



# 4-WAY STEM VALVES

## 4-Way Stem Valves

4-way valves can supply and exhaust two different outlets, and are commonly used with double-acting cylinders. When the stem is in one position air flows from the inlet to one of the outlets. The second outlet is open to the exhaust port. Moving the stem to the opposite position opens the inlet to the second

outlet while exhausting the first outlet. 4-way stem valves are spool valves that may either be spring return or double acting.

**Medium:** Air

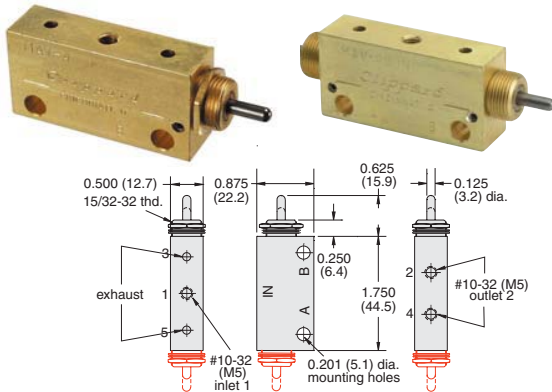
**Stem Travel:** 1/8" (3.2)

**Materials:** Brass body, Buna-N seals, stainless steel stem and spring

**Input Pressure:** 150 psig/10 bar max.

**Mounting:** 15/32-32 thread. Nut and lockwasher furnished.

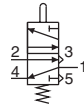
### Miniature 4-Way Spool Valves



**Air Flow:** 5.0 scfm @ 50 psig; 8.5 scfm @ 100 psig; 240 l/min @ 6 bar

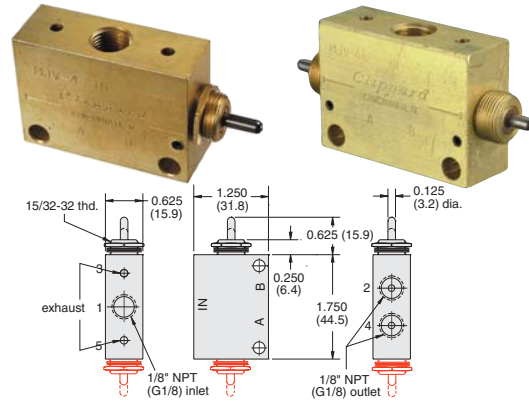
**Force For Full Stem Travel:** MAV-4 - 38 oz. nominal; MAV-4D - 12 oz. nominal

**Mounting:** Also two 0.201" dia. mounting holes in valve body.



Part No.	Description
MAV-4	Spool Valve with Spring Return, #10-32
MAV-4-M5	Spool Valve with Spring Return, M5
MAV-4D	2 Position Spool Valve, #10-32
MAV-4D-M5	2 Position Spool Valve, M5

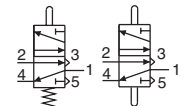
### J-Series 4-Way Spool Valves



**Air Flow:** 8.0 scfm @ 50 psig; 14.0 scfm @ 100 psig; 390 l/min @ 6 bar

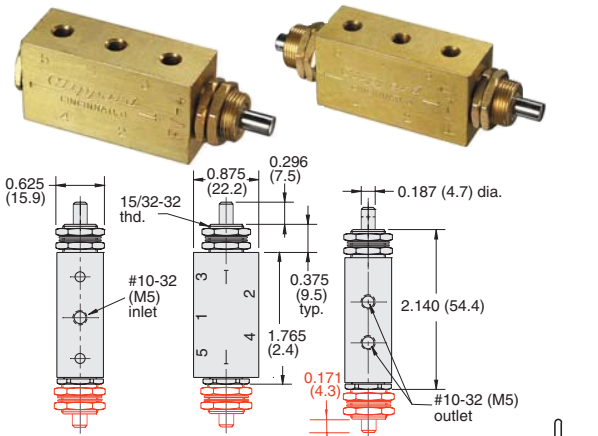
**Force For Full Stem Travel:** MAV-4 - 38 oz. nominal; MAV-4D - 12 oz. nominal

**Mounting:** Also two 0.201" dia. mounting holes in valve body.



Part No.	Description
MJV-4	Spool Valve with Spring Return, 1/8" NPT
MJV-4-MG	Spool Valve with Spring Return, G1/8
MJV-4D	2 Position Spool Valve, 1/8" NPT
MJV-4D-MG	2 Position Spool Valve, G1/8

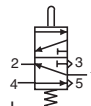
### FV-Series 4-Way Spool Valves



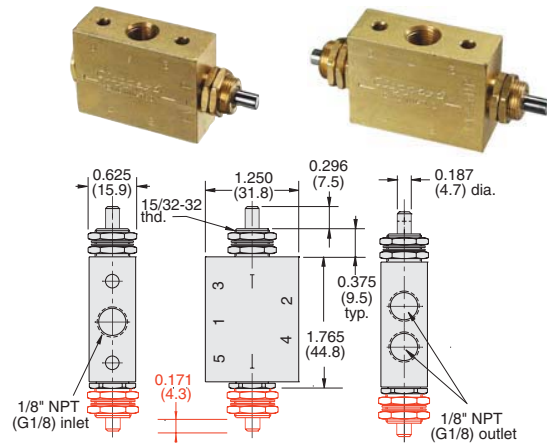
**Air Flow:** 6.0 scfm @ 50 psig; 10 scfm @ 100 psig; 240 l/min @ 6 bar

**Force For Full Stem Travel:** FV-4 & FV-4-M5 - 4 1/2 lb. nominal; FV-4P & FV-4P-M5 - 1 1/2 lb. nominal

Part No.	Description
FV-4	Plunger Actuated Spring Return Valve, #10-32
FV-4-M5	Plunger Actuated Spring Return Valve, M5
FV-4D	2 Position Double Plunger Valve, #10-32
FV-4D-M5	2 Position Double Plunger Valve, M5



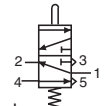
### FV-Series 4-Way Spool Valves



**Air Flow:** 6.5 scfm @ 50 psig; 10 scfm @ 100 psig; 250 l/min @ 6 bar

**Force For Full Stem Travel:** FV-4P & FV-4-MG - 4 1/2 lb. nominal; FV-4DP & FV-4D-MG - 1 1/2 lb. nominal

Part No.	Description
FV-4P	Plunger Actuated Spring Return Valve, 1/8" NPT
FV-4-MG	Plunger Actuated Spring Return Valve, G1/8
FV-4DP	2 Position Double Plunger Valve, 1/8" NPT
FV-4D-MG	2 Position Double Plunger Valve, G1/8



# 4-WAY FULLY-PORTED STEM VALVES

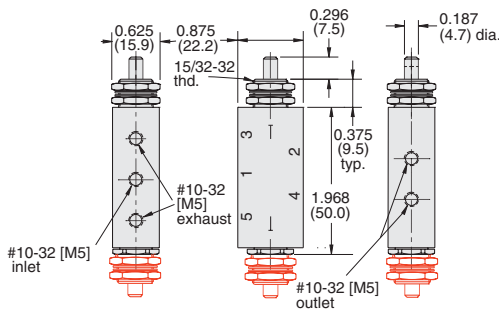
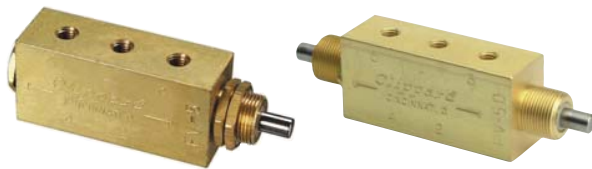


## 4-Way Fully-Ported Stem Valves

4-way fully-ported valves have two inlets, two

outlets and one exhaust port. When the stem is in one position air flows from one inlet to its outlet while the other inlet is blocked. Moving the stem to the opposite position reverses this action. This may be defined as two 3-way valves, one Normally-Closed and one Normally-Open operating simultaneously. 4-way fully ported stem valves may either be spring return or double acting. A double acting stem must be moved from one position to the other, a spring return stem will move to the opposite position when released.

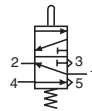
### 4-Way Fully-Ported Valves



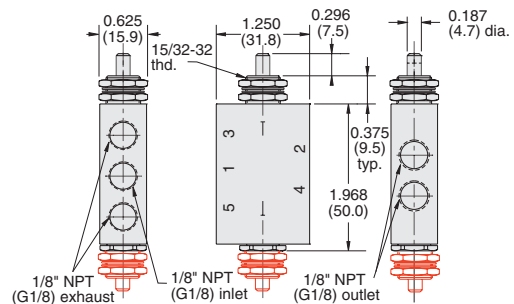
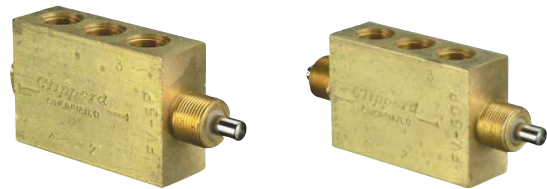
**Medium:** Air or Oil

**Air Flow:** 6.0 scfm @ 50 psig; 10 scfm @ 100 psig;  
240 l/min @ 6 bar

**Force For Full Stem Travel:** FV-5 & FV-5-M5 - 4 1/2 lb. nominal;  
FV-5D & FV-5D-M5 - 1 1/2 lb. nominal



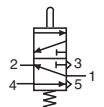
### 4-Way Fully-Ported Valves



**Medium:** Air or Oil

**Air Flow:** 6.5 scfm @ 50 psig; 10.5 scfm @ 100 psig;  
250 l/min @ 6 bar

**Force For Full Stem Travel:** FV-5P & FV-5-MG - 4 1/2 lb. nominal;  
FV-5DP & FV-5D-MG - 1 1/2 lb. nominal



Part No.	Description
FV-5	Plunger Actuated Spring Return Valve, #10-32
FV-5-M5	Plunger Actuated Spring Return Valve, M5
FV-5D	2 Position Double Plunger Valve, #10-32
FV-5D-M5	2 Position Double Plunger Valve, M5

Part No.	Description
FV-5P	Plunger Actuated Spring Return Valve, 1/8" NPT
FV-5-MG	Plunger Actuated Spring Return Valve, G1/8
FV-5DP	2 Position Double Plunger Valve, 1/8" NPT
FV-5D-MG	2 Position Double Plunger Valve, G1/8

## Flow Paths for "FTV & FV" Series

Solid lines indicate flow paths with toggle or stem in one direction. Dotted lines indicate flow paths when the toggle or stem are shifted.

