# **MV 3-Way Switches**



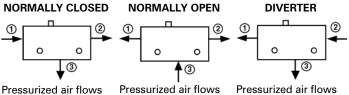
\* For <sup>15</sup>/<sub>32</sub>" panel openings; <sup>15</sup>/<sub>32</sub>-32 UNS

Mead's MV air switches are 3-way 1/8" ported air pilot valves that are identical in size, actuating style, and mounting characteristics to most industrial type electric limit switches. Use them in place of electric limits to save on hookup cost and eliminate spark hazard. MV valves simplify circuits by eliminating the need for wire shielding, transformers, and solenoids.

General Specifications	
Pressure Range:	Vacuum to 120 PSI
Media:	Air or Inert Gas
Flow:	0.11 C <sub>v</sub>
Flow at 100 PSI:	6 SCFM
Ports:	<sup>1</sup> / <sub>8</sub> ″ NPT
Cycle Life:	7-10 million
Force to Actuate:	As Low as 6.4 Ounces
Max. Ambient Temp.:	115°F
Lubrication:	Not Required
Filtration:	40 Micron
Seals:	Viton
Spool:	Dupont Teflon <sup>®</sup>
Body:	Cast Zinc

The MV air switch may be piped normally closed, normally open, or as a diverter. These alternatives are described in detail below.

NORMALLY OPEN NORMALLY CLOSED



from 1 to 2 when button is pushed.

Exhaust air flows from 2 to 3 when button is released.

from 3 to 2 when button is not pushed.

Exhaust air flows from 2 to 1 when button is pressed.

Pressurized air flows from 2 to 1 when button is pushed.

Pressurized air flows from 2 to 3 when button is released. This hookup does not provide for exhaust.

#### Perform "AND" Logic Function With MV-60

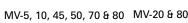


This hookup provides that flow will occur at C only when air signals are received at A and B. The MV-60 is a 3-way air piloted valve.

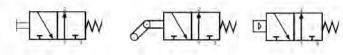
# Add Push to Connect 1/4" Fittings



MV valves are available with 1/4" brass push to connect fittings. The valve will be provided with a fitting for the inlet, outlet and the exhausts ports. Any MV valve may utilize this option. The valve's body height increases by 5/16" and the mounting holes are 0.532" apart.



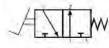
Valve Symbols



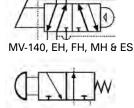
MV-15, 25, 30, 40 & 75



2060280 & 2060400



**MV-75** 



**MV-80** 

MV-35 & TP

MV-60



MV-85 (Lever 6" long)



MV-MH<sup>‡</sup>

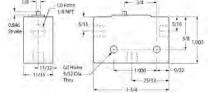
\* For <sup>15</sup>/<sub>32</sub>" panel openings; <sup>15</sup>/<sub>32</sub>-32 UNS

**MV 3-Way Switches** 

## **Control Valves**



### **Basic Valve Dimensions**



valves are shown in the chart below.

Envelope dimensions of

Act. Stroke Act. Force Distance lbs. @ Envelope 100 PSI Dimensions Ove Crack Full Model Actuator NC NO Open Trave Len. Wid. Hgt. Oper <sup>11</sup>/<sub>16</sub> MV-5  $1^{3}/_{4}$ Pin Plunger .035 2.5 3.3 .035 .046 1 2 <sup>3</sup>/<sub>16</sub> <sup>11</sup>/<sub>16</sub> 1 <sup>1</sup>/<sub>4</sub> **MV-10** Straight Leaf .100 .137 .079 1.2 1.5 2<sup>3</sup>/<sub>16</sub> <sup>11</sup>/<sub>16</sub> 1<sup>5</sup>/<sub>8</sub> MV-15 Steel Roller 1.0 1.3 .100 .137 .079 MV-20 1-Way Roller Leaf 1.3 .100 .079 2<sup>3</sup>/<sub>16</sub> <sup>11</sup>/<sub>16</sub> 2<sup>1</sup>/<sub>16</sub> .137 1.0  $^{11}/_{16}$  2  $^{3}/_{16}$ .046  $1^{3}/_{4}$ MV-25 **Roller Plunger** 2.8 .035 .155 3.5  $^{11}/_{16}$  2  $^{3}/_{16}$ MV-30 Cross Roller 2.8 3.5 .035 .046 .155  $1^{3}/_{4}$  $^{11}/_{16}$  2  $^{5}/_{16}$ MV-35 Flip Toggle 2.3 35° 35° 35°  $1^{3}/_{4}$ 1.5 <sup>11</sup>/<sub>16</sub> 1 <sup>19</sup>/<sub>32</sub> MV-40 Ball Roller 2.5 3.3 .035 .046 .035  $1^{3}/_{4}$ MV-45 Straight Plunger 2.5 3.3 .035 .046 .155  $1^{3}/_{4}$ <sup>11</sup>/<sub>16</sub> 1 <sup>29</sup>/<sub>32</sub> <sup>11</sup>/<sub>16</sub> 1 <sup>3</sup>/<sub>8</sub> MV-50 .079 **Fingertip Lever** 1.0 1.3 .100 .137  $2^{5}/_{8}$ <sup>11</sup>/<sub>16</sub> 1 <sup>5</sup>/<sub>8</sub> MV-60 **Pressure Piloted** 40\* 40\*  $1^{3}/_{4}$ --<sup>11</sup>/<sub>16</sub> 1 <sup>9</sup>/<sub>16</sub> MV-70 Extended Leaf 0.7 1.0 .255 .315 .195  $4^{1}/_{2}$ 1 <sup>3</sup>/<sub>4</sub> 3 <sup>7</sup>/<sub>16</sub> MV-75 HD Roller Leaf 2.8 3.5 .093 .119 .129  $2^{1/4}$ HD 1-Way Roller 2.8 2 <sup>1</sup>/<sub>8</sub> 1<sup>3</sup>/<sub>4</sub> 4<sup>1</sup>/<sub>8</sub> MV-80 3.5 .093 .119 .129 6<sup>1</sup>/<sub>4</sub> 1<sup>3</sup>/<sub>4</sub> 3<sup>1</sup>/<sub>8</sub> HD Extended Rod .782 .330 MV-85 0.4 0.6 .637 2<sup>3</sup>/<sub>16</sub> <sup>11</sup>/<sub>16</sub> 1<sup>5</sup>/<sub>8</sub> MV-90 Nylon Roller 1.0 1.3 .100 .137 .079 1<sup>3</sup>/<sub>4</sub> 1<sup>3</sup>/<sub>8</sub> 2<sup>1</sup>/<sub>4</sub> MV-140 Palm Actuator 2.5 3.3 MV-MH Mushroom Head 1<sup>3</sup>/<sub>4</sub> 1<sup>1</sup>/<sub>2</sub> 2<sup>5</sup>/<sub>8</sub> \_ \_ MV-TP **Two Position** -1<sup>3</sup>/<sub>4</sub> 1<sup>1</sup>/<sub>2</sub> 3<sup>1</sup>/<sub>32</sub> --MV-FH Flush Head  $1\frac{3}{4}$   $1\frac{1}{2}$   $2\frac{7}{32}$ MV-EH Extended Head  $1\frac{3}{4}$   $1\frac{1}{2}\frac{2^{13}}{32}$ ---2<sup>1</sup>/<sub>2</sub> 2<sup>1</sup>/<sub>2</sub> 2<sup>7</sup>/<sub>8</sub> MV-ES **Emergency Stop** -----1<sup>3</sup>/<sub>4</sub> 1<sup>5</sup>/<sub>8</sub> 3<sup>1</sup>/<sub>4</sub> **MV-EMS** Emergency Stop --\_ --

NO=Normally Open, NC= Normally Closed

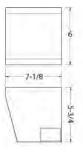
\* For 15/32" panel openings; 15/32-32 UNS

Model #2060400



#### Model #2060400G (Guarded)





NOTE: 2060400 and 2060400G are provided with push to connect fittings as the C4 option (described on opposite page). For Normally Open applications or where all ports are needed, specify either 2060400-C5 or 2060400G-C5.

MV-ES<sup>‡</sup> MV-EMS MV-FH (Button Flush)‡ **MV-EH** (Button <sup>5</sup>/16" Up)<sup>‡</sup> **MV-TP**<sup>‡</sup> Red & Spring Return Only Red & Manual Only

<sup>‡</sup> For 1 <sup>3</sup>/<sub>16</sub>" panel opening

\* PSI;

Specify Red, Green or Black

Specify Red, Green or Black

