



## **CAST IRON GATE, GLOBE AND CHECK VALVE INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS**

### **INSTALLATION**

- 1) Thoroughly clean and prepare the piping system before valve installation.
- 2) Remove the valve end caps if present and inspect the valve ports and seating surfaces for cleanliness just prior to installation.
- 3) Support the valve to prevent unnecessary stresses induced by connecting pipe.
- 4) Be sure the rating of the valve is compatible with the intended service conditions. Recommended aptitude is with the stem in the vertical position. Horizontal stem installations can present issues for larger valves, especially in reduced pressure service such as low pressure(5-35 psi) steam.
- 5) Bolt flange in line per recommendations of applicable ASME/ANSI standard, e.g., ASME/ANSI B16.1. Use full face gaskets.
- 6) Operate the valve from the full open to closed position.
- 7) Verify the tightness of the packing nut/gland after installation.
- 8) Recommended Gate and Globe Valve installation: Stem in the vertical position with operator on top.

**NOTE 1:** Check valves may be installed in both horizontal and vertical lines with upward flow or in any intermediary position, as long as the hinge pin on swing checks is horizontal. Make sure they are sufficiently distant from pump outlets or other turbulence including devices. See [Technical Bulletin](#).

**NOTE 2:** Check valves may be shipped with internal packaging to prevent disc damage in transit. Remove any packing material prior to installation.

### **OPERATION**

- 1) Gate and globe valves are manually operated. To open, turn the handle in a counterclockwise direction. To close, turn the handle in a clockwise direction.
- 2) Check valves are automatic.

### **INSPECTION & MAINTENANCE**

- 1) Periodic inspection and preventative maintenance is not required other than adjustment of stem packing, and cycling of the valve from open to closed position.
- 2) If a valve develops a packing leak, adjust the packing gland nut to increase the pressure on the stem packing. The packing nuts should be turned in a clockwise direction approximately 1/4 turn, or until the leakage stops. **Do not repack under pressure.**
- 3) Whenever a new stem is installed, the packing should be changed also.

### **REPAIR PARTS**

Under normal conditions, repair parts are not required. Parts that may be considered recommended spare parts are as follows:

Gate Valves-Packing, Bonnet Gasket  
Globe Valves-Packing, Bonnet Gasket  
Check Valves-Disc Kit, Hanger Kit, or Repair Kit

When ordering parts provide the figure number of the valve, size, part needed and age of the valve.