



Model WDGV250

Non-Rising Stem Wedge Disc Gate Valve

Installation Instructions

Intended Use

Dixon Powhatan® brand non-rising stem wedge disc gate valves are intended to provide connections for hose service for standpipe connections or other water source. These valves are intended for non-potable water service only. Working conditions are limited to the liquid range of water. They are intended for installation on systems that are non-pressurized when not in use. Gate valves offer the advantage of gradual, controlled opening and closing, reducing the possibility of a "water hammer".

Before Installation

Connection on the inlet side is by 2-1/2" female NPT thread. Standard outlet connection is 2-1/2" male NH or NYFD. Other nominal 2-1/2" thread sizes are available upon request.

Ensure that the inlet and outlet threads are undamaged and free of debris. Check operation of the valve that it fully opens and closes smoothly and that the stem has not been bent in transport.

Installation

The gate valve installation and use are in accordance with NFPA 13, NFPA 13R, NFPA 14 or NFPA 20.

Hose valve equivalent length values: Model: WDGV250 Equivalent length: 0.5ft

System should be flushed prior to installation. Clean threads on the 2-1/2" male and female threads at connection point. Apply thread sealant, paste or tape as approved by the AHJ, to the male threads to which the valve is to be connected. Rotate the entire valve onto the threaded male pipe connection. Tighten to the desired orientation using a wrench on the hex on the inlet side of the valve. DO NOT use the handwheel or bear against the valve stem while tightening.

After Installation

Close the valve fully and apply system pressure. Maximum working pressure is **300 PSI (20.7 Bar, 2.07 Mega Pascal)**. Air may be purged by loosening the stuff nut at the top of the valve. Do not attempt to operate the valve under pressure for the first time until only water exits around the stem. Re-tighten the stuff nut once the air has been purged. Check for any leakage at the inlet connection. If there is any leakage, the valve must be removed, and the sealant reapplied. There may be some seepage of fluid around the valve seat. Valve seats are designed so that repeated opening and closing maintains or improves sealing capability.

Maintenance

Dixon® wedge disc gate valves do not require regular maintenance under normal use. They should be operated at least once a year to ensure the mechanism operates freely.

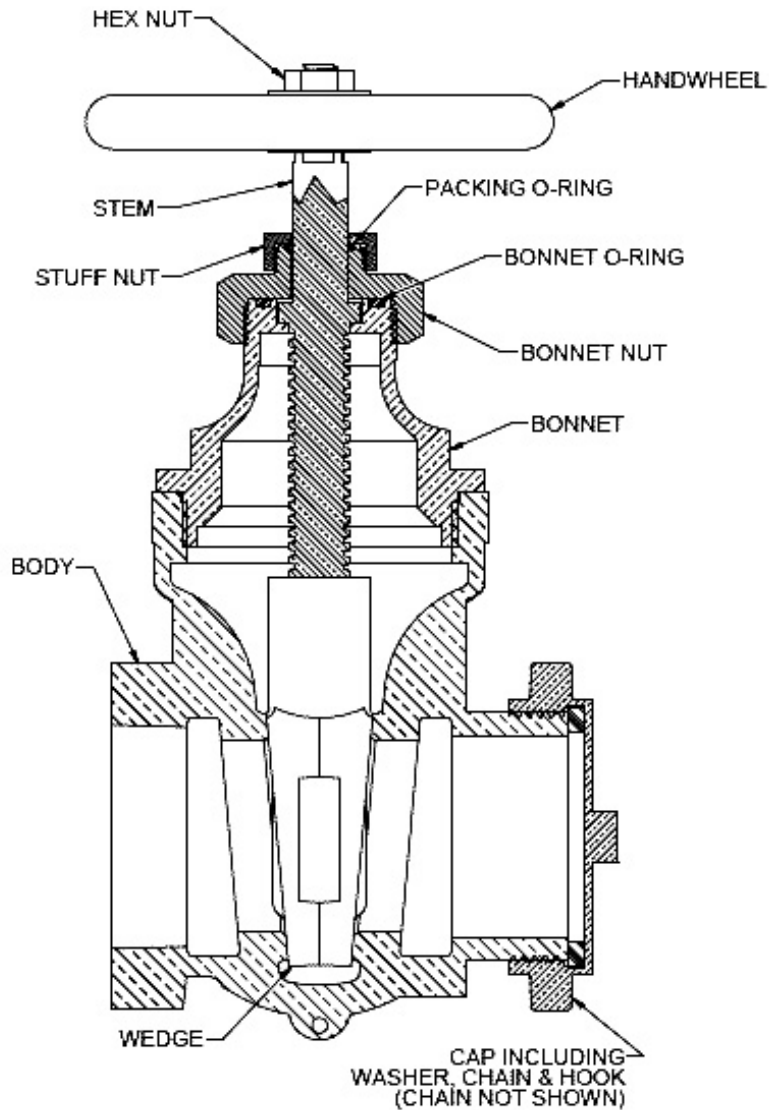
Service

The only wear part that may require replacement is the packing O-ring. To access it, close the valve and turn off any upstream water supply. Loosen the hex nut above the handwheel and remove and set aside. Remove the handwheel. Handwheel may be tapped parallel to the stem with a rubber mallet if it does not come off by hand. Do not strike the handwheel sideways as this may damage the stem. Remove the stuff nut to access the O-ring. If the O-ring does not come out easily, do not pry with a metal object as this may damage the sealing surfaces. Plastic or wood may be used as a pick to loosen the O-ring.

Additional service: Should the bonnet O-ring fail, remove all of the above parts, and the bonnet nut may be removed. The bonnet O-ring is beneath. If the valve is disassembled this far, lithium or similar grease may be applied to the threads on the stem.

The valve should be tested and maintained in accordance with NFPA 25.

Non-Rising Stem Wedge Disc Gate Valve Breakdown



Dixon®
325 Arbor Court
Winchester, VA 22602
540-535-2181
dixonvalve.com