

# Lockout Device for Cylinder Operated Knife Gate Valves

Instruction D10435 November 2017



# DeZURIK

### Instructions

These instructions are for use by personnel who are responsible for the installation, operation and maintenance of DeZURIK valves, actuators or accessories.

## Safety Messages

All safety messages in the instructions are identified by a general warning sign and the signal word CAUTION, WARNING or DANGER. These messages indicate procedures to avoid injury or death.

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

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

#### Inspection

Your DeZURIK product has been packaged to provide protection during shipment; however, items can be damaged in transport. Carefully inspect the unit for damage upon arrival and file a claim with the carrier if damage is apparent.

### **Parts**

Replaceable wear parts are listed on the assembly drawing. These parts can be stocked to minimize downtime. Order parts from your local DeZURIK sales representative or directly from DeZURIK. When ordering parts please provide the following information:

**If the valve has a data plate:** please include the 7-digit part number with either 4-digit revision number (example: 99999998000) or 8-digit serial number (example: S1900001) whichever is applicable. The data plate will be 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.

If there isn't any data plate visible on the valve: please include valve model number, part name, and item number from the assembly drawing. You may contact your local DeZURIK Representative to help you identify your valve.

# **DeZURIK Service**

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



#### DeZURIK Lockout Device for Cylinder Operated Knife Gate Valves

## **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 it to the neutral position.

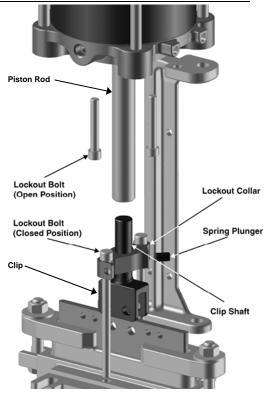
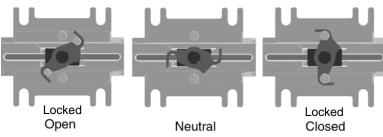


Figure 1—Lockout Assembly



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.

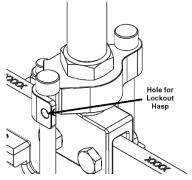


Figure 3 – Lockout Collar Hasp Location

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.

### **Limited Warranty**

DeZURIK, Inc. ("Seller") manufactured products, auxiliaries and parts thereof that we manufacture for a period of twenty-four (24) months from date of shipment from Seller's factory, are warranted to the original purchaser only against defective workmanship and material, but only if properly stored, installed, operated, and serviced in accordance with Seller's recommendations and instructions.

For items proven to be defective within the warranty period, your exclusive remedy under this limited warranty is repair or replacement of the defective item, at Seller's option, FCA Incoterms 2020 Seller's facility with removal, transportation, and installation at your cost.

Products or parts manufactured by others but furnished by Seller are not covered by this limited warranty. Seller may provide repair or replacement for other's products or parts only to the extent provided in and honored by the original manufacturer's warranty to Seller, in each case subject to the limitations contained in the original manufacturer's warranty.

No claim for transportation, labor, or special or consequential damages or any other loss, cost or damage is being provided in this limited warranty. You shall be solely responsible for determining suitability for use and in no event shall Seller be liable in this respect.

This limited warranty does not warrant that any Seller product or part is resistant to corrosion, erosion, abrasion or other sources of failure, nor does Seller warrant a minimum length of service.

Your failure to give written notice to us of any alleged defect under this warranty within twenty (20) days of its discovery, or attempts by someone other than Seller or its authorized representatives to remedy the alleged defects therein, or failure to return product or parts for repair or replacement as herein provided, or failure to store, install, or operate said products and parts according to the recommendations and instructions furnished by Seller shall be a waiver by you of all rights under this limited warranty.

This limited warranty is voided by any misuse, modification, abuse or alteration of Seller's product or part, accident, fire, flood or other Act of God, or your failure to pay entire contract price when due.

The foregoing limited warranty shall be null and void if, after shipment from our factory, the item is modified in any way or a component of another manufacturer, such as but not limited to; an actuator is attached to the item by anyone other than a Seller factory authorized service personnel.

All orders accepted shall be deemed accepted subject to this limited warranty, which shall be exclusive of any other or previous warranty, and this shall be the only effective guarantee or warranty binding on Seller, despite anything to the contrary contained in the purchase order or represented by any agent or employee of Seller in writing or otherwise, notwithstanding, including but not limited to implied warranties.

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