MILWAUKEE VALVE

LUG BUTTERFLY VALVE
INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

INSTALLATION

1) Thoroughly clean and prepare the piping system before valve installation.
2) Inspect the valve port and seating surfaces for cleanliness just prior to installation.
3) Support the valve to prevent unnecessary stresses induced by connecting pipe.
4) Be sure the rating of the valve is compatible with the intended service conditions.
5) Operate the valve from the open to closed position.
6) Resilient seated butterfly valves are designed for installation between Class 125 cast iron or Class 150 steel flanges. Installations between metallic flanges do not require gaskets. Installations between PVC flanges require a full-faced elastomer gasket (compatible with system/ media) that is 1/8" thick and has a durometer (hardness) of 70 +/- 5 Shore A at each flange connection. See the Technical Bulletin regarding this subject for more information.
7) Valve should be installed with the disc in the almost closed position. It is recommended that butterfly valves on horizontal pipelines have the stem in the vertical position.
8) Prior to tightening any flange bolts, the valve should be carefully cycled to the open position to check for possible disc interference. Interference may occur when the butterfly valve is installed on systems using pipe that has extra heavy wall thicknesses. Corrective action would include tapering the pipe ID, or the use of spool pieces.
9) Centralize valve in flanges, small valves may be supported by hand; larger valves may require strap and lifting device. (This is to ensure raised face flanges contact the valve properly, concentric and metal-to-metal all around except for 2-1/2" and smaller. For wafer valves, spacers over threaded rod on the bottom may be used to support/centralize the valve.)
10) Lug valves should be installed using the crossover method for tightening. This distributes the bolt loads evenly across the valve. **Do not over-tighten the bolts.** In dead end service (lug only) the side of the valve marked "INLET" should face the pressure side of the system. For safety, a downstream flange is recommended. Consult the catalog for bolt or cap screw length and diameter. EPDM & Buna Lined Valves 2" - 12" are suitable for Bi-Directional Dead End Service. Follow instructions shown above to insure proper installation.
11) For gear operated valves: The valve is normally shipped with the handwheel loose, the installing contractor or mechanic must take care to ensure the roll pin that holds the handwheel to the input shaft of the gear operator is installed completely, and is balanced on both sides of the handwheel. The fit of the pin in the handwheel and the shaft is controlled and should provide years of reliable service.
12) Verify the gear operator travel stops after installation. Adjust as necessary.

OPERATION

Manual butterfly valves can be operated by a lever handle or a gear operator. It is usually recommended that gear operators be used for valves 8" and larger. The lever handle gives an indication of disc position. Gear operators provide position indication with an indicator dial located on the top of the operator. Valves that are used infrequently should be cycled on a regular basis from open to close to prevent the build-up of material inside the valve.

INSPECTION & MAINTENANCE

Butterfly valves require no routine maintenance. Periodic cycling of the valve is highly recommended.

REPAIR PARTS

Under normal conditions, spare parts are not required. Consult factory for availability of repair parts.