

AVK Series 25, 45 and 55 Resilient Wedge Gate Valve Sample Specification

1. General

- A. The valve shall be a ductile or gray iron body and bonnet as specified. The valve shall be non-rising stem (NRS), open left, resilient seated, with an AWWA standard 2" square operating nut.
- B. Valves shall comply with AWWA C509 except where modified and/or augmented in these specifications.
- C. All bolting shall be stainless steel AISI grade 304. If nuts are used on the bolts the nuts shall be 304 stainless steel and the bolt threads shall be coated with an anti-galling compound. Bonnet bolting shall thread directly into the valve body. The head of each bonnet bolt shall be recessed in an iron pocket within the bonnet casting that is filled with hotmelt to prevent external water from touching the bolts.
- D. Valves shall comply with the requirements of ANSI/NSF 61.

2. Resilient gate

- A. The valve gate shall be ductile iron, fully encapsulated with EPDM rubber, and shall be capable of a drip-tight shutoff with flow in either direction.
- B. The EPDM shall be permanently vulcanized to the gate.

3. Stems

- A. Valve stems shall be made of stainless steel or bronze with minimum yield strength of 40,000psi.
- B. Stems shall be provided with separate or integral bronze thrust collars.
- C. Series 55 bronze valve stems shall contain no more than 2% zinc, no more than 11% aluminum, and no more than 0.3% lead.
- D. Series 25 and 45 bronze valve stems shall contain no more than 2% zinc, no more than 2% aluminum and no more than 0.09% lead.



2155 Meridian Blvd Minden, NV 89423 Tel: (775) 552-1400 Fax: (775) 783-1031 sales@avkus.com www.americanavk.com



E. Stainless steel stems shall contain a minimum of 16% chrome and no more than 0.25% carbon.

4. Seals and Gaskets

- A. Valve stem seals shall be an o-ring type with not less than one o-ring below the thrust collars and two o-rings above the thrust collars.
- B. The outer-most most stem seal shall be a lip type seal that prevents dirt and other debris from entering the gland flange around the stem.
- C. If an o-ring groove is cut into the stem the diameter of the groove shall not be less than the root diameter of the stem threads.
- D. O-rings and gaskets shall be made of an NBR rubber to help prevent the effects of permeation.
- E. Bonnet gaskets shall be an o-ring type that completely encircles each individual bonnet bolt so that the bolts are isolated from internal or external water sources. Bonnet gaskets shall be made of an NBR rubber to help prevent the effects of permeation.

5. Protective Coatings

A. The exposed ferrous surfaces, except those made of stainless steel, shall be coated with a fusion bonded epoxy in accordance with AWWA C550.

6. End Connections

- A. End Connections shall be either Mechanical Joint, Push-On Joint, Flanged or combination thereof.
- B. Mechanical and Push-On joints shall comply with the requirements of AWWA C111.
- C. Flanged ends shall comply with ANSI/ASME B16.1, class 125 flanges.

