

## Materials Specifications – 7 for SWING CHECK VALVES

### 4-Inch through 24-Inch Nominal Diameter

**1. GENERAL:**

Swing check valves shall be designed and manufactured in accordance with AWWA C508 with the following additional requirements or exceptions.

**2. VALVE DESCRIPTION:**

Valves shall be iron body and the disc shall be swing type.

**3. INSTALLATION:**

Valves shall be installed in a horizontal position. Some operating conditions may dictate the need for an assisted closure feature such as a counterweight or spring to reduce check valve slam.

**4. SERVICE:**

Valves shall be suitable for frequent operation as well as service involving long periods of inactivity. The working pressure shall be 150 psig.

**5. BOLTING MATERIAL:**

Bolts and hex nuts that are used for attaching the top cap to the body shall be the manufacturer's standard and shall be fabricated from low-alloy steel for corrosion resistance or electroplated with zinc or cadmium. The hot-dip process, in accordance with ASTM A 153, is NOT acceptable.

**6. END CONNECTION:**

Check valves shall be furnished with flanged ends. The size and drilling shall be in accordance with ANSI B16.1 Class 125. Flanges shall be machined to a flat surface with a serrated finish in accordance with AWWA C207.

**7. TESTING:**

Each valve, after shop assembly, shall be given the operation and hydrostatic tests in accordance with AWWA C508.

**8. COATINGS:**

Ferrous surfaces, except machined or bearing surfaces, shall be prepared in accordance with SSPC-SP-10. These surfaces shall then be coated with liquid epoxy in two or more uniform coats, or with fusion bonded epoxy, to a minimum dry film thickness of 12 mils, in accordance with AWWA C550.

**9. CERTIFICATION:**

The manufacturer shall furnish a sworn statement that the inspection and all of the specified tests have been completed and that the results comply with the requirements of these Standards. A copy of the Certification, including compliance with ANSI/NSF 61, shall be sent to Denver Water.

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Swing Check Valves*