# Butterfly Valves

## Design Care and Maintenance

### Design Requirements

The Fivalco grooved butterfly valve should be connected to the piping system with approved couplings or flange adapters. Flow may be from either direction, and the valve may be positioned in any direction.

Fivalco 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 manufacture 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 valve closes hard, it is usually due to debris lodged in the sealing 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.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 distortion of the valve body.

Conduit and electrical connections to the optional tamper switch must be in accordance with National Electrical Code(NFPA 72)and/or requirements of the local authority having jurisdiction.

### Care &Maintenance

Fivalco 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 authority having jurisdiction. The inspection should include a visual check for leakage at the valve pipe connection and body to operator connection.

Inspection and maintenance should be performed by a qualified inspection service.

### Switch Installation

Fivalco butterfly valves are provided with internal supervisory position switches.The tamper switch operates by a cam connected to the vallve stem.The switch will change position and close within two(2)full turns of the hand wheel from the fully open position.

**Switch#1:**

For connection to the supervisory circuit.
Normally closed :2 Yellow
Normally open :2 Red
Common :2 White

**Switch#2:**

Auxiliary switch connected per authority.
Normally closed :1Blue
Normally open :1Orange
Common :1 Black
Ground Lead :1Green