

**1. USE:**

- 1.1 Life of valve can be maximized if the valve is used within the rated range, in accordance with pressure, temperature, and corrosion data.

**2. MANUAL OPERATION:**

- 2.1 To open or close the valve, turn the handle ¼ turn (90 degrees).
- A. Valve in Open Position – the handle is in parallel (in-line) with the valve or pipeline.
- B. Valve in Closed Position – the handle is perpendicular (crossed) with the valve or pipeline.

**3. GENERAL INFORMATION FOR INSTALLATION**

- 3.1 The valve can be installed in any position on the pipeline.
- 3.2 Before installation of the valves, the pipe must be flushed clean of dirt, burrs and welding residues, or the seats and ball surface will be damaged.
- 3.3 The pipe must be free from tension.

**4. INSTALLATION OF THREADED VALVES**

- 4.1 Use conventional sealant, such as hemp core, Teflon, etc. on the threads.
- 4.2 Apply wrench only on the hexagon of the valve ends. Tightening by using the valve body or lever can seriously damage the valve.

**5. INSPECTION:**

Each valve should be inspected periodically. The time frame for the inspection should be adjusted depending on the service conditions of the valve and include the following.

- A. Operate the valve. The valve should open and close smoothly.
- B. Check the stem for any leakage. If a leak is found, tighten the gland nut with no more than a quarter turn or until the leak stops.

**6. REMOVING & CLEANING THE VALVE:**

- 6.1 Ball valves can trap fluids in ball cavity when it is in closed position.
- 6.2 If the valve has been used in hazardous media, it must be decontaminated before disassembly.
- A. Relieve the line pressure.
- B. Place valve in half-open position and flush the line to remove any hazardous material from valve.
- C. All persons involved in the removal and disassembly of the valve should wear the proper protective clothing, such as face shield, glove, apron, etc.

**7. PACKING REPLACEMENT:**

- 7.1 Remove the stem nut, washer, handle, and gland nut.
- 7.2 Remove the existing packing with a proper packing remover tool being careful not to damage the valve.
- 7.3 Examine the valves machined surfaces for scratches and clean the packing chamber.
- 7.4 Insert the new packing and reassemble the stem nut, washer, handle, and gland nut. Tighten the gland nut to the below torque.
- 7.5 Return to service and inspect the valve periodically for leaks.

GLAND NUT TORQUE		
SIZE	NM	IN*LBS
1/4"	30	226
3/8"	30	226
1/2"	30	226
3/4"	50	443
1"	52	460
1-1/2"	54	478
2"	58	513

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For product specifications go to <http://download.a-tcontrols.com/>

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