

RESILIENT HINGE CHECK VALVES

PART 1 – GENERAL

1.01 SECTION COVERS

- A. The design, manufacture, and testing of 3” through 36” Ken-Flex check valves of the resilient hinge design for the purpose of preventing reverse flow and minimizing valve slam in water applications.

1.02 REFERENCES & STANDARDS

- A. AWWA C508 “Swing Check Valves for Waterworks Service”
- B. ASTM A536 "Standard Specification for Ductile Iron Castings"
- C. ANSI B16.1 "Pipe Flanges and Flanged Fittings"

1.03 QUALITY ASSURANCE

- A. Valves shall be warranted by the manufacturer for defects in materials and workmanship for a period of one year (12 months) from date of shipment.
- B. Each valve shall be assembled and tested by the valve manufacturer.

PART 2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. McWane Plant & Industrial (MPI)
- B. Kennedy Valve

2.02 KEN-FLEX CHECK VALVES

- A. The valve body shall be ductile iron (ASTM A536 Grade 65-45-12) and allow full flow equal to nominal pipe diameter at all points through the valve. The seating surface shall be on a 45-degree angle to minimize disc travel. A threaded port with pipe plug shall be provided on the bottom of the valve to allow for field installation of a stainless-steel jackscrew device without special tools or removing the valve from the line.
- B. The valve cover shall be ductile iron (ASTM A536 Grade 65-45-12). An O-ring shall be provided in a machined groove in the valve body to provide a seal between the body and cover. A threaded port with pipe plug shall be provided in the access cover to allow for field installation of a stainless-steel disc position indicator.
- C. The disc shall be of one-piece construction, fully encapsulated with EPDM and molded with an integral O-ring seal.
- D. The valve disc shall be cycle tested 1,000,000 times in accordance with ANSI/AWWA C508 in both directions, and show no signs of wear, cracking or distortion.
- E. Valve shall be rated for 250psi working pressure. Valves shall be hydrostatically shell tested to 2 times the rated pressure per AWWA C508.
- F. The interior and exterior of the valve shall be coated with an NSF-61 approved fusion bonded epoxy.

PART 3 – INSTALLATION

- A. A minimum of 5 pipe diameters of straight pipe are recommended upstream of the check to ensure proper operation.