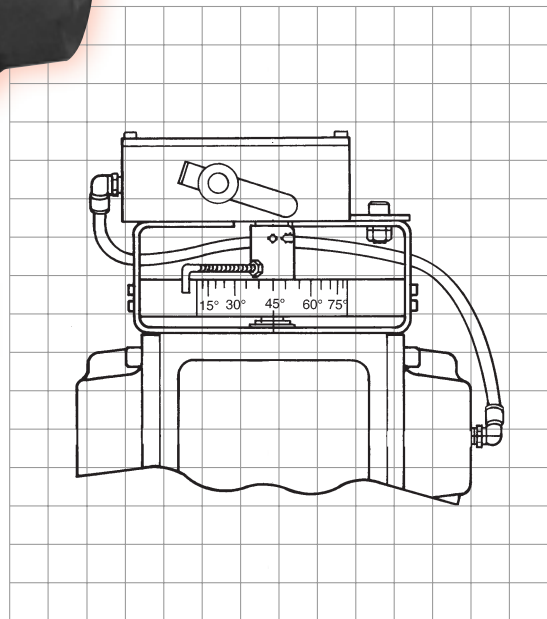


AN ISO 9001 REGISTERED COMPANY



PM15 Pneumatic Positioners

Compact, cost effective pneumatic and electro-pneumatic positioners for precise control of rotary devices

The Series PM15 Positioner

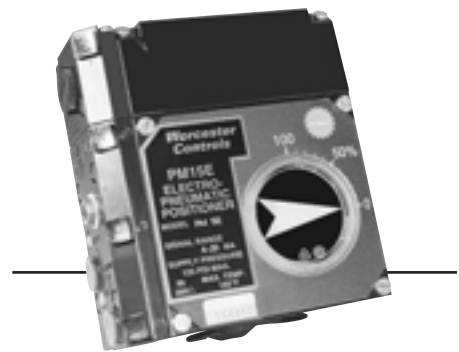
Common features:

- Simple and rugged case and internal mechanism.
- Ease of servicing and calibration.
- Low air consumption.
- High air delivery capacity.
- High contrast position indication.
- Cam characteristic capability.
- Split range capability.
- Direct or reverse acting.
- Compact modular construction.

PM15

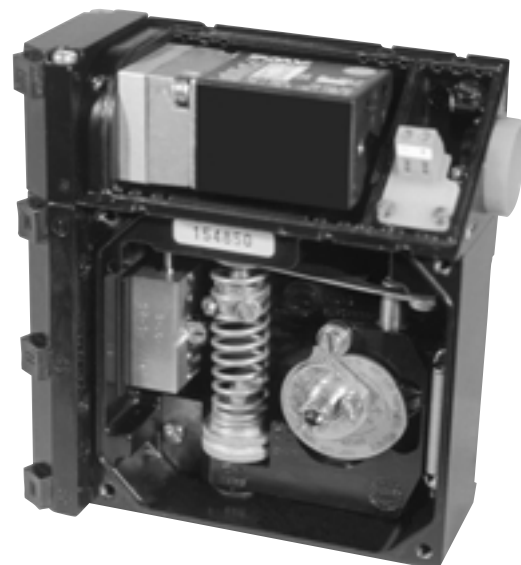
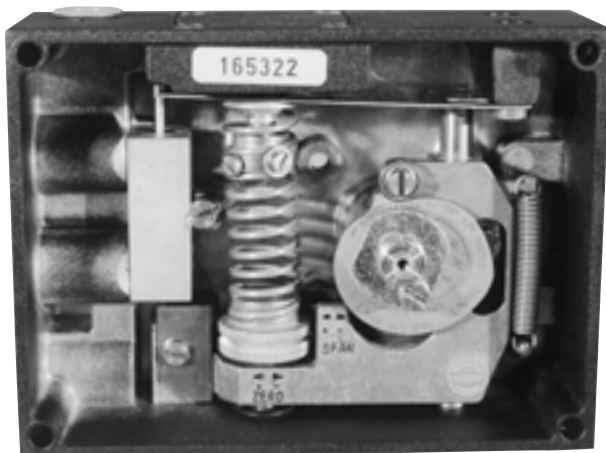


PM15E



Worcester's PM15 Positioner is specifically designed to provide precise quarter turn positioning for both double acting and single acting actuators. The dual capability provides installation flexibility, allows field change-over, plus offers the ability to standardize on one positioner for all your requirements. Accepting a 3-15 psi (or 3-9, 9-15 split range) signal, a sealed diaphragm transfers the signal pressure to the force balancing arm insuring greater sensitivity and durability. The PM15 accepts up to 120 psi supply pressure.

The PM15E Positioner provides the missing link between electronic analog instrumentation and quarter turn pneumatic actuators. Capable of receiving a 4-20mA D.C. input signal, it acts as an integrated I/P converter, amplifier and position controller suitable for the positioning of double acting or spring return (single acting) pneumatic actuators. This rugged but simple positioner employs a spool valve and voice coil type I/P converter to provide precise electro-pneumatic positioning. Split ranging precision, as well as easy calibration are also featured by its unique design.



Specifications

Supply Pressure - 40-120 psig

Air Requirements - supply air shall be clean, dry and free from oil, water and debris. Air to have a dew point at least 10°C (18°F) below ambient temperature. A <30µ filter/regulator is recommended.

Air Consumption - steady state air consumption at 80 psig supply
.71 SCFM max. (PM15)
.78 SCFM max. (PM15E)

Air Flow (Supply) capacity - 12.6 SCFM (PM15 / PM15E)

Input Signal Ranges PM15 - 3-15 psig - standard. Split range also available: 3-9 psig or 9-15 psig.

Input Signal Ranges PM15E - 4-20 mA D.C. -standard. Split range also available: 4-12 mA or 12-20 mA D.C.

Standard Characteristics - Linear, other characteristics available, consult Worcester Controls.

Hysteresis - the maximum difference in position for a given input signal during a full range traverse in each direction.
0.5% of input span (PM15)
1% of input span (PM15E)

Independent Linearity - the maximum deviation of the actual characteristic from a straight line so positioned as to minimize the maximum deviation.

0.5% of input span

(PM15)

0.75% of input span

(PM15E)

Repeatability - the closeness of agreement among a number of consecutive measurements of valve position for the same value of input, approaching from the same direction, for full range transverse 0.5% of input span

Temperature limits

- 5°F to 185°F

-15°C to 85°C

Operation - direct or reverse acting.

Calibration - easily accessible independent zero and range adjustments.

Housing - aluminum alloy -black anodized.

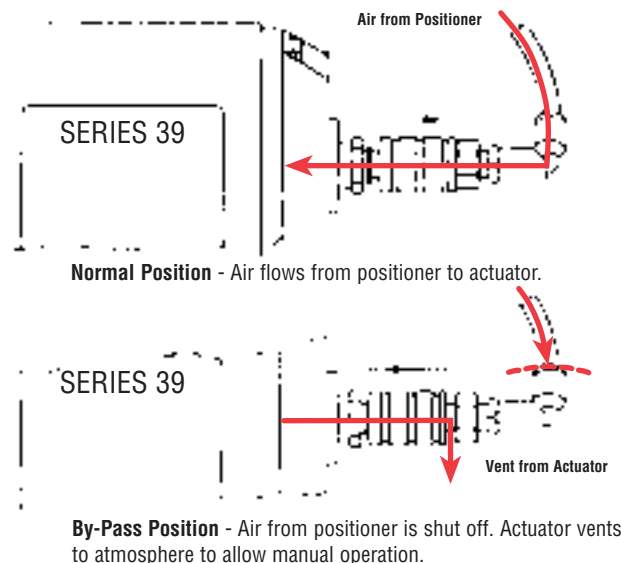
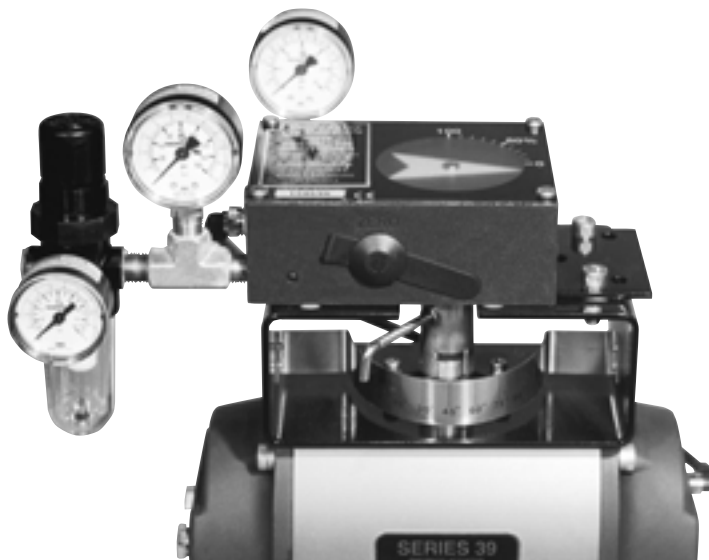
Optional Accessories

Gauges - Air supply pressure and instrument signal pressure gauges at the positioner will aid in calibration. Available as a standard option.

Filter Regulator - When used on the air supply port, the filter regulator will extract dust or other particles in the air, extending the life and efficiency of the positioner.

Special Cams - For other than standard characteristics or different split range capability, special cams can be made available, consult Worcester Controls.

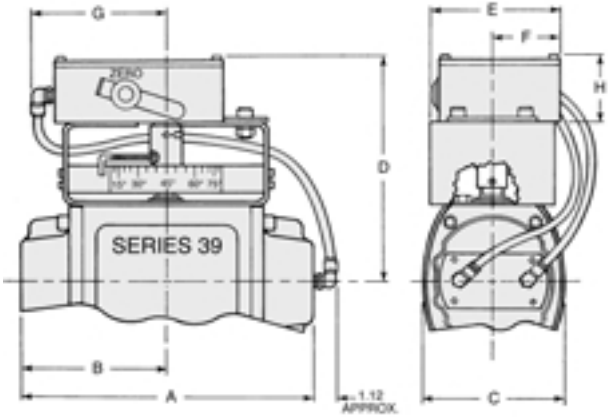
By-Pass Valve - When installed in air line between positioner and actuator, the valve will vent the actuator allowing manual override.



Dimensions - inches (mm)

Series 39 Pneumatic Actuator

Dim.	Actuator Size									
	1039	1539	2039	2539	3039	3339	3539	4039	4239	4539
A	6.10 (155)	7.66 (195)	9.24 (235)	10.62 (270)	12.77 (324)	15.64 (397)	16.62 (422)	20.02 (509)	24.24 (616)	22.87 (581)
B	3.02 (77)	3.83 (97)	4.57 (116)	5.31 (135)	6.39 (162)	7.82 (199)	8.31 (211)	10.01 (254)	12.12 (308)	11.43 (290)
C	3.02 (77)	3.70 (94)	4.57 (116)	5.34 (136)	6.10 (155)	8.11 (206)	8.34 (212)	9.64 (245)	11.14 (283)	13.19 (335)



PM15 Single Acting and Double Acting Positioner

D	6.42 (163)	6.78 (172)	7.19 (183)	7.69 (195)	8.78 (223)	10.05 (255)	10.10 (257)	10.83 (275)	11.93 (303)	12.92 (328)
E	←				4.17 (106)	→				
F	←				2.17 (55.1)	→				
G	←				4.64 (118)	→				
H	←				2.10 (53.3)	→				

PM15E Electro-Pneumatic Positioner

D	6.62 (168)	6.98 (177)	7.39 (188)	7.89 (200)	8.98 (228)	10.25 (260)	10.30 (262)	11.03 (280)	12.13 (308)	13.12 (333)
E	←				5.90 (150)	→				
F	←				3.90 (99)	→				
G	←				4.64 (118)	→				
H	←				2.30 (58)	→				

Approx. Positioner Weight Lbs. (Kg)

PM15	2.1 (.95)
PM15 E	3.2 (1.4)

Connections (Air) Supply, Signal, Actuator

PM15	1/4" NPT
PM15 E	1/4" NPT 1/2" NPT CONDUIT

How To Order

Series	Style	Standard Options	Action	Input Signal
PM 15	Blank -Pneumatic Single or Double Acting	Blank -Without Options B Bypass Valve One only on PM15, Single Acting G - Gauges, Signal and Supply F - Filter Regulator	Blank -Direct Acting R -Reverse Acting	Blank 3-15 psi 3 3-9 psi split range 9 9-15 psi split range
	E -Electro-pneumatic Single or Double Acting	Blank -Without Options B Bypass Valve G - Gauge, Supply only F - Filter Regulator	Blank -Direct Acting R -Reverse Acting	Blank 4-20 mA 4 4-12 mA split range 12 12-20 mA split range

*Ordering Example: A PM15 pneumatic positioner, with a direct acting 3-9 psi split range signal, with signal and supply gauges.

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can (and often does) provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation Operation Maintenance (IOM) instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

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