

**BUTTERFLY VALVE SPECIFICATION
FBE COATING, 316 TRIM, THROUGH SHAFTS**

Scope

1.1 This specification is designed to cover the design, manufacture and testing of AWWA Class 150B (4"-96") and AWWA Class 250B (4"-48").

Standards and Approvals

2.1 The valves shall be designed, manufactured and tested in accordance with American Water Works Association Standard ANSI/AWWA C504.

Connections

3.1 Flanged end connections shall fully conform with ANSI B16.1 for Class 125 or Class 250 iron flanges. Both 125 and 250 flanges shall be flat faced.

3.2 Mechanical Joint end connections shall fully conform with ANSI/AWWA C111/A21.11.

Design

4.1 Valve shafts shall be of the through-type for all sizes. No stub-type shafts will be accepted. Shafts shall be locked to the disc by O-Ring sealed taper pins retained with Stainless Steel nuts.

4.2 Valve Discs shall be of the solid type without external ribs or vanes to obstruct flow.

4.3 Resilient seats shall be located on the valve disc and shall provide a 360° continuous, uninterrupted seating surface. Seats shall be mechanically retained with a stainless steel retaining ring and stainless steel Nylok® cap screws which shall pass through both the resilient seat and the retaining ring. The resilient seat's mating surface shall be to a 360° continuous, uninterrupted stainless steel body seat ring. The retaining ring shall be continuous or investment cast with overlapping sections, serrated grooves, and shoulders. Resilient seats shall be field adjustable and replaceable and shall not require hypodermic needles or pressure vessels to replace or adjust.

4.4 Sleeve Bearings shall be provided in the valve hubs and shall be nylatron or woven Teflon, fiberglass backed. They shall be self-lubricating.

4.5 Thrust bearings shall be provided and shall be adjustable on valves 30" and larger.

4.6 Shaft seals shall be of the V-type and shall be replaceable without removal of the valve from the line or the shaft from the valve.

Materials

5.1 Body: Class 150B valve bodies shall be ASTM A126, Grade B gray iron. Class 250B valve bodies shall be ASTM A536 Grade 65-45-12 ductile iron.

5.2 Disc: Valve disc shall be ASTM A536 Grade 65-45-12 ductile iron.

5.3 Shafts: Shafts shall be ASTM A276 type 316, or ASTM A564, type 630 Stainless Steel for 250B valves.

5.4 Seat: Resilient seat shall be Buna-N and mate to a type 316 Stainless Steel body seat ring.

5.5 Hardware: All seat retaining hardware shall be type 316 stainless steel.

Actuation

6.1 Manual, electric or cylinder actuation shall be provided as specified.

Manufacture

7.1 Valves shall be proof of design tested in accordance with ANSI/AWWA C504, and certified to ANSI/NSF 61 Drinking Water System Components - Health Effects.

7.2 Valve exteriors and interiors shall be coated with an ANSI/NSF 61 Fusion Bonded epoxy coating approved for potable water.

7.3 Valve shall be Val-Matic® Series 2000 or equal.



ANSI/NSF Standard 61
Drinking Water System Components
2LA8

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