

Sanitary Fluid Separation & Flow Metering Now Available in one High Performance Valve

New technology developed by **Resolution Air** allows the benefits of pinch valve fluid separation to be combined with proportional valve control for sanitary processes that require highly accurate incremental flow regulation where cleanliness and sterility is required. Previously, this could only be accomplished with a manually operated control valve. The newly developed Miniature Proportional Pinch Valve series has been engineered to meet the needs of the most challenging precision flow applications in industries such as bio-chemical, food and beverage, and healthcare.

Miniature Proportional Pinch Valve Design

The MPPV series design physically separates the valve from corrosive or high purity process fluids, while providing the incremental flow control offered in a conventional proportional valve. The MPPV pinches a fluid filled, pressurized, low durometer tube to regulate the flow of the liquid or gas through the tube. The design incorporates a stepper linear actuator and custom piston, which provide precision proportional control functioning in the valve. In addition, with the actuator's locking lead screw, power is only required when changing position.

Available in a variety of size configurations to meet a wide range of needs, Resolution Air Miniature Proportional Pinch Valves are ideally suited for use in portable and handheld equipment designed for analytical and diagnostic processes.

Resolution Air, Ltd. *Miniature Proportional Pinch Valves* offer unprecedented system design flexibility through this revolutionary new valve technology. Contact us today to discuss your application or to order an easy-to-install evaluation kit.



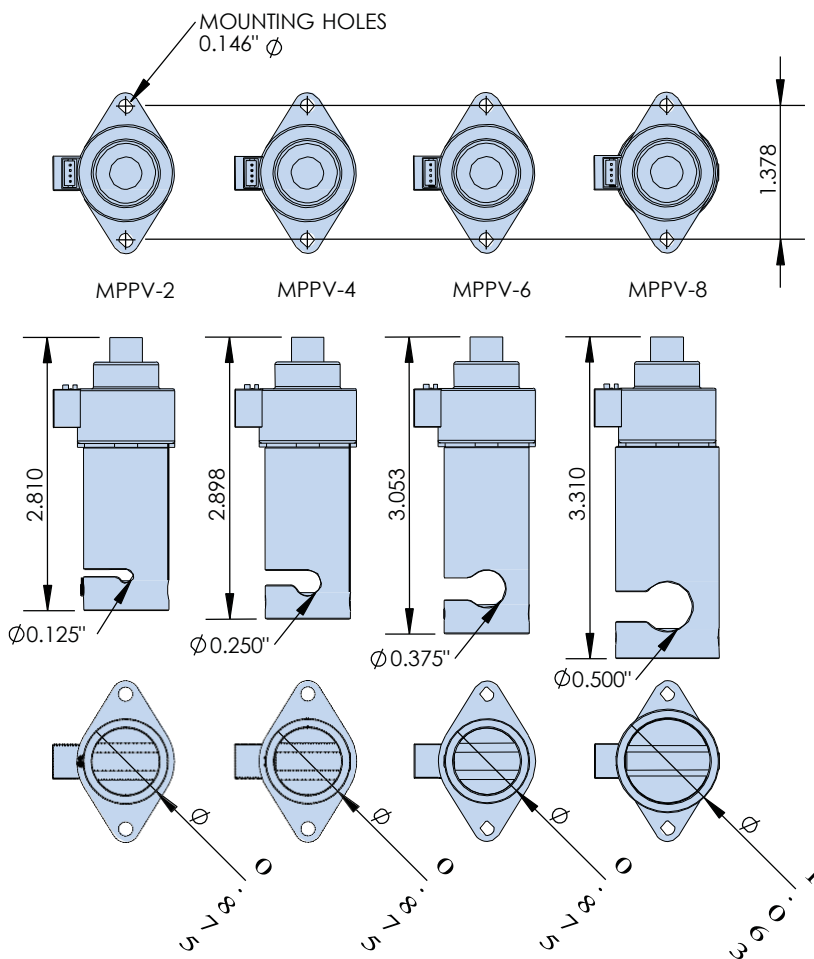
Miniature Proportional Pinch Valve Advantages

- Automated control
- No physical contact with process fluid
- High resolution flow control
- Automatically locks with power loss
- Durable construction
- Tested performance
- High repeatability
- Low power consumption
- No leakage
- Long performance life
- Cost efficiency
- Light weight, low profile design
- Superior corrosion resistance

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Applications for the Miniature Proportional Pinch Valve Series

- Chemical mixing / dispensing
- Dosage systems
- Lab analysis
- Clinical or chemical analysis
- Blood handling / analysis
- Vending machines



Performance Characteristics	
Standard Tube Sizes (O.D.)	1/8", 1/4", 3/8", 1/2"
Recommended Tubing Durometer	50-60 SHORE A
Max. Temp.	130 Degrees C
Motor Wiring	Bi-Polar
Power Consumption	3.85 Watts
Position Resolution	.0005"/step
Electrical Connection	Wiring Harness (included)
Driver Requirements	Bi-Polar Chopper Drive
Supply Voltage	12-40VDC Unregulated Power Supply
Home Switch (available option)	Digital output for full open position

	Tube Size O.D.	Max. Inline PSI	Travel Rate*	Valve Dimensions
MPPV-2	0.125"	100 PSI	.5 sec.	0.875 O.D. x 2.810" L
MPPV-4	0.250"	50 PSI	1 sec.	0.875 O.D. x 2.898" L
MPPV-6	0.375"	25 PSI	1.5 sec.	0.875 O.D. x 3.053" L
MPPV-8	0.500"	17 PSI	2 sec.	1.062 O.D. x 3.310" L

*full open to full close

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