



## **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 installation: Stem in the vertical position with operator on top.

**NOTE 1:** For gear operated valves: The valve is normally shipped with the handwheel loose, the installing contractor or mechanic must take care to ensure the roll pin that holds the handwheel to the input shaft of the gear operator is installed completely, and is balanced on both sides of the handwheel. The fit of the pin in the handwheel and the shaft is controlled and should provide years of reliable service.

**NOTE 2:** Make sure check valves are oriented properly for flow and gravity effect, and that they are sufficiently distant from pump outlets or other turbulence inducing devices. See [Product Bulletin](#), Check Valves for minimum flow rates and installation locations.

**NOTE 3:** 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
- Globe Valves-Packing
- Check Valves-None

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