



Installation, Operation and Maintenance of Resilient Seat Butterfly Valve

Application

Resilient Seat Butterfly Valve are indicating type valves designed for use in fire protection systems where a visual indication is required as to whether the valve is open or closed. They are used, for example, as system, sectional, and pump water control valves. Wafer, Lug, and Grooved type connection are available.

For applications requiring supervision of the open position of the valve, the Gear Operators for the Butterfly Valves are provided with two sets of factory installed internal switches each having SPDT contacts. The supervisory switches transfer their electrical contacts when there is movement from the valve's normal open position during the first two revolutions of the handwheel.

Notice

Resilient Seat Butterfly Valve described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the National Fire Protection Association, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of these devices. The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Installation

Resilient Seat Butterfly Valve may be installed with flow in either direction and can be positioned either horizontally or vertically.

The valve may be installed with any pressure class or schedule of pipe or tubing no greater than schedule 40 that is listed or approved for fire protection service and installed in accordance with the manufacturer's instructions.

Bolts and studs for connection must meet the minimum strength requirements of ASTM A307 (Grade B), and the nuts must meet the minimum strength requirements of ASTM A563 (Grade A).

Prior to installation, close the valve. Spread the flanges or couplings apart to allow the valve to slip easily between the flanges. Make sure the pipe flange or couplings faces are clean of any foreign material such as scale, metal shavings, or welding slag. Do not apply lubricant to the seat faces as this may damage the seat material. Be sure to center the valve and do not damage the liner. Relax the separation of the flanges or couplings, install, and hand-tighten all bolts.

Slowly open the valve, checking for free movement of the disc. If valve opens freely, leave the valve in the open position, and using a cross draw sequence, tighten all bolts. Be certain to keep flange or couplings faces as parallel as possible during and after tightening bolts or studs. After final tightening, again check the valve for full opening and closing.

Conduit and electrical connections are to be made in accordance with the authority having jurisdiction and/or the National Electrical Code. The supervisory switch is intended for connection to the supervisory circuit of a fire alarm control panel in accordance with NFPA 72. The auxiliary switch is intended for the unsupervised connection to auxiliary equipment in accordance with NFPA 70, National Electric Code.



Stop Adjustment Procedure

The gear operator's OPEN and SHUT position have been factory set. The following procedure should be used if slight adjustments are needed.

1. Turn the Handwheel until the valve is fully closed.
2. Remove the two Lock Screws from the gear operator body.
3. Turn the Shut Stop Screw clockwise until snug.
4. Turn the Handwheel until the valve is fully open.
5. Turn the Open Stop Screw clockwise until snug.
6. Close the valve by turning the Handwheel until the valve is fully in the closed position. Ensure the disc has returned to the fully closed position and the disc is centered in the seat area. Readjust the Shut Stop Screw if necessary.
7. Replace the two Lock Screws into the gear operator body, locking the stops into position.

Care and Maintenance

Resilient Seat Butterfly Valve must be maintained and serviced in accordance with this section.

Before closing a fire protection system control valve for maintenance or inspection work on either the valve or fire protection system which it controls, per-mission to shut down the affected fire protection systems must be obtained from the proper authorities and all personnel who may be affected by this decision must be notified.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in accordance with the applicable standards of the National Fire Protection Association (e.g., NFPA 25), in addition to the standards of any authority having jurisdiction. Contact the installing contractor or product manufacturer with any questions. Any impairment must be immediately corrected.

It is recommended that automatic sprinkler systems be inspected, tested, and maintained by a qualified inspection service.