

# 4-WAY TOGGLE VALVES



## 4-Way Toggle Valves

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

while exhausting the first outlet. 4-way toggle valves are spool valves that by movement of the toggle may either be 2-position or have a momentary actuation.

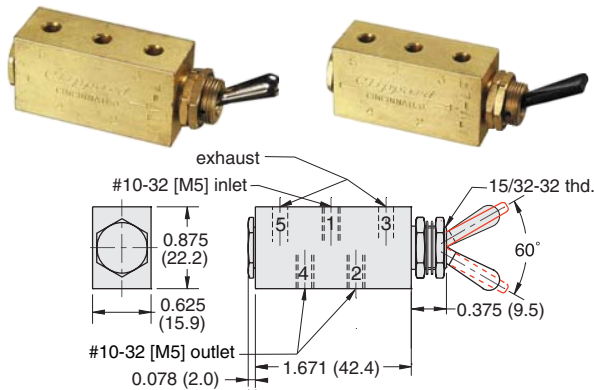
**Medium:** Air

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

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

**Mounting:** 15/32-32 thread. Nuts and lockwashers furnished.

### 2 Position Spool Valves



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

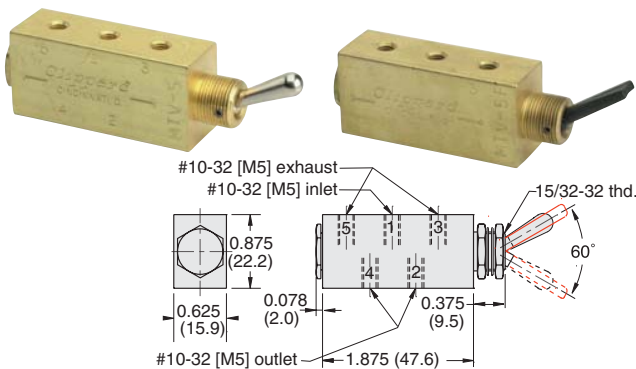
**Air Flow:** 6 scfm @ 50 psig; 10 scfm @ 100 psig;  
240 l/min @ 6 bar

**Force For Full Stem Travel:** 12 oz. nominal



Part No.	Description
MTV-4	2 Position Spool Valve, NP Steel Toggle, #10-32
MTV-4-M5	2 Position Spool Valve, NP Steel Toggle, M5
MTV-4F	2 Position Spool Valve, Plastic Toggle, #10-32
MTV-4F-M5	2 Position Spool Valve, Plastic Toggle, M5

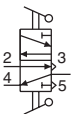
### 2 Position Fully-Ported Spool Valves



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

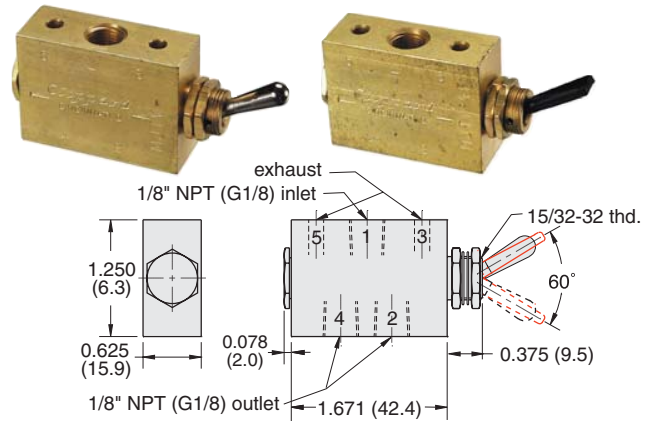
**Air Flow:** 6 scfm @ 50 psig; 10 scfm @ 100 psig;  
240 l/min @ 6 bar

**Force For Full Stem Travel:** 16 oz. nominal



Part No.	Description
MTV-5	2 Position Spool Valve, NP Steel Toggle, #10-32
MTV-5-M5	2 Position Spool Valve, NP Steel Toggle, M5
MTV-5F	2 Position Spool Valve, Plastic Toggle, #10-32
MTV-5F-M5	2 Position Spool Valve, Plastic Toggle, M5

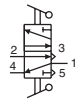
### J-Series 2 Position Spool Valves



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

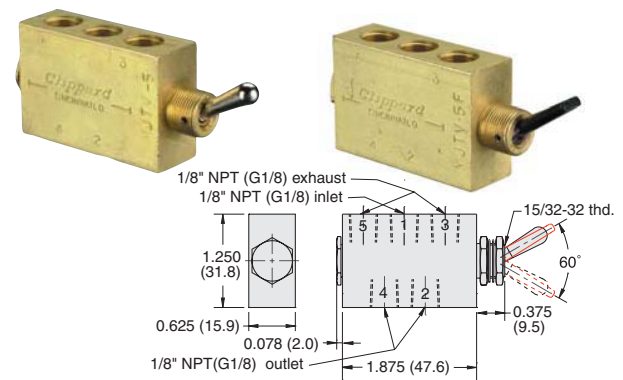
**Air Flow:** 6.5 scfm @ 50 psig; 10.5 scfm @ 100 psig;  
250 l/min @ 6 bar

**Force For Full Stem Travel:** 12 oz. nominal



Part No.	Description
MJTV-4	2 Position Spool Valve, NP Steel Toggle, 1/8" NPT
MJTV-4-MG	2 Position Spool Valve, NP Steel Toggle, G1/8
MJTV-4F	2 Position Spool Valve, Plastic Toggle, 1/8" NPT
MJTV-4F-MG	2 Position Spool Valve, Plastic Toggle, G1/8

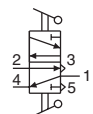
### J-Series 2 Position Fully-Ported Spool



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

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

**Force For Full Stem Travel:** 16 oz. nominal



Part No.	Description
MJTV-5	2 Position Spool Valve, NP Steel Toggle, 1/8" NPT
MJTV-5-MG	2 Position Spool Valve, NP Steel Toggle, G1/8
MJTV-5F	2 Position Spool Valve, Plastic Toggle, 1/8" NPT
MJTV-5F-MG	2 Position Spool Valve, Plastic Toggle, G1/8

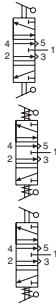


# 4-WAY TOGGLE VALVES

## 3 Position Toggle Valves

By choosing valves with different toggle position options the user can customize the application to best suit the needs. For example, the DM model can be used on the momentary side as a "jog" or "manual" control, and with the detented side for "automatic" or "run" mode.

Valves are made of solid brass, bright dipped finish to resist corrosion; stems and springs are of stainless steel, toggle of black acetyl plastic, and seals of Buna-N rubber.



Model Number					
TV-4D	#10-32	Detented	SPRING CENTERED supply blocked both sides exhausted	Detented	
TV-4D-M5	M5				
TV-4DP	1/8" NPT				
TV-4M	#10-32	Momentary		Momentary	
TV-4M-M5	M5	Detented		SPRING CENTERED supply blocked both sides exhausted	Momentary
TV-4MP	1/8" NPT				
TV-4DM	#10-32				
TV-4DM-M5	M5	Momentary	SPRING CENTERED supply blocked both sides exhausted		Momentary
TV-4DMP	1/8" NPT				

**Medium:** Air

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

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

**Air Flow:** 4.5 scfm @ 50 psig; 7.5 scfm @ 100 psig;  
180 l/min @ 6 bar

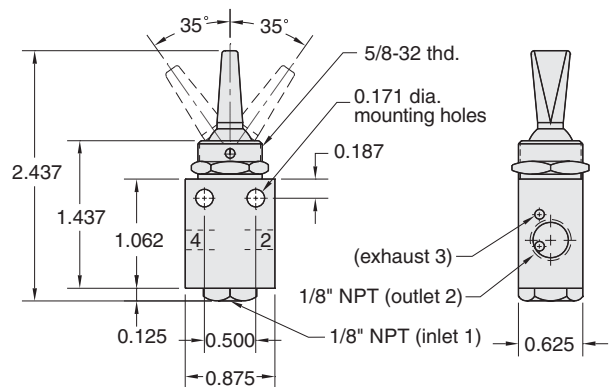
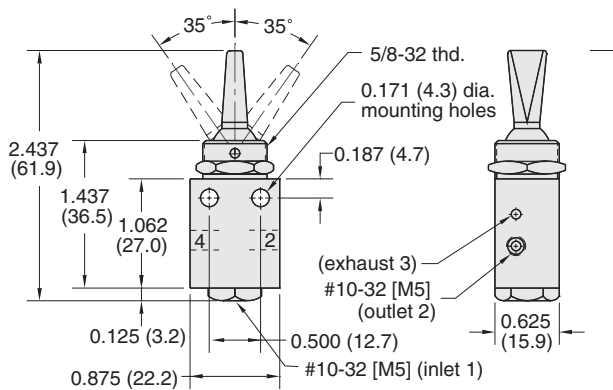
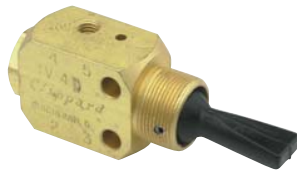
**Force For Full Stem Travel:** 8 oz. nominal

**Toggle:** Plastic

**Mounting:** 5/8-32 thread. Nut and lockwashers furnished.

## 3 Position Toggle Valves, #10-32/M5

## 3 Position Toggle Valves, 1/8" NPT



Part No.	Description
TV-4D	Toggle Valve, Detented/Detented, #10-32
TV-4D-M5	Toggle Valve, Detented/Detented, M5
TV-4M	Toggle Valve, Momentary/Momentary, #10-32
TV-4M-M5	Toggle Valve, Momentary/Momentary, M5
TV-4DM	Toggle Valve, Detented/Momentary, #10-32
TV-4DM-M5	Toggle Valve, Detented/Momentary, M5

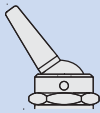
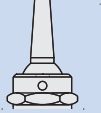
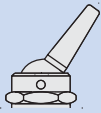
Part No.	Description
TV-4DP	Toggle Valve, Detented/Detented, 1/8" NPT
TV-4MP	Toggle Valve, Momentary/Momentary, 1/8" NPT
TV-4DMP	Toggle Valve, Detented/Momentary, 1/8" NPT

# FILL & BLEED TOGGLE VALVES



## Fill and Bleed Applications

The FBV-3 may be used to pressurize or "fill" a chamber or bladder by depressing the toggle in one direction and then de-pressurize or "bleed" that same chamber or bladder by depressing the toggle in the other direction. Toggling back and forth between the inlet and exhaust provides a fine adjustment of the required pressure in the chamber or bladder.

Model Number				
FBV-3D & FBV-3DF FBV-3DP	#10-32 1/8" NPT	Detented	SPRING CENTERED  all ports blocked	Detented
FBV-3M & FBV-3MF FBV-3MP	#10-32 1/8" NPT	Momentary		Momentary
FBV-3DM & FBV-3DMF FBV-3DMP	#10-32 1/8" NPT	Detented		Momentary

**Medium:** Air

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

**Input Pressure:** 120 psig max.

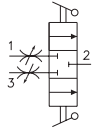
**Air Flow:**

<u>Adjustable</u>	<u>Full-Flow (-F)</u>
3.0 scfm @ 50 psig	4.5 scfm @ 50 psig
5.0 scfm @ 100 psig	7.5 scfm @ 100 psig

**Force For Full Stem Travel:** 8 oz. nominal

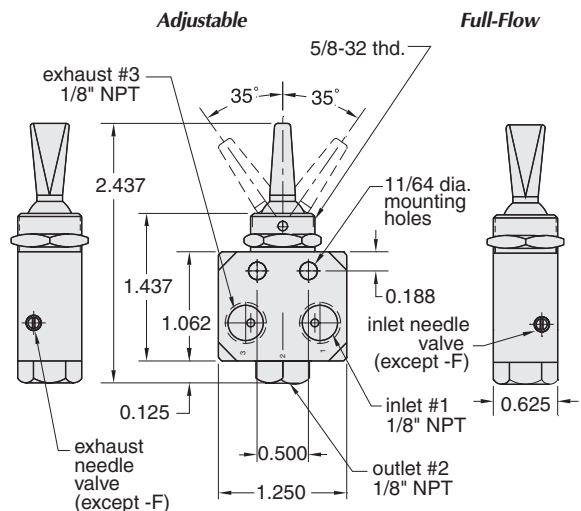
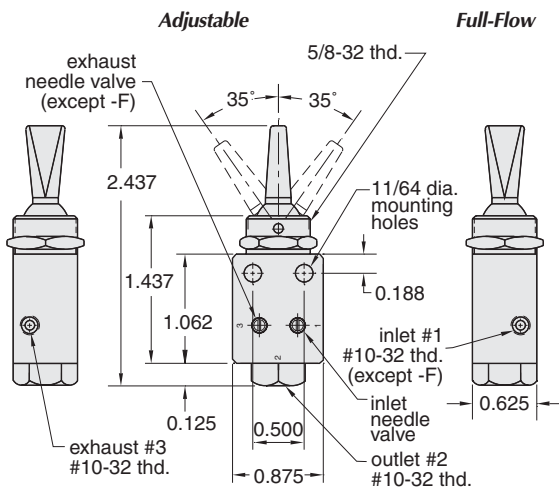
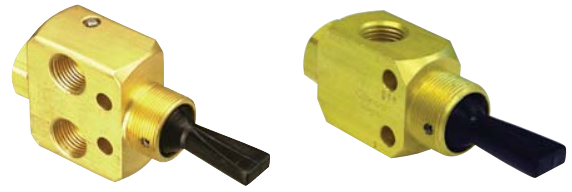
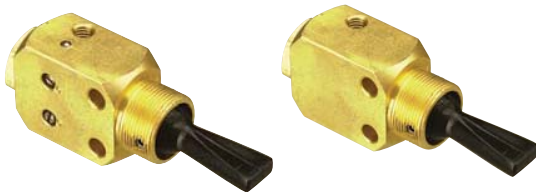
**Toggle:** Plastic

**Mounting:** 5/8-32 thread. Nut and lockwashers furnished. Two 0.171 mounting holes in body or may be mounted directly on a cylinder



## 3 Position Fill & Bleed Valves, #10-32

## 3 Position Fill & Bleed Valves, 1/8" NPT



Part No.	Description
FBV-3D	Fill & Bleed Valve, Adjustable, Detented/Detented
FBV-3DF	Fill & Bleed Valve, Full-Flow, Detented/Detented
FBV-3M	Fill & Bleed Valve, Adjustable, Momentary/Momentary
FBV-3MF	Fill & Bleed Valve, Full-Flow, Momentary/Momentary
FBV-3DM	Fill & Bleed Valve, Adjustable, Detented/Momentary
FBV-3DMF	Fill & Bleed Valve, Full-Flow, Detented/Momentary

Part No.	Description
FBV-3DP	Fill & Bleed Valve, Adjustable, Detented/Detented
FBV-3DPF	Fill & Bleed Valve, Full-Flow, Detented/Detented
FBV-3MP	Fill & Bleed Valve, Adjustable, Momentary/Momentary
FBV-3MPF	Fill & Bleed Valve, Full-Flow, Momentary/Momentary
FBV-3DMP	Fill & Bleed Valve, Adjustable, Detented/Momentary
FBV-3DMPF	Fill & Bleed Valve, Full-Flow, Detented/Momentary