Installation Instructions

Document No. 129-228 September 29, 2009

Flowrite[™] AP 599 Series 4-inch Pneumatic Valve Actuator

Product Description

The Flowrite AP 599 Series 4-inch Pneumatic Valve Actuator is designed for use with the Flowrite VF 599 Series valves with a 3/4-inch (20 mm) stroke.

Product Numbers

599-01081 3 to 8 psi (21 to 55 kPa) spring range
599-01082 5 to 10 psi (34 to 69 kPa) spring range
599-01083 10 to 15 psi (69 to 103 kPa) spring range

Warning/Caution Notations

WARNING	Δ	Personal injury/loss of life may
	4	occur if a procedure is not
		performed as specified.
CAUTION	Δ	Equipment damage, or loss of
	4	data may occur if the user
		does not follow a procedure as
		specified.

Required Tools

- 5 mm hex wrench
- 5/16-inch hex wrench
- 1/8-inch NPT straight barbed fitting
- Squeeze bulb (baumanometer)

Expected Installation Time

16 minutes for field mounting of the actuator.

36 minutes for removing the old and mounting a new actuator.

Prerequisites



WARNING:

If mounting the actuator to a valve already in line, either close the shut-off valves in the piping (upstream first, then downstream) or switch off the pump to allow the differential pressure to drop.



CAUTION:

Do not damage or scratch the polished surface of the valve stem.

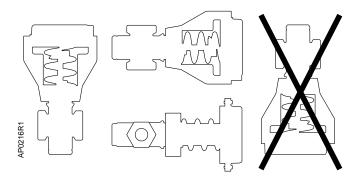


Figure 1. Acceptable Mounting Positions.

The vertical position is recommended for mounting. *Figure 1* shows the acceptable mounting positions.

Installation

If you are not replacing an existing actuator, begin with the instructions of *Figure 5*.

Installation, Continued

Removing an existing actuator from a valve

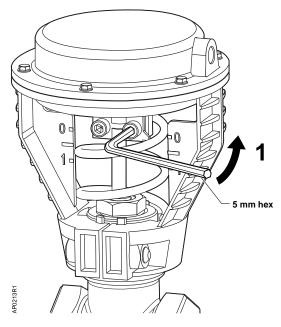


Figure 2.

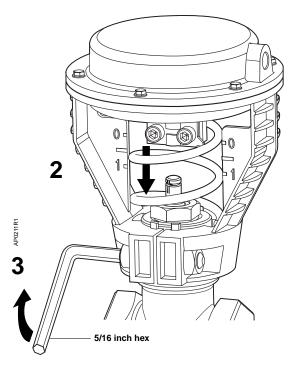
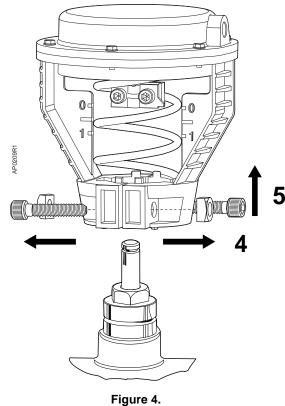


Figure 3.



Preparation before mounting an actuator to a valve

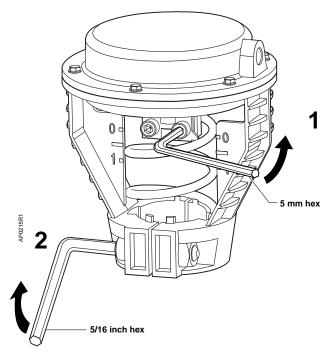
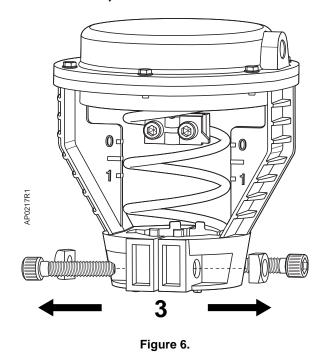


Figure 5.

Installation, Continued



Mounting an actuator to a valve

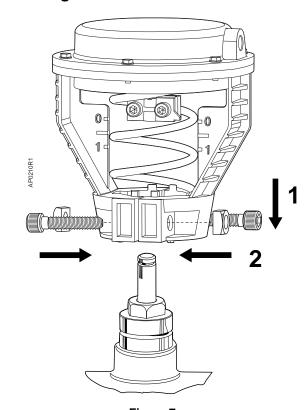


Figure 7.

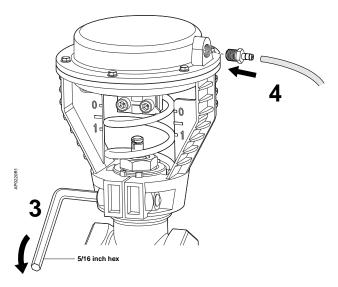


Figure 8.

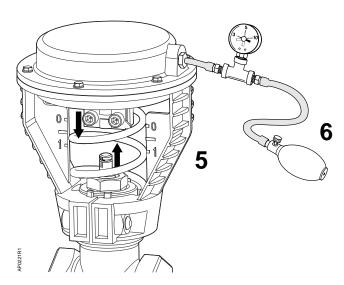


Figure 9.

Raise the valve stem. Apply enough air pressure to lower the stem retainer to meet the valve stem.

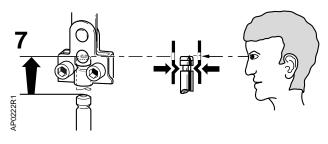


Figure 10.

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Installation, Continued

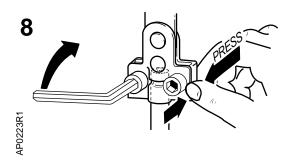


Figure 11.

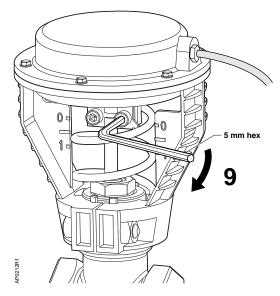


Figure 12.

The installation is now complete.

Reference

Technical Instructions

AP 599-3 Flowrite AP 599 Series 4-inch Pneumatic Valve Actuator 155-183P25

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