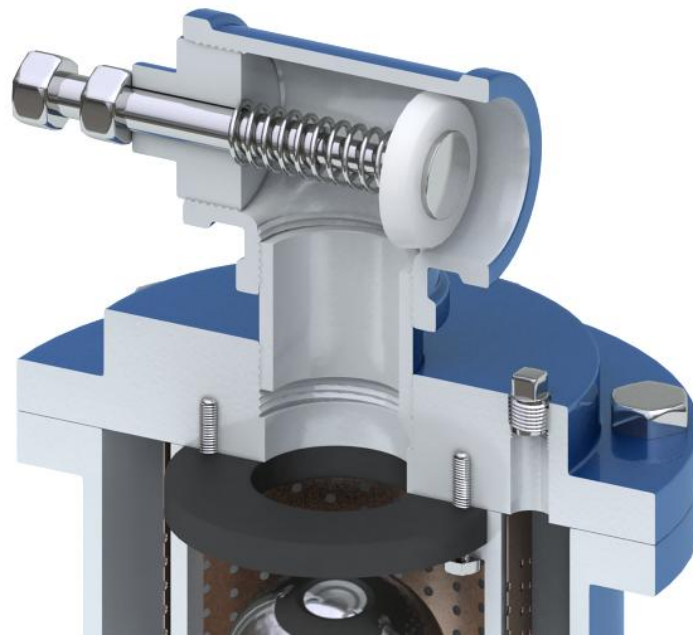




APCO DAT DOUBLE ACTING THROTTLING DEVICE



Instruction **D12029**
June 2014

DeZURIK

APCO DAT Double Acting Throttling Device

Instructions

These instructions provide information for the APCO DAT Double Acting Throttling Device. They are for use by personnel who are responsible for installation, operation and maintenance of APCO products.

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.

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.

Inspection

Your APCO DAT Double Acting Throttling Device 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 choose from the following:

If the valve has a DeZURIK APCO nameplate 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.

If there isn't any nameplate visible on the valve, please include Valve Model number, the part name, and item number from the assembly drawing. You may contact your local DeZURIK APCO 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 www.dezurik.com.

Table of Contents

Description - - - - - 3
Adjustment - - - - - 4

Description

The DAT Double Acting Throttling Device is used to throttle exhausting air and allow large amount of air to enter the system in a vacuum condition.

The DAT is used to regulate (adjust) the air exhaust on pump start-up to attain a smooth pressure transition between the exhausting air and the operating pressure. During pump shut-off, the device will automatically allow a large amount of air in during vacuum to protect against pipe collapse.

NOTE: The DAT is not a stand-alone device and cannot be installed directly to the pipeline. The DAT must be installed in the outlet port (top) of the Air/Vacuum Valve or Combination Air Valve.

DeZURIK

APCO DAT Double Acting Throttling Device

Adjustment

See Figure 1 for part identification.



WARNING!

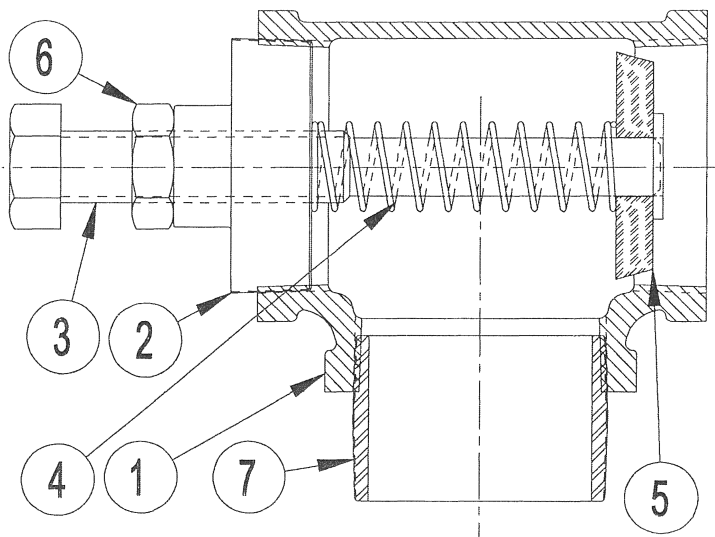
The setting on the Double Acting Throttling Device must be tolerable to the collapsing pressure on the system.

Confirm that the DAT is firmly screwed to the valve outlet (top).

To adjust the DAT, close the Teflon plug (5) by turning the adjustable stem (3) **clockwise** to be fully extended. Note that the device is designed so as it cannot completely close. Open the Teflon plug by turning the adjustment stem **counter clockwise**, three (3) full turns.

Start pump. Listen and observe the Air/Vacuum Valve closing when water column reaches the valve. If the valve gently closes and no surge is apparent, lock the position setting in by turning the lock nut (6) against the cover (2).

If there is a "thunk" when valve is closing, turn the adjustable stem (3) one full turn **clockwise** to farther close the device and restrict the amount of air evacuating. Depending on the application, more than one turn towards the closed position may be necessary. This will establish a back pressure on the rising column of liquid to reduce shock, pressure surge and water hammer to the system.



NO	DESCRIPTION
1	Housing
2	Cover
3	Adjustable Stem
4	Spring
5	Plug
6	Lock Nut
7	Nipple

Figure 1: DAT Double Acting Throttling Device