



APCO | WILLAMETTE

DeZURIK SP SPEED
CONTROLS
USED WITH CYLINDER ACTUATORS

DeZURIK - SP Speed Controls

Used With Cylinder Actuators

Instructions

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

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 that have been removed from service with the assumption of pipeline material within the valve.

Inspection

Your SP Speed Controls 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.

Table of Contents

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

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.

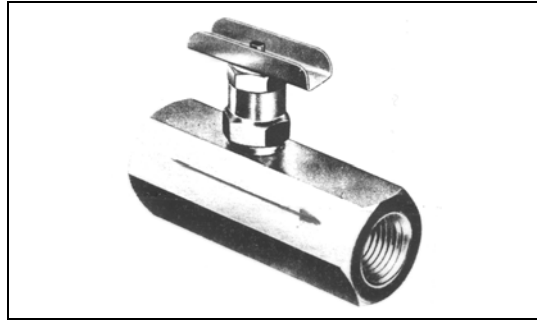


Figure 1 - SP Speed Control Valve

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.