

# PA-63 PNEUMATIC ACTUATOR AIR MOTOR - 3" STROKE

MODEL: 1705 - PA-63

Revision: 0

BULLETIN  
1705

## DESCRIPTION

Pyronics Pneumatic Actuators are air motors designed to operate with 0 to 15 psig air pressure signals. These actuators are normally used with control instruments that supply air impulses between 3 psig and 15 psig to position the air motor.

Piston travel against a linear spring is directly proportional to impulse pressure changes over the entire range. The seal is a roll type premolded diaphragm to fit the piston. This roll action provides a constant pressure area at all piston positions with minimum friction.

The Pyronics Pneumatic Actuator is available with a Model VP Positioner when maximum accuracy of response to minute variations of impulse air is required. The positioner functions as a pneumatic relay or booster pilot. It makes available the full supply line air pressure (usually 20 psig) for moving the piston but limits this movement to the requirements of the control instrument.

The Pneumatic Actuator is easily mounted on Pyronics Wafer Butterfly Valves. The photograph below shows the compact assembly. See Bulletin 1351 for Wafer Butterfly Valve dimensions.



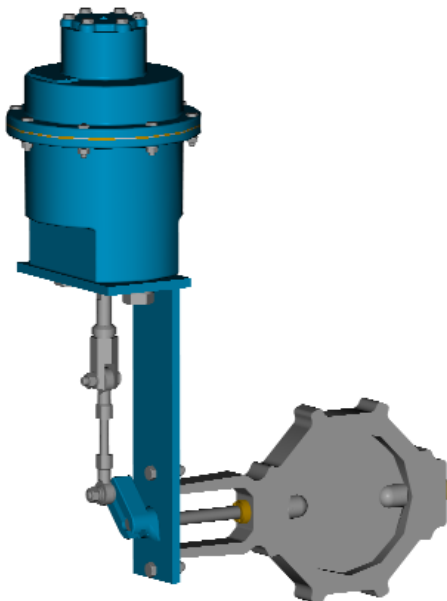
**PA-63-P ACTUATOR**

## PERFORMANCE SPECIFICATIONS

STROKE DISTANCE	FORCE AVAILABLE IN POUNDS PER POUND OF SIGNAL CHANGE	
	Without Positioner	With Positioner
FULL TRAVEL		
3"	25	190

## FEATURES

- Constant area piston for uniform power
- Roll diaphragm piston seal
- Long stroke – 3" travel
- Compact design
- Dustproof construction
- Oil impregnated sintered bronze bearings
- Precision ground shafts
- Rugged, lightweight -- cast aluminum
- Positioner factory or field mounted
- Clevis output linkage



**PA-63 ACTUATOR  
MOUNTED ON WBV  
BUTTERFLY VALVE**

CAUTION: Operation of combustion equipment can be hazardous resulting in bodily injury or equipment damage. Each burner should be supervised by a combustion safeguard and only qualified personnel should install, make system adjustments and perform any required service.



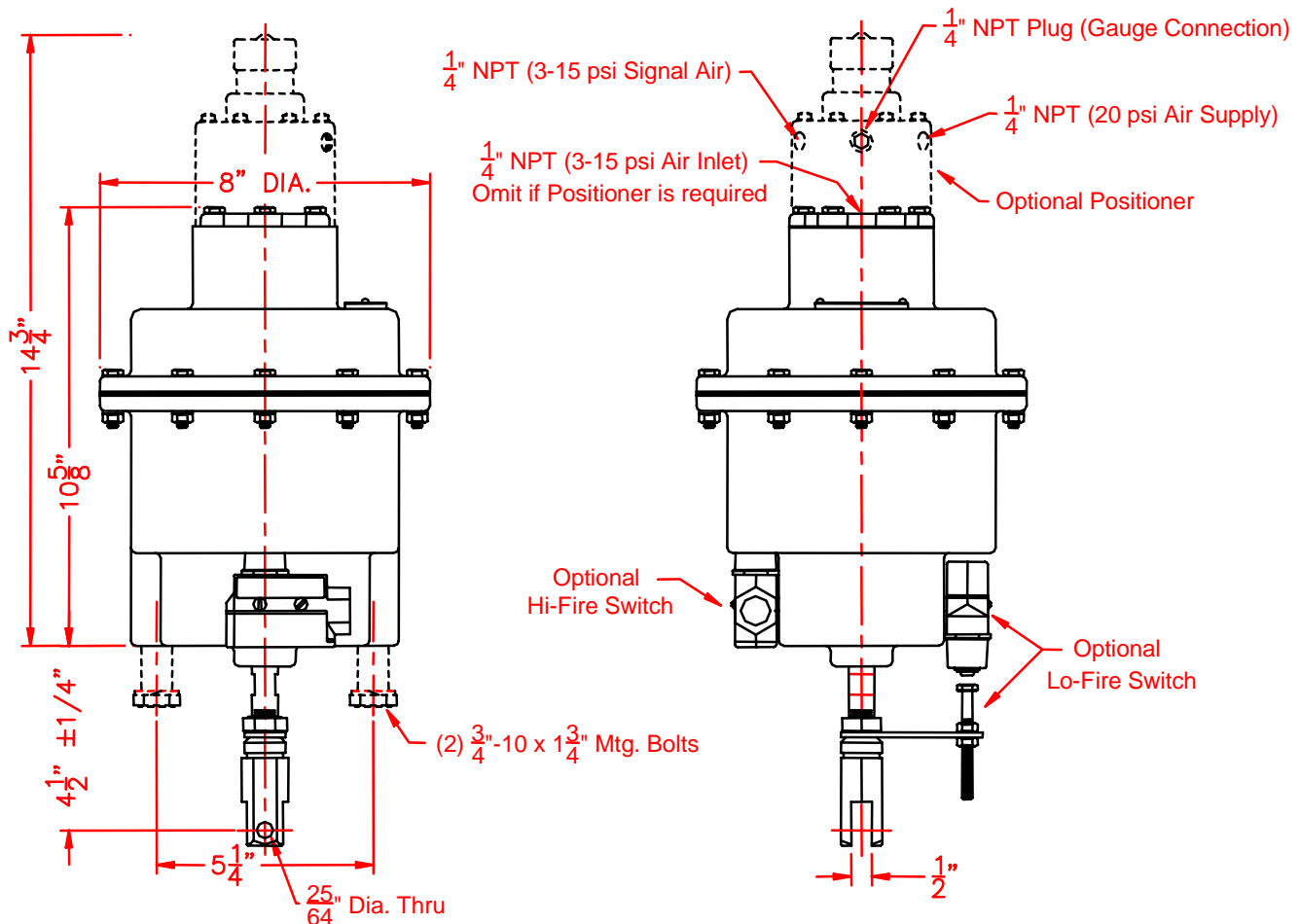
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Combustion Equipment & Controls for Industry  
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NOTICE: PYRONICS practices a policy of continuous improvement in the design of its products. It reserves the right to change the specifications at any time without prior notice.

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## DIMENSIONS



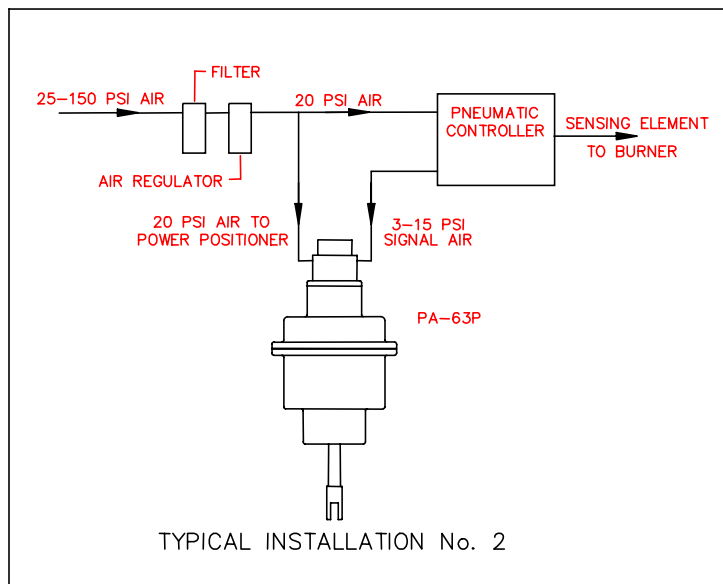
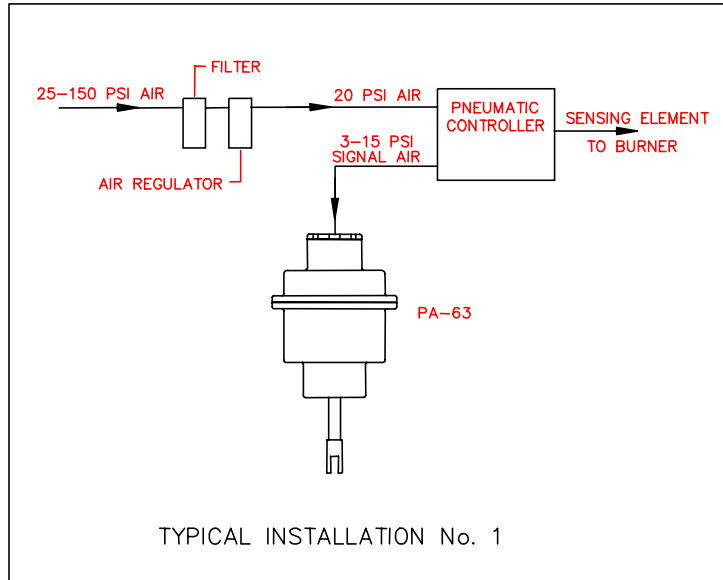
## OPERATION AND ADJUSTMENT

- 1) Mount Pneumatic Actuator on bracket furnished in any desired position.
- 2) Connect the linkage so that there is the least possible angular torque on the arm.
- 3) Make air connection to instrument with 1/4" tube or 1/4" pipe and test for leaks.
- 4) Set the linkage used for the stroke required, being sure actuator stops against the maximum and minimum stops and not on the linkage. The stroke distance is proportional between the two limits shown.
- 5) The spring setting, when shipped, covers a proportional band from 3 psig to 15 psig. The setting should not require field change.

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## TYPICAL INSTALLATIONS



## ORDERING INFORMATION

1. Specify quantity of PA-63 Pneumatic Actuators required.
2. Add catalog code letter "P" for Positioner factory installed. (PA 63-P)
3. Specify CPAP mounting package for a butterfly valve.

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