Series 79P PST-101 Pneumatic Positioner

Specifications

Input Signal: 3-15psi
Supply Air Pressure: 60 to 100psi
Air Consumption: 0.4 CFM @ 60psi
Linearity: 2% of Span
Hysteresis: 1% of Span
Repeatability: 0.5% of Span
Conduit Entry: 1/2" NPT

Standard Features

- Simple calibration of positioner with independent zero and span
- Short and precise response time
- Type 4X rated enclosure
- Corrosion resistant polyester powder coated enclosure
- Stainless steel trim
- Low air consumption
- Pressure gauges
- 1/4" NPT air connection
- Can operate in high vibration environments
- Reverse acting capability
- Temperature limit of 185° F

Options

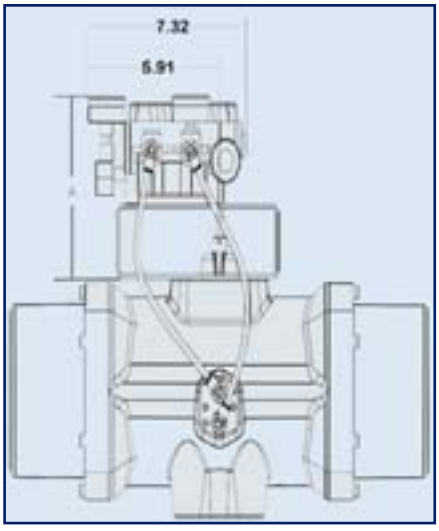
- Two SPDT mechanical switches
- Two SPST inductive switches
- Hart capability
- 4-20 mA transmitter

Sample Specification

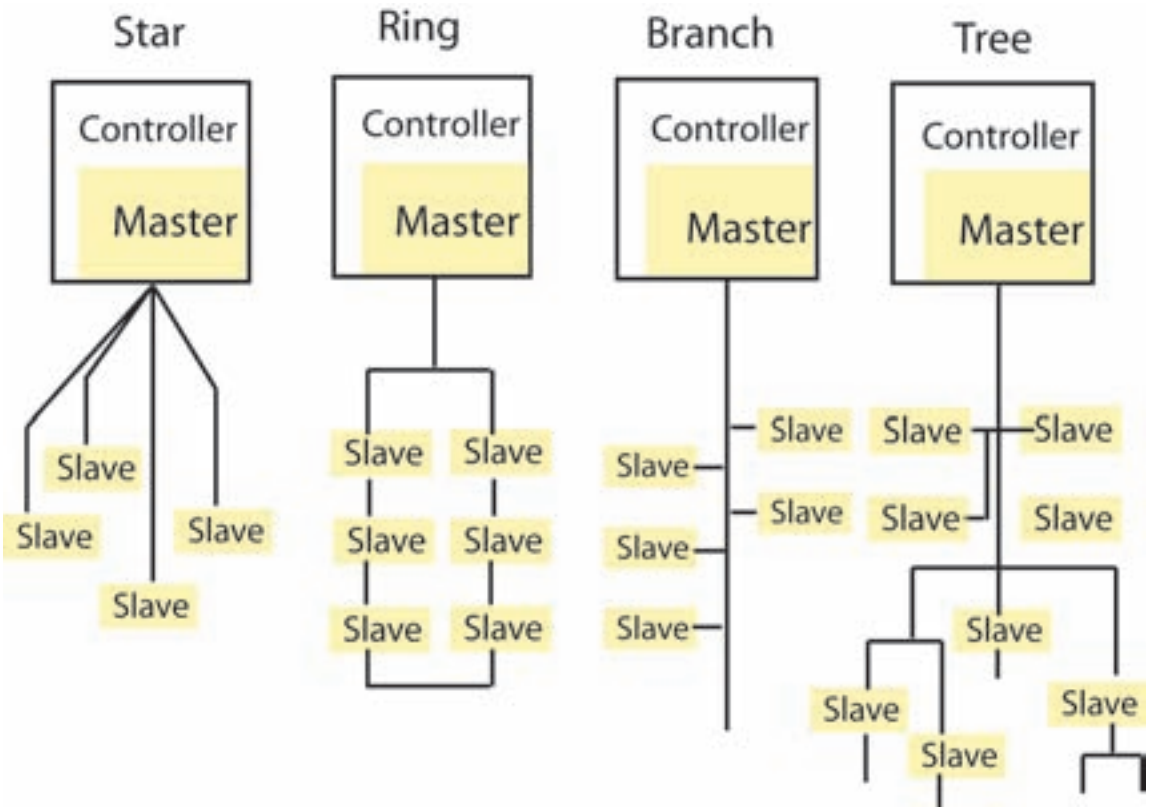
All PST- 101 modulating valves shall be equipped with the PST-101 pneumatic positioner. Positioner housing shall be polyester powder coated rated Type 4X, with stainless steel shaft and hardware, and visual position indication. Positioner shall be capable of operating in high vibration environments with short and precise response time, equipped with pressure gauges, and be a low air consumption, unit as supplied by Asahi/ America, Inc.

Dimensions (in.)

Actuator	A
A79P	5.04
B79P	5.43
B579P	5.43
C79P	5.43
C579P	5.43
D79P	5.43
D579P	5.43
E79P	5.43
F79P	6.22
G79P	6.22
L79P	6.22
M79P	6.22



AS-i Bus System



AS-i (actuator sensor interface) offers many of the benefits of more complex and costly bus systems, but does it at a substantially lower cost and with greater simplicity. The AS-i is ideally suited for controlling valves, actuators and many other field devices in your processing application. This interface can be used for stand-alone process control, or it can be used together with a higher level bus control system. AS-i does not compete with higher level bus systems; it should be seen as a complimentary system that offers low cost, reliable device control for binary and analog devices. Reliability, simplicity and interoperability make AS-i a cost effective connection/control solution, particularly where low installation costs are imperative. A pair of wires, which handles power and communications, is used to control the network by means of "chaining" the actuators with the PLC. Each actuator (or device) will then have its own unique address within the system and only that device with the proper address will respond to system commands. AS-i is best known for its yellow flat cable, which is pierced by insulation displacement connectors so that the expense of tees and complex connectors is avoided. Devices are simply clamped onto the cable. Digital signals are encoded on this cable in a sinusoidal signal, which has a very narrow frequency bandwidth. Filtering, which is distributed through the network, rejects all extraneous frequencies, and, in this way, AS-i can be operated in electrically noisy environments without experiencing transmission errors. The yellow flat cable carries low current (30 VDC) for input devices as well as the AS-i signal. If power for outputs (such as energizing relays) is required, an additional black flat cable is available. Standard networking is capable of 62 units with a distance up to 100 meters, and a cycle time of 5 ms. A maximum of 300 meters is achieved by installing repeaters. This system also responds well with products from other manufacturers, by installing a gateway to "translate" the commands of higher level networks. This allows an existing system to be expanded simply by using the AS-i networking system. There are various wiring structures that can be used with this system such as the star, the ring, the branch, and the tree, etc. All are practiced and acceptable, but the loop has a distinguished property; if there were a "break" in the network cable the units would still cycle and the master would detect the loss of a node. This feature is unique to the ring structure.