

# *INSTALLATION - INSTRUCTIONS*

## **Keckley Wafer Double Disc – Wafer Silent & Globe Silent Check Valves**

### **INSTALLATION:**

- Check valves should be installed, if possible, a **minimum of 6 pipe diameters** from other line elements, i.e. elbows, valves, strainers, etc.
- Valves may be installed upward vertically, horizontally, or at other angles. For vertical downward flow, please consult the factory.
- For Keckley Style DD check valves, the hinge pin/stop pin must be installed perpendicular to the flow.
- Install the valve with proper positioning of the flow arrow.
- Support and align adjacent piping and the valve.
- Install lubricated flange bolts.
- Hands tighten, and then torque the bolts using the crossover flange bolt-tightening method to load the bolts evenly, and eliminate concentrated stresses.
- Valves must be mounted to ASME flanges with conventional flat face or ring gaskets.
- Proper centering of the ring gaskets is important to prevent internal leakage.
- Never lift the valve by the bronze or stainless steel trim.
- Install a strainer in the piping.

### **PRECAUTIONS:**

- Do not install check valves directly against another valve whereby the check valve discharges downstream directly into the valve.
- Do not install the valve whereby it directly discharges downstream into a tee or elbow fitting.
- These valves are not suggested for installation in sewage ejector piping.
- Careful consideration would be given to the selection of valves for use in an air, steam, hot water, and boiler feed systems. Consult our factory on these applications.
- Individuals performing removal and disassembly should be provided with suitable protection from possibly hazardous liquids.
- Prior to disassembly, valve must first be isolated from system pressure and flow.
- Upon disassembly ensure spring pressure is released slowly to prevent personal injury due to the spring “launching” itself unexpectedly.

# *MAINTENANCE - INSTRUCTIONS*

## **Keckley Wafer Double Disc – Wafer Silent & Globe Silent Check Valves**

### **CAUTION!**

Make sure the valve is not under pressure before starting any maintenance.

### **DISASSEMBLY:**

- Lay valve down with the downstream side of the valve upward.
- Remove stop pin retainers and hinge pin retainers.
- Remove stop pin, being careful with the short hooked spring legs on valves 6" and larger.
- Remove hinge pin out of the body while holding spring(s) firmly as some are preloaded and may snap out. **Observe caution.**
- Remove springs, plates, and bearings.

### **ASSEMBLY:**

- Lay body down with downstream side of valve upward.
- Clean all parts in a suitable solvent.
- Position both plates in body with hinge lugs together and align with pin holes. If valve is equipped with support sleeves, assemble into plate with body bearings.
- Lay springs in plate recess, between lugs, with short hooked leg extending upward on valves 6" and larger (other longer leg to contact plate). On smaller valves, spring(s) without short leg, wind spring legs 180°, install with legs contacting each plate and hold to insert hinge pin in step 6.
- Insert all bearings provided.
- Insert hinge pin through plate lugs, bearings, and through spring coils.
- Pull stop pin leg of spring (short hooked leg) toward plate leg and insert stop pin. Repeat until stop pin is fully inserted in body holes.
- Install hinge pin retainers and stop pin retainers using PTFE tape or a suitable thread sealing compound.

No special tools are required.