



## **Flowseal Valves**

Flowseal high performance butterfly valves are available in sizes 2" through 48" in ANSI pressures classes 150, 300 and 600 and with a diverse range of actuation options.

Flowseal is a leading provider of soft seal, metal seat and fire-safe high performance butterfly valves. Flowseal products are manufactured under and ISO 9001 Quality Assurance Program that ensures each valve we produce meets or exceeds customers exacting application requirements.

Flowseal high performance butterfly valves are a standard in many industries including heating, ventilating and air conditioning, power generation, hydrocarbon processing, water and waste water treatment, and marine and commercial shipbuilding. These products are also installed in applications as diverse as food and beverage processing, snowmaking and pulp and paper production. Configurations are available for harsh conditions as well as applications requiring normal pressure and temperature ratings.

Flowseal high performance butterfly valves are backed by the resources and experience of one of the world's largest valve producers with a delivery and quality track record that is unparalleled in the industries we serve.

### **Soft Seat Valves**

The Flowseal Soft Seat valve provides a bi-directional bubble tight shutoff (zero leakage) by the use of a patented seat. This unique seat design creates a self-energized seal in vacuum-to-low pressure applications.

Under higher pressures conditions, the seat is also designed to permit, confine and direct movement of the soft seat against the disc edge, up to the full ANSI Class 150, 300 and 600 Cold working Pressures.

The Soft Seat is designed for high services with minimal wear and low torque. Seat replacement is a simple operation, requiring no special tools.

- Sizes 2" - 48"
- Wafer Body and Lug Body Styles
- Available in ANSI Class 150, Class 300 and Class 600
- Electric Actuators, Pneumatic Actuators, or Gear Actuators and Manual Operators Available



### Metal Seat Valves

The Flowseal metal-to-metal seat high performance butterfly valve incorporates an Inconel seat for higher tensile strength, a 300 series stainless steel back-up ring in the seat cavity for axial seat support, and a disc that is case hardened by nitriding.

The Inconel seat, by its dynamic and flexible design, applies enough force per linear inch against the disc edge (Rockwell Hardness of C66 to C70) to obtain an optimum sealing characteristic while controlling the loads between the metal surfaces.

The Flowseal metal-to-metal seat valve is utilized for temperatures up to 900°F, in compliance with ANSI B16.34 pressure/temperature specifications. Leakage is rated at Class IV per ANSI FCI 70-2.

- Sizes 2" - 48"
- Wafer Body and Lug Body Style
- Available in ANSI Class 150, Class 300, Class 600
- Electric Actuators, Pneumatic Actuators, or Gear Actuators and Manual Operators Available

### Fire Flow Valves

The Flowseal Fire-Flow™ high performance butterfly valve (HPBFV) is a fire-safe, soft seat quarter turn valve. The Fire-Flow™ design incorporates two patented seats which function together to seal off pipeline flow. In normal operation, the soft seal provides a bi-directional "bubble tight" shutoff (zero leakage); the metal seat provides bi-directional shutoff in the event of a fire, in conformance to industry fire-safe requirements.

With little or no pressure, the Fire-Flow seat creates a self-energized seal against the disc. Higher line pressures act on the geometry of both seats to dynamically load them against the disc, creating higher sealing forces in either direction.

The Fire-Flow™ metal seat is made of Inconel material which is shaped by a proprietary hydroforming process into its unique, patented design. Stainless steel outer bearings are included for post-fire disc and shaft alignment. Fireproof packing is used to prevent external shaft leakage.

- Sizes 2" - 48"
- Wafer Body and Lug Body Style
- Available in ANSI Class 150, Class 300, Class 600
- Electric Actuators, Pneumatic Actuators, or Gear Actuators and Manual Operators Available