

**SAMPLE SPECIFICATION**

**AWWA C508 Rubber Flapper Check Valves**

GA-RFCV-SPEC

1.0 GENERAL

1.1 Manufacturer shall have a minimum of ten (10) years’ experience in the manufacture of rubber flapper swing check valves conforming to American Water Works Association (AWWA) Standard C508 (latest revision).

1.2 When requested, manufacturer shall provide detailed product data and descriptive literature including dimensions, weight, head loss vs. flow, pressure rating, materials of construction and cross-sectional drawings clearly illustrating the individual components.

2.0 PRODUCT

2.1 The check valve shall conform to the design, materials of construction, testing and laying length required by AWWA C508 (latest revision).

2.2 The valve shall have integral flanged connections that are faced, drilled and of the thickness required by ANSI/ASME B16.1 Class 125. There shall be a minimum 1” NPT plugged port in the cover. Valves 8-inch and larger shall be provided a flat pad beneath each flange to enable the valve to sit on a support pier.

2.3 The valve shall have a “full waterway” with a flow area not less than the nominal pipe size. Valves 4-inch and larger shall be capable of passing a 3-inch sphere.

2.4 The body shall have its seat on a 45-degree angle to minimize closure time. There shall be a bottom threaded port to permit installation of a backflow device. The cover shall be domed and have a threaded port to permit the installation of visual position indicator.

2.5 The flexible disc shall have been cycle tested by an independent laboratory to a minimum of 1 million cycles as required by AWWA C508 without evidence of deterioration, damage or wear and seal drop tight upon the conclusion of testing.

3.0 MATERIALS

3.1 The valve body and cover shall be rated for 250 PSI and made from ductile iron conforming to ASTM A536 Grade 65-45-12.

3.2 The flexible disc shall be the only moving part and made from precision molded Nylon reinforced Buna-N rubber with an integral O-ring seating surface. An alloy steel plate shall be imbedded in the rubber to provide rigidity.

3.3 Cover bolts, nuts, studs and pipe plugs shall be Type 316 stainless steel. Valves 10-size and larger shall have a minimum of 2 lifting eye-bolts.

3.5 The interior and exterior ferrous surfaces of the valve shall be shop coated with minimum 6 mil NSF-61 certified 2-part epoxy.

4.0 OPTIONS

4.1 Specify when required: A screw in type backflow device shall be provided to permit the valve to be opened under static conditions to prime or flush a pump. The backflow device shall be made from lead free bronze and stainless steel and be of the rising stem type to show position.

4.2 Specify when required: A mechanical position indicator shall be provided on valves 4-inch and larger

4.3 Specify when required: The valve shall be equipped with a single pole, double throw NEMA 1, 2, 4, 6, 12 and 13 limit switch to indicate valve closed position.

5.0 MANUFACTURER

 5.1 Rubber flapper swing check valves shall be GA Industries Figure 200, VAG USA, LLC Cranberry Township, PA USA.