



Lockout Device for Cylinder Operated Knife Gate Valves

Instruction D10435
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DeZURIK

Lockout Device for Cylinder Operated Knife Gate Valves

Instructions

These instructions are intended for personnel who are responsible for the installation, operation and maintenance of the lockout device for cylinder operated knife gate valves.

Safety Messages

All safety messages in the instructions are flagged with the word Caution, Warning or Danger. These messages must be followed exactly to avoid equipment damage, personal injury or death.

Safety label(s) on the product indicate hazards that can cause equipment damage, personal injury or death. If a safety label becomes difficult to see, or if a label has been removed, please contact DeZURIK for replacement label(s).



WARNING!

Personnel involved in the installation or maintenance of valves should be constantly alert to potential emission of process material and take appropriate safety precautions. Always wear suitable protection when dealing with hazardous process materials. Handle valves which have been removed from service with the assumption of process material within the valve.

Inspection

Your cylinder actuator has been packaged to provide protection during shipment. Carefully inspect the unit for damage upon arrival and file a claim with the carrier if damage is apparent.

Parts

Recommended spare parts are listed on the assembly drawing. These parts should be stocked to minimize downtime.

Order parts from your DeZURIK sales representative, or directly from DeZURIK. When ordering parts, please include the serial number or the 7-digit part number and 4-digit revision number (example: **9999999R000**) located on the data plate attached to the valve assembly. Also include the part name, the assembly drawing number, the balloon number and the quantity stated on the assembly drawing.

DeZURIK Service

DeZURIK Service personnel are available to install, maintain and repair all DeZURIK products. DeZURIK also offers customized training programs and consultation services. For more information, contact your local DeZURIK representative or visit our website at www.dezurik.com.

Field Mounting Lockout Device

1. Mark clip shaft to ensure proper alignment when reassembling.
2. Remove screws and nuts from clip and retract cylinder. Unscrew clip from piston rod.
3. Place spring plunger into lockout collar. Do not tighten.
4. Thread lockout collar onto the clip shaft. Position the collar about halfway between the mark and the bottom of the clip shaft. (Make sure lockout collar is positioned such that the spring plunger engages into the slot in the clip shaft in neutral position.)
5. Start the lockout bolts into the tapped holes in the cylinder head or cylinder mounting plate, but do not tighten the bolts.
6. Reattach the clip and stroke the valve to the fully open and closed positions two times.
7. Stroke the valve to the fully opened position and adjust the open position bolts. Mark the threads on the lockout bolts and apply a coat of Loctite 242 to the threads and thread the bolts back in the holes until the marks are in position. *Note: refer to the cylinder actuator instruction if adjustment to the valve open position stop is required.*
8. Turn the lockout collar to the locked position. Ensure that the lockout collar is fully engaged with the lockout bolts. See Figure 2 *Locked Open*.
9. Turn the lockout collar to the neutral position, which is where the spring plunger engages into the clip slot.
10. Stroke the valve to the fully closed position and adjust the closed position lockout bolts. Mark the threads on the lockout bolts and apply a coat of Loctite 242 to the threads and thread the bolts back in the holes until the marks are in position. *Note: refer to the cylinder actuator instruction if adjustment to the valve closed position stop is required.*
11. Turn the lockout collar to the locked position. Ensure that the lockout collar is fully engaged with the lockout bolts. See Figure 2 *Locked Closed*.
12. Turn the lockout collar to the neutral position and stroke the valve to the fully open and closed positions to ensure the lockout collar does not interfere with the lockout bolts. See Figure 2 *Neutral*.
13. Tighten spring plunger to clip shaft. Back off spring plunger 1/8 of a turn. Turn lockout collar to the locked position and then back to neutral position several times. Make sure lockout collar “snaps” into place when turning to the neutral position.

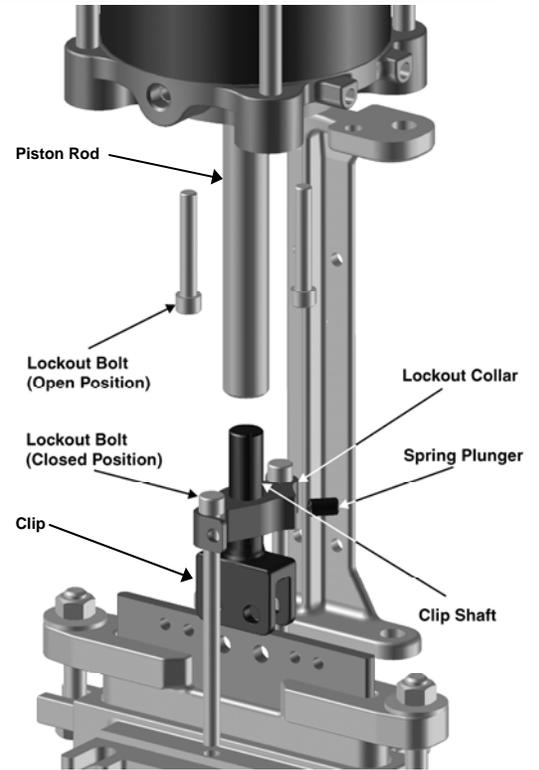
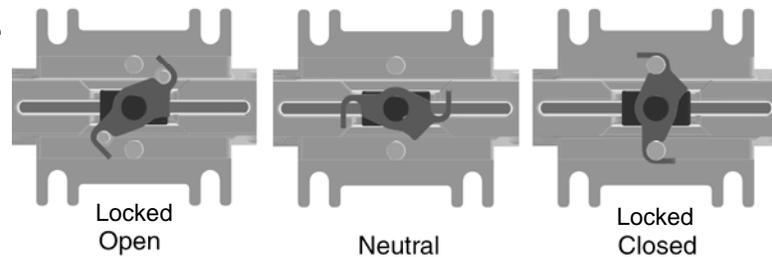


Figure 1—Lockout Assembly



Note: All shown as viewed straight down from cylinder end. Exact positions may vary.

Figure 2— Lockout Positions

Operation

1. When valve actuation is necessary, or lockout is not required, the lockout collar must be in the neutral position.
2. The ability of the lockout collar to remain in the neutral position should be verified. If the lockout collar moves too freely from the neutral position, thread the spring plunger inward to increase the plunger force onto the clip. If the lockout collar movement is too difficult, thread the spring plunger outward to decrease the plunger force onto the clip.
3. When gate lockout is required, move the gate to the required position and rotate the lockout collar until it touches the shaft under the lockout bolt head. Insert a lockout hasp (user provided) into one of the holes near the lockout collar tip (see Figure 3) and then add the necessary lock(s) as per the user's requirements.

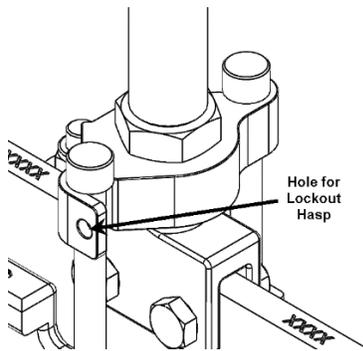


Figure 3 – Lockout Collar Hasp Location

4. To unlock the valve's gate, remove the lock(s) and lockout hasp and rotate the lockout collar to the neutral position. Ensure that the spring plunger engages with the slot in the clip shaft.

Maintenance

The ability of the lockout collar to remain in the neutral position should be verified. In the neutral position, the spring plunger should “snap” or engage into the slot in the clip shaft. If the lockout collar moves too freely from the neutral position, thread the spring plunger inward to increase the plunger force onto the clip. If the lockout collar movement is too difficult, thread the spring plunger outward to decrease the plunger force onto the clip.