24” to 72” American Iron & Steel Compliant
AWWA C504 Butterfly Valve Specification

DESIGN

A. Butterfly valves shall be in complete accordance with AWWA C504 (latest revision) for Rubber Seated Butterfly Valves. Valves shall be bubble-tight at rated pressure and be capable of operation after long periods of inactivity.
B. Valves shall be Pressure Class 150B unless otherwise specified. Flanged valves shall meet the AWWA C504 “short-body” face-to-face dimensions and be faced and drilled per ANSI B16.1 Class 125. Mechanical joint end valves shall conform to ANSI/AWWA C111/A21.11.
C. Valve shall be NSF-61 certified for contact with drinking water.
D. The nominal size, pressure rating, date of manufacture and manufacturer’s name shall be cast onto the body or be on a permanently attached nameplate.

CONSTRUCTION

A. Sizes 24” to 72” shall be constructed as follows:
    1. Valve body shall be ASTM A126 Class B cast iron or ASTM A536 Grade 65-45-12 ductile iron body with a field adjustable and replaceable rubber seat.
    2. Valve discs shall be single offset type to provide 36 degrees uninterrupted seating. Valve disc shall be made from ASTM A536 Grade 65-45-12 ductile iron with no external ribs transverse to the flow and be un-cored so that disc surfaces are exposed for inspection and ease of measurement.
    3. The synthetic rubber seat shall be incorporated on the disc edge and mechanically retained by means of a stainless steel ring and screws. The rubber seat shall be capable of field adjustment without the need for special tools and be replaceable in the field without chipping, grinding or burning out of the old seat, rotating the valve disc or removing the valve from the line.
    4. The mating metallic seating surface shall be Type 304 stainless steel and integral with the valve body. Sprayed or plated mating seat surfaces are not acceptable.
    5. Valve shall have upper and lower Type 304 stainless steel shafts. The disc shall be fastened to the shafts with stainless steel taper pins located tangential to the valve shafts, mechanically secured and sealed to form a leak tight joint.
    6. Valves shall have corrosion-resistant, self-lubricating upper and lower shaft bearings suitably designed for horizontal or vertical shaft orientation with a factory-set, field adjustable, two-way thrust bearing.
    7. The valve shaft shall be sealed where it passes through the body by a stuffing box and pull down packing gland so that the packing can be adjusted or completely replaced without disturbing any part of the valve or operator except the packing gland.

COATINGS

A. Valves shall have internal ferrous surfaces coated with 6-8 mil of NSF-61 certified epoxy per AWWA C550.
B. External surfaces except flange faces shall be factory primed with 6-8 mil of epoxy.

ACTUATORS

A. Manually operated valves for above ground service shall be actuated by a worm gear or traveling nut actuator with a hand wheel and visual position indicator.
B. Manually operated valves for buried service shall be actuated by a sealed and grease-packed worm gear or traveling nut actuator with a 2” square operating nut.
C. Manual actuators shall conform to AWWA C504 and direct-mount on the valve body.
D. When shown on the plans or listed in the valve schedule, the valve shall be operated by an electric motor, pneumatic or hydraulic cylinder actuator.

MANUFACTURER

A. Rubber-seated butterfly valves shall be GA Industries Series 800, Figure 805 StreamSeal, Cranberry Township, PA USA

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