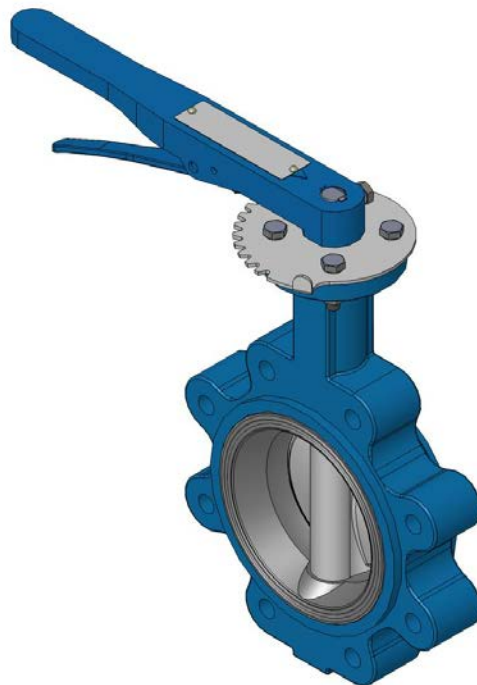


# DEZURIK TEN-POSITION LEVER ACTUATOR USED ON BOS BUTTERFLY VALVES



Instruction **D10461**  
January 2015

### Instructions

These instructions provide information about Lever Actuators. They are for use by personnel who are responsible for installation, operation and maintenance of Lever Actuators.

### Safety Messages

All safety messages in the instructions are flagged with an exclamation symbol and the word Caution, Warning or Danger. These messages indicate procedures that 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 read, 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 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.**

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### Inspection

Your Lever Actuator has been packaged to provide protection during shipment; however, it 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

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

Order parts from your local DeZURIK sales representative, or directly from DeZURIK. When ordering parts, please include 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 sales representative or visit our website at [www.dezurik.com](http://www.dezurik.com).

**Ten-Position Lever Actuator Used On BOS Butterfly Valves**

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**Ten-Position Lever Actuator Used On BOS Butterfly Valves**

Description

The Ten-Position Lever is a manual actuator for 90° rotation of BOS Butterfly Valves. The actuator holds the valve in the open or closed position, or in any of eight other equally spaced intermediate positions.

Operation

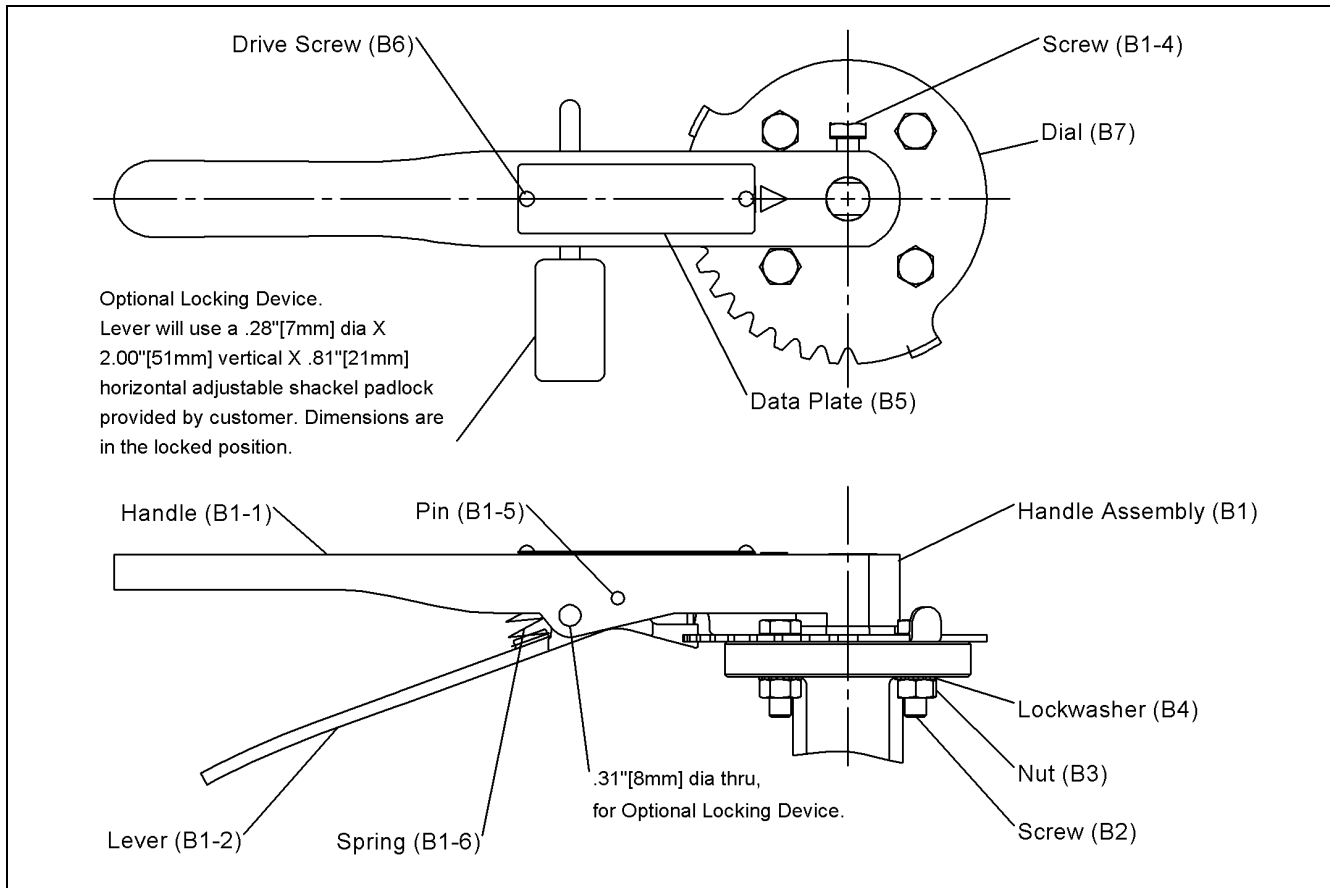
To operate the actuator, firmly grasp and squeeze the end of the handle (B1-1) and the lever (B1-2) to disengage the lever from the dial (B7); then slowly rotate the handle to the desired valve position. Clockwise rotation closes the valve, and counterclockwise rotation opens the valve. Ensure that the lever is engaged in one of the 10 notches before releasing the handle. Refer to Figure 1 for parts identification.



**CAUTION!**

**Close the valve slowly. Rapid closure of the valve can cause pipeline pressure surges that will damage pipeline equipment.**

**Ensure that the lever is engaged in one of the 10 notches before releasing the handle. If the lever is not engaged, the valve can slam closed and cause pipeline pressure surges that will damage pipeline equipment.**



**Figure 1— Parts Identification**

## **Ten-Position Lever Actuator Used On BOS Butterfly Valves**

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### Locking Device

A lockout feature allows the actuator to be padlocked in any of the 10 actuator positions. To lock the actuator, insert the padlock (not included) between the lever and the handle as shown in Figure 1. See recommendations below.

#### ***Padlock for the small size lever:***

Master No. 510 or equivalent, with a .28" (7.1 mm) diameter removable shackle, 2.00" (50 mm) vertical clearance, and .81" (21 mm) horizontal clearance, as shown in Figure 2.

#### ***Padlock for the medium size levers:***

Master No. 5 or equivalent, with a .38" (9.5 mm) diameter shackle, 2.50" (64 mm) vertical clearance, and .94" (24 mm) horizontal clearance, as shown in Figure 2.

### Removing Actuator

Refer to Figure 1 for parts identification.



#### **WARNING!**

**Flow in the pipeline with the actuator removed can allow the valve to slam closed and cause personal injury and/or damage to the flow system. Shut down the flow in the pipeline before removing the actuator.**

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1. Shut down the flow in the pipeline.
2. Close the valve.
3. Loosen the screw (B1-4) that secures the handle assembly (B1) to the valve shaft.
4. While squeezing the lever (B1-2), lift and remove the handle assembly (B1) from the valve shaft.  
**Note:** Some valve sizes have double-D shafts and some have keyed shafts. Take care not to lose the key on valves with keyed shafts.
5. Remove the nuts (B3), lockwashers (B4) and screws (B2) from the dial (B7).
6. Remove the dial (B1-3) from the valve.

## Installing Actuator

Refer to Figure 1 for parts identification.

1. Select the desired actuator mounting position. The actuator may be mounted on the valve in the standard or 180° mounting positions, as shown on the Installation Drawing for the valve.
2. Mount the dial (B7) to the top of the valve with the screws (B2), lockwashers (B4) and nuts (B3). Tighten the screws finger tight.  
**Note:** Some valve sizes have double-D shafts and some have keyed shafts. Make sure the key is in the valve shaft before mounting the actuator on valves with keyed shafts.
3. Place the handle assembly (B1) in position on the valve shaft, and flush with the top of the valve shaft. Ensure that the lever is engaged in one of the notches.
4. Tighten the screw (B1-4) in the handle (B1-1).
5. Tighten the screws (B2), lockwashers (B4) and nuts (B3).



### **CAUTION!**

**After mounting the handle assembly to the valve, verify that when the valve is in the closed position that the position indicator points to the “SHUT” indication mark on the dial plate. Also verify that when the valve is in the open position, that the position indicator points to the “OPEN” indication mark on the dial plate.**

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## Changing Mounting Position



### **WARNING!**

**Flow in the pipeline with the actuator removed can allow the valve to slam closed and cause personal injury and/or damage to the flow system. Shut down the flow in the pipeline before removing the actuator.**

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The actuator may be mounted on the valve in the standard or 180° mounting positions, as shown on the Installation Drawing for the valve. To change to a different mounting position:

1. Remove the actuator as described in the “*Removing Actuator*” section.
2. Move the actuator to the opposite mounting position and replace the actuator on the valve as described in the “*Installing Actuator*” section.

## Limited Warranty

DeZURIK, Inc. ("Seller") manufactured products, auxiliaries and parts 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 will 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, 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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## Disclaimer

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## Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:

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