



**BrayLINE**  
ACCESSORIES

**SERIES 64**  
FOR DOUBLE-ACTING &  
SINGLE-ACTING ACTUATORS

**POSITIONERS**  
PNEUMATIC & ELECTRO-PNEUMATIC

# SERIES 64

## PNEUMATIC

The Brayline Series 64 Pneumatic Positioner has a standard input range of 3 to 15 psig. For proportional control of actuator and valve settings, the unit automatically positions the output shaft to precise angles between 0 and 90 degrees in response to a pneumatic input signal. The standard positioner is direct acting but it can easily be reversed with no additional

parts by simply turning the cam over and reversing the air connections to the actuator. The Series 64 remains unaffected by the vibrations of most pipelines. Used with double or single acting actuators, the Series 64 offers the best in reliable, economical valve position control.

This positioner is based on a force balanced feedback principle, has split range capabilities, and features span and zero adjustment.

Additional features include: a supply

air filter that eliminates dust and oil particle contamination and a single sensitive annular Buna-N diaphragm which permits greater sensitivity than positioners containing two or more diaphragms. The Stainless Steel spool valve is precisely machined and polished to reduce steady state air loss and therefore operating costs.

The Series 64 is unaffected by normal supply pressure fluctuations. Units are available with or without air pressure gauges.



## POSITION INDICATION & POSITIONER HOUSING

A highly visible pointer locally signals exact position of the final control element. The pointer is enclosed by a rugged clear polycarbonate cover which fully protects the positioner from harsh environments. All components are enclosed, external springs are not required. The housing body is anodized aluminum. Additionally, a conveyed discharge creates a slight purging pressure inside the positioner housing. This pressure prevents dust, humidity or gas from entering the unit.

## SPECIAL CAMS

Special Cams for non-standard ranges may be modified by the factory or customer.

## MOUNTING TO BRAY PNEUMATIC ACTUATORS

The Series 64 and Bray actuators both comply with VDI/VDE 3845 (NAMUR recommendations.)

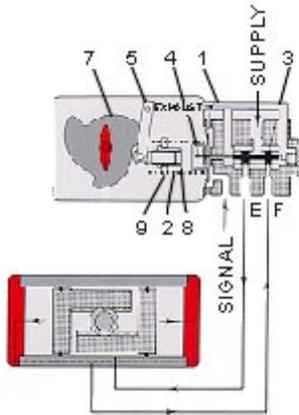
Please consult Bray factory or representatives for positioner dimensions and further technical information.



# SPECIFICATIONS

## SERIES 64 OPERATION

The positioner consists of a diaphragm (1) exposed to the signal pressure of a feed-back spring (2) of a double acting spool valve (3) connected to the diaphragm through the rod (4). An increase of signal pressure on the diaphragm stretches the feedback spring thus causing the displacement of the spool valve and consequently of the piston in the actuator (6). The shaft rotation is transmitted to the feedback spring through the cam (7) and the lever (5), thus balancing the signal pressure on the diaphragm. The actuator position only as long as the feedback spring's force is equal to the air signal force on the diaphragm. The spool valve is then in a neutral position. The position of the actuator is determined by the signal pressure and by the shape of the cam. A decrease in signal pressure reverses the above sequence.



## CALIBRATION

- **Reversal** can be obtained simply by turning the cam over and reversing the air connections to the actuator.
- **Zero Adjustment** is carried out by setting of the nut (8), which determines the pre-loading of the feedback spring.
- **Range Adjustment** is carried out by setting the screw (9) to alter the number of the spring's turns.

	<b>Pneumatic Positioner</b>
Supply Pressure [Max]	30-100psi [150psi] (2-8bar [10bar])
Air Consumption (80psi)	.73 scfm Single Acting .73 scfm Double Acting
<i>Input Signal</i>	
Single Range	3-15psi (0.2-1 bar)
Split Range	3-9psi (.2-.6 bar) 9-15psi (.6-1 bar)
<i>Connections</i>	
Supply	1/4" NPT or BSP
Signal	1/8" NPT or BSP
Sensitivity	0.1%
Hysteresis	1.5%
Linearity / Non-Linearity	1.0%
Temperature Range	-5°F (-20°C) to +160°F (+70°C)
Weight	4 lbs.
Control Element Type	Spool and Sleeve

## MATERIALS

	<b>PNEUMATIC POSITIONER</b>
Housing	Anodized Aluminum
Cover	Polycarbonate
Spool / Cam System	Stainless Steel
Diaphragm	Buna-N

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# **Bray** CONTROLS

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