



## **S766 Double Eccentric Butterfly Valve Sample Specification**

### **1. General.**

- A. This specification shall apply to Class 150 and Class 250 butterfly valves
- B. Valves shall be designed, manufactured, and test in accordance with AWWA C504.
- C. Valves shall be certified to the requirements of ANSI/NSF 61.
- D. Valves shall be certified to comply with the low lead requirements of the Safe Drinking Water Act, ANSI/NSF 372.
- E. Manufacturer shall be ISO 9001 and ISO 14001 Certified.

### **2. General Design.**

- A. The butterfly valve shall be of a double eccentric design.
- B. If specified, the valve shall seal at the rated pressure in both directions.
- C. The valve body shall be ductile iron, ASTM A536 65-45-12.
- D. The valve disc shall be ductile iron, ASTM A536 65-45-12. The disc shall be a flow through design to reduce head loss.
- E. The valve stems shall be of the stub type design. The materials shall be 431 stainless steel for Class 150B valves and 17-4PH (ASTM A564, Type 630) stainless steel for Class 250 valves.
- F. The stems shall be a dry stem design. O-rings shall be used to prevent water from entering the disc-stem area and the body-stem area.
- G. All stem seals shall be O-rings. All O-rings shall be replaceable without requiring that the stem be removed from the valve.
- H. The rubber seat shall be EPDM. The rubber seat shall be clamped in the valve disc by a continuous 316 stainless steel ring. The rubber seat shall be a continuous uninterrupted sealing surface.
- I. Resilient seats shall be field replaceable without the use of special tools or epoxy.
- J. The resilient seat mating surface shall be a continuous uninterrupted 316 stainless steel ring mounted in the valve body.

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- K. The bearings shall be sleeve type, PTFE impregnated copper with steel backing.
- L. Thrust bearings shall be provided and shall be adjustable.
- M. The valve disc shall be rigidly connected to the stem by two pins for each shaft plus one backup safety key. The pins shall be protected for water and corrosion by O-ring seals.
- N. All bolting and hardware shall be stainless steel AISI grade 316.
- O. There shall be no exposed, uncoated iron in the interior or exterior of the valve.

### 3. Actuator

- A. The valve actuator shall conform to AWWA C504. It shall be designed to hold the valve in any intermediate position without creep or fluttering.
- B. The actuator shall be able to withstand a 450 ft-lb input torque.

### 4. Protective Coatings

- A. All exposed ferrous surfaces shall be coated with a fusion bonded epoxy in accordance with AWWA C550.

### 5. End Connections.

- A. End Connections shall be either Mechanical Joint or Flanged.
- B. Mechanical shall comply with the requirements of AWWA C111.
- C. Flanged ends shall comply with ASME B16.42, class 150.

### 7. Warranty

- A. All butterfly valves shall be covered by a Manufacturer's 1 Year Limited Warranty on manufacturers defects and labor costs for replacement.

