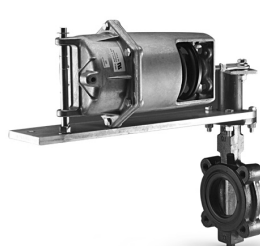
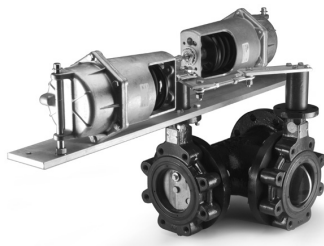


Two- and Three-Way Resilient Seat Valve Assemblies



Two-Way Butterfly Valve with pneumatic actuator.



Three-Way Butterfly Valve with pneumatic actuators tandem mounted.



Two-Way Butterfly Valve with electronic actuator.



Three-Way Butterfly Valve with electronic actuators tandem mounted.

Description

Available in two-way and three-way arrangements for two-position (On/Off), floating and modulating control, Resilient Seat Butterfly Valve Assemblies provide bubble-tight shutoff for the assemblies' full-rated pressure.

Features

- Molded-in resilient seat provides bubble-tight shutoff up to 150 psi
- Operating temperature up to 250°F (120°C)
- Lugged body is drilled and tapped for isolation and removal of downstream piping at full-rated pressure
- Round, polished disc and hub edge provides 360 degree concentric seating, minimum flow restriction, lower torques and longer seat life
- Upper and lower inboard bronze bearings ensure longer service life with low operating torques
- Thru-stem design provides high strength and positive disc control with standardized end connection for operator interchangeability
- Extended neck allows adequate clearance for flanges and insulation
- Bi-directional, self-adjusting stem seal is suitable for vacuum and pressure while preventing external contamination of the stem area
- Heavy-duty corrosion resistant top bushing, absorbs actuator side thrust
- Cast-in top plate is an integral part of the body and is standardized to allow direct mounting of actuators
- Each valve is factory tested to 110 percent of specified pressure rating
- Available in multiple configurations to match jobsite needs.

Applications

Butterfly Valve assemblies provide excellent flow control of low pressure steam, hot water, chilled water, condenser water, and thermal storage systems applications.

Specifications

| | |
|--|-------------------------------|
| Valve Size | 2 to 20" (51 to 508 mm) |
| Body Style | Butterfly |
| Assembly Type | 2-Way/3-Way |
| Materials | |
| Full Cut Disk 2 to 12" / Under Cut Disk 2 to 6": | |
| Body | Cast Iron |
| Disc | 304 Stainless Steel |
| Stem | 416 Stainless Steel |
| Seat | EPDM |
| Bearing | Bronze |
| Upper Stem Bushing | Polyester |
| Upper Stem Seal | NBR |
| Full Cut Disk 14 to 20" / Under Cut Disk 8 to 20": | |
| Body | Cast Iron |
| Disc | Aluminum Bronze |
| Stem | 316 or 18-8 Stainless Steel |
| Seat | EPDM |
| Bearing | Sintered Metal |
| Upper Stem Bushing | Polyester |
| Upper Stem Seal | NBR |
| Controlled Medium | Chilled Water, Hot Water |
| Temperatures | -40 to +250°F (-40 to +121°C) |
| Close-off Ratings | Refer to Selection Tables |

Part Number Configuration

A-248

Valves

| | | BV | 2W | 02 | F | S2 | L | O | X | X | X | X | Add accessories by simply replacing the X with the appropriate letter. |
|-------------------------------|--|----|----|----|---|----|---|---|---|---|---|---|--|
| Assembly Configuration | | | | | | | | | | | | | |
| 2W | 2-Way | | | | | | | | | | | | Manual Override |
| 3W | 3-Way | | | | | | | | | | | | M Manual Override (Non-STD) (Pneumatic Actuator Only) |
| Valve Size | | | | | | | | | | | | | X Not Used |
| 02 | 2-inch | | | | | | | | | | | | |
| 25 | 2.5-inch | | | | | | | | | | | | |
| 03 | 3-inch | | | | | | | | | | | | |
| | to | | | | | | | | | | | | Heater |
| 20 | 20-inch | | | | | | | | | | | | H Heater (Must Be Used with EM and EP, Optional with E2) |
| Disc Type | | | | | | | | | | | | | X Not Used |
| F | Full Cut Disc — 150 psi Shutoff | | | | | | | | | | | | |
| U | Under Cut Disc 100 psi Tight Shutoff 2-6" 50 psi Tight Shutoff 8"+ | | | | | | | | | | | | Actuator Type |
| Actuator Type | | | | | | | | | | | | | S Limit (End) Switch for Pneumatic, Actuators (Non-STD) |
| S2³ | Pneumatic Spring Return 30 psi | | | | | | | | | | | | A Limit (End) Switch for G1, G2, G4, G5, G7, and G8 Actuators (Non-STD) |
| S6 | Pneumatic Spring Return 60 psi | | | | | | | | | | | | X Not Used |
| D6 | Pneumatic Double Acting 60 psi, Non-Spring Return | | | | | | | | | | | | |
| E2 | Electronic 2-position/Floating, 100-240 Vac/Vdc, Non-Spring Return | | | | | | | | | | | | |
| EM | Electronic Modulating 0-10 Vdc, 100-240 Vac/Vdc, Non-Spring Return | | | | | | | | | | | | Actuator Accessories/Options |
| EP | Electronic Modulating 4-20 mA, 100-240 Vac/Vdc, Non-Spring Return | | | | | | | | | | | | P Pneumatic Positioner, 20 psi Actuator |
| G1¹ | Electronic Spring Return, On/Off, 120 Vac | | | | | | | | | | | | Q Pneumatic Positioner, 60 psi Spring Return Actuator |
| G2¹ | Electronic Spring Return, On/Off, 24 Vac | | | | | | | | | | | | R Pneumatic Positioner, 60 psi Direct Acting Actuator |
| G3¹ | Electronic Spring Return, Floating, 24 Vac | | | | | | | | | | | | T E/P Valve, 120 Vac, 20 psi Spring Return Actuator |
| G4¹ | Electronic Spring Return, Modulating 0-10 V, 24 Vac | | | | | | | | | | | | U E/P Valve, 24 Vac, 20 psi Spring Return Actuator |
| G5¹ | Electronic Spring Return, Modulating 4-20 mA, 24 Vac | | | | | | | | | | | | V E/P Valve, 120 Vac, 60 psi Spring Return Actuator |
| G6² | Electronic Floating, 24 Vac, NSR | | | | | | | | | | | | W E/P Valve, 24 Vac, 60 psi Spring Return Actuator |
| G7² | Electronic Modulating 0-10 Vdc, 24 Vac, Non-Spring Return | | | | | | | | | | | | Y E/P Valve, 120 Vac, 60 psi Direct Acting Actuator |
| G8¹ | Electronic Modulating 4-20 mA, 24 Vac ⁴ , Non-Spring Return | | | | | | | | | | | | Z E/P Valve, 24 Vac, 60 psi Direct Acting Actuator |
| | | | | | | | | | | | | | X Not Used |
| Valve Body Style | | | | | | | | | | | | | Fail Position/Assembly Configuration |
| L | Lug-cast Iron (Standard) | | | | | | | | | | | | O Fail Open 2-Way Spring Return |
| | | | | | | | | | | | | | C Fail Closed 2-Way Spring Return |
| | | | | | | | | | | | | | N 2-Way Non-Spring Return |
| | | | | | | | | | | | | | A-F 3-Way Spring Return |
| | | | | | | | | | | | | | A-F 3-Way Non-Spring Return |

Ordering Notes:

¹2 to 4-inch sizes only ²2 to 6-inch sizes only ³2 to 12-inch sizes only ⁴Also order 499 Ohm Restrictor Kit, 985-124.

Table Notes:

- Not all assembly configurations are available. Consult Customer Care.
- Items marked NON-STD (non-standard) will require factory pricing and may have longer lead times.
- For 3-way valve assemblies with spring return actuators — 1 Port Fail Close (FC). 1 Port Fail Open (FO).
- For 2-way and 3-way valve assemblies with pneumatic non-spring return actuators, fail last position. For 2-way and 3-way valve assemblies with electric non-spring return actuators, fail position will depend on type of failure and controls installed, consult Customer Care.

Part Number Configuration

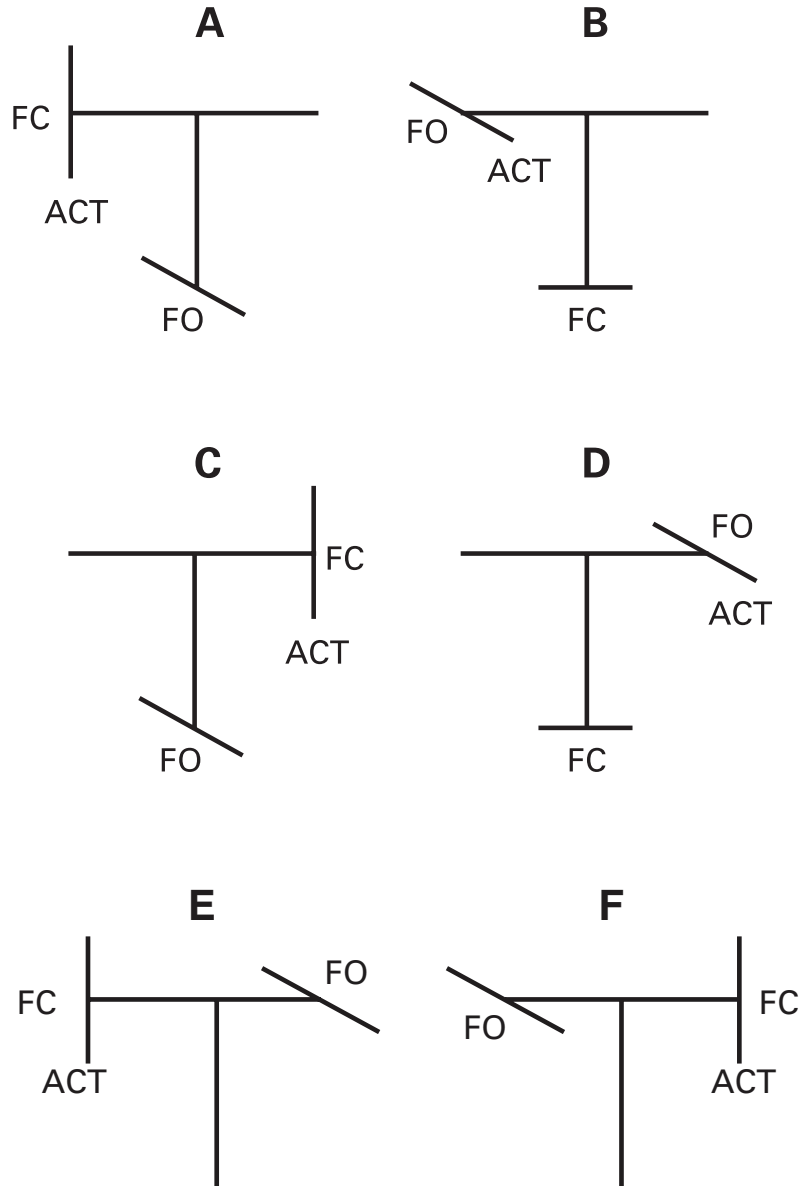
Three-Way Butterfly Valve Configurations

Key:

FC Fail Closed

FO Fail Open

ACT Actuator Location



View from Top of Valve/Actuator Assembly
(Shaft or Actuator End)