chordal dimensions (top of page 3 of product bulletin BV100) with your minimum pipe or tube I.D.
- 2. Valve Location** - Butterfly valves should be installed a minimum of 6 pipe diameters away from other line elements such as elbows, pumps, valves, etc. If this is not practical for your installation, it is important to leave as much distance as necessary to ensure that the fully open disc does not interfere with the adjacent equipment.
- 3. Valve Orientation** - We recommend that our butterfly valves be installed with the stem in the upright position for most applications. *However*, we request that the stem be in the horizontal position with the bottom of the disc opening in the downstream direction for the following applications: slurries, sludge, mine tailing, pulp stock, dry cement and any other media with sedimentary particles. *These valves should not be installed with the stem vertically downward.*

Installation Procedure:

1. Ensure that the pipe and flanges are clean. Foreign matter such as pipe scale, metal chips, welding slag, etc., can obstruct disc movement or damage the seat and/or the disc.
2. The Colton butterfly valve has a phenolic backed seat. Therefore, *no gaskets are recommended* as this seat serves the function of a gasket.
3. Align the piping and spread the pipe flanges a sufficient distance apart to permit the valve body to be easily dropped into place without contacting the flange face.
4. Position the valve disc 10 degrees open (approximately 1/4" to 3/8" from the face of the seat but not proud of the body).
5. Taking care not to damage the seat faces, insert the valve between the flanges. Use the locating holes in the body as lifting eyes or lift your valve into position with a sling around the neck of the valve. *Do not use the valve operator or lever for lifting the valve.*
6. Align the valve with the flange bolt holes and span the wafer style (CIWB series) with all flange bolts or, in the case of a lug style (CILB series), loosely thread flange bolts into the threaded body. *Do not tighten the bolts yet.*
7. Carefully open the disc to the full open position, making sure that the disc does not hit the adjacent pipe wall. Now, systematically loosen and remove the jack bolts or other flange spreaders and hand tighten the flange bolts. Slowly close the valve disc to ensure clearance from the flange I.D. Return the disc to a full open position and tighten all flange bolts. Finally, repeat a full open to close cycle to ensure obstruction free movement.

Note: Do not weld flanges while your butterfly valve is attached as conducted heat can cause severe seat damage.

Maintenance:

Design features minimize wear and maintenance requirements. No lubrication is required. Prior to valve removal, ensure that the disc is near the closed position .