

KEYSTONE

Installation and operating instructions for:

- F221 Wafer style valves
- F222 Lugged style valves

Storage Instructions

To protect disc edges during storage or installation/removal, ensure disc is in the closed position.

The valve faces should be adequately protected against damage and coated with corrosion inhibitor even when stored under cover.

Valves must be kept off the ground and high enough to avoid standing water.

Flange and Pipe Compatibility

Keystone valves are suitable for installation between standard ANSI 150 [PN10-16] flanges.

Weld neck flanges (flange ID approximates flange bore) are recommended to ensure maximum valve performance, however, slip on flanges may be used.

Do not weld near the valve, as this will result in serious damage to the valve.

Safety Precautions

Whenever a valve is being installed or removed from the pipeline, ensure the line is not pressurized and any hazardous medium is drained away.

General

Keystone valves are bi-directional and will control flow in either direction of flow. In most horizontal pipe installations it is recommended that the valve be installed with its shaft horizontal and the lower disc edge opening downstream, particularly on sediment duties. Do not use flange gaskets or sealing compounds. The Keystone seat-face design eliminates the need for gaskets.

Maintenance

Routine maintenance or lubrication are not required.

Installation

- 1 Consideration should be given to the location of the valves in the piping system. The valve should not be placed too close to other valves, elbows, etc. as its performance may be affected. It is recommended that the valve have a minimum of six pipe diameters upstream and four pipe diameters downstream between it and other valves, elbows, etc. in the piping system.
- 2 Ensure that the flanges are clean, undamaged and compatible with the valve.
- 3 Spread the flanges to allow sufficient clearance for the valve. **DO NOT USE THE VALVE AS A CROW BAR.**
- 4 Loosely fit two bolts at the bottom of the flanges to bear the weight of the valve.
- 5 Close the valve so that the disc edge is within the body (about 5° open).
- 6 Insert the valve between the flanges.
- 7 Loosely fit the remainder of the flange bolts.
- 8 Centre the valve and ensure the flanges are properly aligned.
- 9 Hand tighten all the flange bolts.
- 10 Slowly open the valve and fully check for adequate disc clearance. (The disc is in line with the parallel flats or keyway in the stem.)
- 11 Cross tighten all the flange bolts.

Actuator Mounting Instructions

The F221 and F222 valves come standard with either handles or gear operators pre-mounted.

Handles (F401) on 2" - 6" [50 - 150 mm] valves.

Gear operators (F422) on 8" - 12" [200 - 300 mm] valves.

