



Butterfly valves should be connected to the piping system with appropriate couplings or flanges. Flow may be from either direction, and the valve may be positioned in any direction.

Butterfly valves have been designed with a slow close hand wheel operator, which effectively minimizes water hammer. These valves feature minimum flow restriction and pressure loss when in the fully open position.

## Installation

When the valves are received from the manufacturer, they should be handled carefully to avoid breakage and damage to the seating area. Before installation of the valve, clean piping, flange and coupling. When the valves close hard, it is usually due to debris lodged in the seating area. Often this may be corrected by backing off the hand wheel and closing again.

The valve should never be forced to seat by applying a wrench to the hand wheel as this may distort the valve components or score the sealing surface. Care must be taken to align wafer valves correctly so that the disc operation to the fully opened position will not be obstructed. The use of excessive force to open or close the valve violates all warranties whether express or implied..

The inlet and outlet pipe adjacent to the valve should be properly supported to prevent excessive stress on the valve body. The valve should not be used to force a pipeline into position as this may result in the distortion of the valve body.

## Care and maintenance

Butterfly valves require no regular maintenance , however it is advisable to inspect and verify proper operation of the unit annually or in accordance with the authorities having jurisdiction.

The inspection should include a visual check for leakage at the pipe connection and body to operator connection. Inspection and maintenance should be performed by a qualified inspection service.

## Switch installation

Butterfly valves are provided with internal supervisor position switches. The tamper switch operates by a cam connected to the valve stem. The switch will change position and close within two full turns of the hand wheel from the fully open position.

### SWITCH N°1

For connection to the supervisory switch

|                 |          |
|-----------------|----------|
| Normally open   | 1 Yellow |
| Normally closed | 1 Red    |
| Common          | 1 White  |
| Ground          | 1 Green  |

### SWITCH N°2

Auxiliary switch connected per authority

|                 |          |
|-----------------|----------|
| Normally open   | 1 Blue   |
| Normally closed | 1 Orange |
| Common          | 1 Black  |
| Ground          | 1 Green  |