



- Ranges from 200 to 10,000 PSI
- Pneumatic Control Applications
- Snap Acting 3-Way Valve
- High Cycle Life
- High Shock Applications



SHOWN WITH COVER REMOVED

GENERAL DESCRIPTION

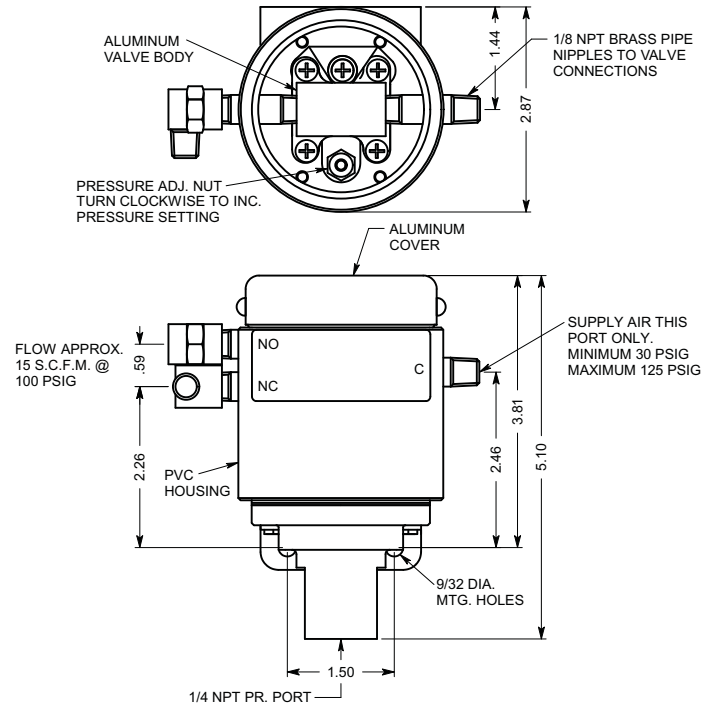
The Model Series 2PV-MVH Pressure Actuated Valve design combines a durable piston sensing element with a reliable, time-tested switch mechanism. The result is a cost effective valve that will perform in the most demanding high pressure and shock applications. High cycle life is attainable, regardless of the amount the pressure varies through the cycle. This is because there is no work hardening of a metal sensing element, such as with a diaphragm, bellows or bourdon tube.

The piston sensing element employs a carbide piston and a spring energized PTFE seal. This low-friction combination results in a switch that is capable of extremely high pressure ratings and cycle life with minimal seal wear and very consistent performance.

APPLICATIONS

Applications include high pressure, shock, and cycles which can cause premature failure of traditional pressure controls. It is immune to explosive decompression which can cause O-rings to fail in high pressure gas applications. Specifically designed for tough applications such as of hydraulic punch presses, injection molding machines, high pressure gas systems, etc.

MODEL SERIES 2PV-MVH Pressure Actuated Valve Piston Sensing Element



SPECIFICATIONS

PHYSICAL DATA (Standard)

-see page 2 for special features

Maximum Ambient Temperature: 180°F

Minimum Ambient Temperature: 0°F

Pressure Connection: 1/4 NPT

Housing: PVC

Deadband: Fixed

Weight: Approx. 2 lbs.

Port Material: Brass

Piston Material: Carbide - 90 Rc

Seal Material: PTFE based material

Set Point Adjustment: Screw type, field adjustable

Valve: Model LTV-5 Three Way Block-and-Bleed

Valve Connections: 1/8 NPT

Valve Flow Capacity: 15 SCFM at 100 PSI

Valve Pilot Pressure: 30 to 125 PSIG

Solon Manufacturing Company

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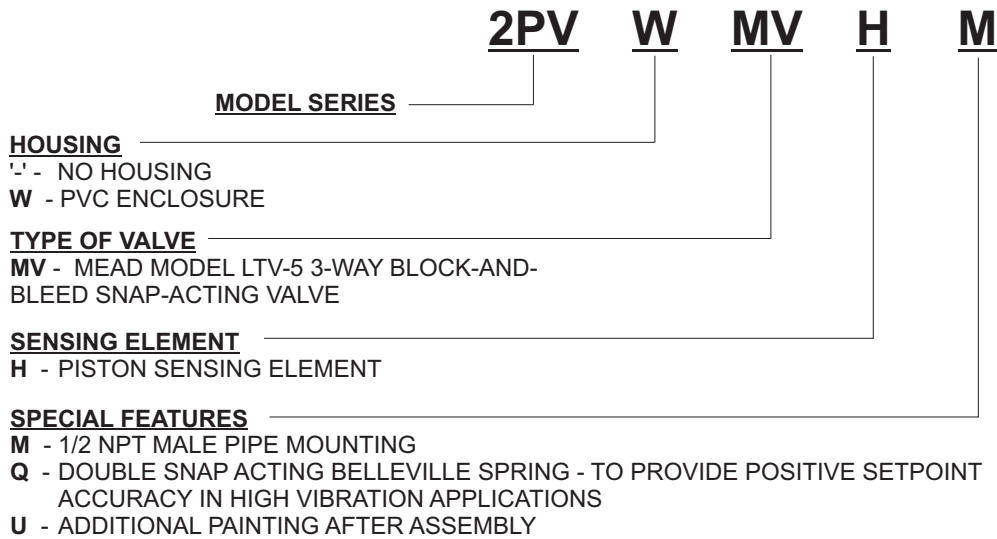
(440) 286-7149 800-323-9717 FAX (440) 286-9047

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ORDERING A SWITCH

MODEL SERIES 2PV-MVH Pressure Actuated Valve Piston Sensing Element

1. SPECIFY A MODEL NUMBER



2. SPECIFY A RANGE

3/16" PISTON

ADJUSTABLE PRESSURE RANGE	DEADBAND RANGE TYPE "2"	MAXIMUM SYSTEM PRESSURE
20-200 PSI	20-60 PSI	5000 PSI
50-500 PSI	40-90 PSI	5000 PSI
100-1000 PSI	80-150 PSI	5000 PSI
200-2000 PSI	150-200 PSI	5000 PSI
300-3000 PSI	170-210 PSI	5000 PSI
400-4000 PSI	180-220 PSI	5000 PSI

1/8" PISTON

ADJUSTABLE PRESSURE RANGE	DEADBAND RANGE TYPE "2"	MAXIMUM SYSTEM PRESSURE
250-2500 PSI	200-380 PSI	10000 PSI
450-4500 PSI	400-700 PSI	10000 PSI
700-7000 PSI	700-850 PSI	10000 PSI

INSTALLATION NOTES

Orientation - The 2PV-MVH will operate satisfactorily in any position, however, mounting the device vertically will allow the easiest adjustability and reduce sediment in the pressure chamber.

Valve Connections - Valve port connections are 1/8 NPT and are marked C, NO, NC. Pilot pressure should be supplied at the common (C) port. Minimum 30 PSI is required to operate valve.

Pressure Connection - 1/4 NPT female is standard. 1/2 NPT male is available ("M" option).

Adjustment - Turn pressure adjustment nut(s) clockwise to increase setpoint. Detailed installation & calibration instructions are provided for every shipment. Factory setting is available at no charge.

DEADBAND NOTES

The deadbands listed in the tables are the nominal valve differentials when the valve is operated at 100 PSIG. Deadbands are decreased as pilot pressure is reduced. Contact factory for more detailed information on deadbands.

Valve Schematic

