

# DEZURIK SP SPEED CONTROLS USED WITH CYLINDER ACTUATORS

Instruction **D10279** 

August 2012

### **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).

### **▲**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.

# 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: 9999999R000) 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 - SP Speed Controls Used With Cylinder Actuators

# **Table of Contents**

Description	4
Installation	4
Double-Acting Actuator	4
Spring-Return Actuator	4
Adjustments	4

# DeZURIK - SP Speed Controls Used With Cylinder Actuators

# **Description**

A speed control is an optional accessory used to control the opening and/or closing speed of a pneumatic or hydraulic valve actuator. The speed control option consists of one or two adjustable manual flow control valves located in the actuator piping line(s). A typical speed control valve is shown in Figure 1. Speed controls may be applied in several different connection configurations as described below for double-acting and spring-return actuators.

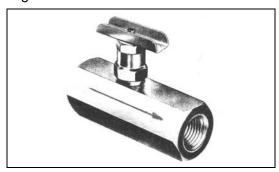


Figure 1 - SP Speed Control Valve

### Installation

Flow through the speed control valve is adjustable in one direction only, as indicated by the direction of the arrow on the valve. A spring-loaded ball in the speed control valve provides non-adjustable full flow in the direction opposite the arrow.

# **Double-Acting Actuator**

To control the opening speed, one speed control valve is piped in the actuator line that exhausts from the actuator when the valve is opening, with the arrow pointing away from the actuator.

To control the closing speed, one speed control valve is piped in the actuator line that exhausts from the actuator when the valve is closing, with the arrow pointing away from the actuator.

To control the opening speed and the closing speed, both of the above speed control valves are used.

# **Spring-Return Actuator**

To control the opening speed or the closing speed, one speed control valve is piped in the actuator line. The speed control valve is positioned with the arrow in the direction of flow in the actuator line during the speed-controlled direction of the actuator—either opening or closing.

To control both opening and closing speed, two speed control valves are piped back-to-back in the actuator line, with the arrows in opposite directions. The opening speed is adjusted by the valve with actuator flow in the direction of its arrow while the valve is opening; the closing speed is adjusted by the valve with actuator flow in the direction of its arrow while the valve is closing.

# **Adjustments**

The speed of operation is adjusted as follows:

- 1. Loosen the locknut on the speed control valve.
- 2. Turn the adjustment clockwise to decrease the speed, or counterclockwise to increase the speed.
- 3. Cycle the actuator to check the new speed, and readjust as necessary to obtain the desired speed.
- 4. Tighten the locknut on the speed control valve.

### **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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#### **Sales and Service**



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