

Line Card

# Valve Positioners Line Card

Positioners, volume boosters,  
transducers and filter regulators

Valve positioners are devices that adjust the valve actuator's position based on a control signal. Siemens has a large family of conventional pneumatic positioners and accessories. These are field proven designs with decades of field service.

All positioners compare the control signal to the actuator position, and use full line pressure to move the actuator until the correct position is reached. Valve positioners are usually mounted on the yolk or top casing of a pneumatic actuator for linear control valves, or on the end of the shaft for rotary actuators. The actuator is connected to the positioner by a mechanical linkage or spring.

#### Positioners can improve your control process by:

- Ability to have fine control
- Increase speed of response
- Allow for split ranging (one controller for two valves)
- Overcome friction in actuators and valves
- Compensates for internal force imbalances in the control valve

## Valve Positioners

The model 73 built-in pneumatic valve positioner is a compact pneumatic valve positioner which incorporates a single-axis, force-balance principle of operation to ensure accurate and stable control valve positioning. In all cases, including bottom-loading applications, the model 73 positioner is mounted directly on the topwork of the valve, with no external levers or other exposed mechanisms.

### Model 73

- Top mounted
- Totally enclosed
- Direct or reverse acting
- Top or bottom loading
- Range spring selection accommodates wide variety of applications
- Applications include process control valves, adjustable pitch fans

The model 74 pneumatic valve positioners are universal positioners that provide versatility, dynamic performance, and high positioning accuracy. Supply pressure variations have little or no effect on the positioner output, which eliminates the need for a supply pressure regulator.

### Model 74

- Capable of handling very long stroke lengths up to 48 inches
- Suitable for long stroke actuators and air cylinders
- Single or double acting actuators
- Reduced gain unit for small actuators
- Linear or rotary actuators

The series 760 P/E valve positioners provide a cost effective, universal approach to your valve control. Their modular concept allows all models to be built on the base pneumatic unit (760P). The electro-pneumatic model (760E) is created by adapting an I/P transducer to the base and a wide range of accessories is easily installed inside the unit.

### Model 760

- Highly configurable
- Electric and pneumatic control signal
- Suitable for linear or rotary actuators
- NAMUR mounting standard
- FM/CSA/ATEX



Model 73

Model 74

Model 760

## Flow Volume Boosters

The series 61 booster relays reproduce pneumatic signals in a 1:1 ratio for applications where input isolation or increased flow capacity are required.

The 61H is a high-capacity booster relay designed to improve the stroking speed of large diaphragm valves.

The 61VH is a high-capacity booster relay designed for use on control valve actuators that require very fast stroking speeds

- Increases the flow from a valve positioner to move large actuators quickly
- Improves valve stroking speed
- High and very high flow capacities
- ¼ and ½ inch line sizes
- Built-in stability needle valve minimizes piping requirements



## I/P Transducers

The model 77 current-to-pneumatic transducer is designed specifically for measuring circuits, converts the output of an electronic measuring device to a pneumatic signal.

The model 771 current-to-pneumatic transducer is designed as a cost-effective valve service transducer. The 771 receives an electronic signal, such as the output of a PID control function, and drives a control valve via the transducer until the control function is satisfied.

- Extremely stable
- FM/CSA
- NEMA construction
- Standard and booster output options
- Converts electronic control signals to pneumatic



Model 771

## Filter Regulator

The model 91-HF filter-regulator is designed to provide clean, accurate air pressure to instruments, valves, and other automatic control equipment. The filter regulator has been proven to provide long lasting corrosion resistance in harsh industrial environments.

- 3 micron filter
- Provides clean, accurate air pressure to positioners and other pneumatic control equipment
- Replaceable filter element



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