

# Two- & Three-Way MT Series Globe Valves

1/2 to 1"

Normally Open, Normally Closed, Mixing

ANSI Class 250

### Description

The Powermite MT Series Globe Valves are designed to work with either a pneumatic or electronic actuator with a 7/32-inch (5.5 mm) stroke. Compatible actuators deliver a minimum of 67 lbf. (300 N) of force.

### Features

- Direct-coupled universal bonnet/no tools required for installation
- Choice of brass or stainless steel trim
- ANSI Leakage Class IV (0.01% of Cv)
- ANSI Class 250
- Available in 3 to 8 psi, 8 to 13 psi, or 10 to 15 psi spring ranges with pneumatic actuation
- Available with spring return and non-spring return 0-10 and floating control electronic actuators
- Greater than 100:1 rangeability for  $C_v \geq 1.0$
- Rated for 15 psi steam with stainless steel trim
- Interchangeable pneumatic or electronic actuators

### Applications

Typical applications include control of hot or chilled water, glycol solutions up to 50%, or steam up to 15 psi (103 kPa).

### Recommendation

Only use the MT Series Valve Actuators. When using this valve with a pneumatic actuator, note that MT valve bodies have the spring in the body, rather than the actuator. To order the correct valve body, select the proper spring range.

Alternate spring ranges for pneumatic sequencing are available as valve and actuator factory assemblies only.

### Specifications

Valve Size	1/2 to 1" (15 to 40 mm)
Body Style	Globe
Seat Style	Metal to Metal
Action	NO/NC/Three-Way Mixing
Valve Body Rating	ANSI Class 250
Stem Travel (Stroke)	7/32" (5.5 mm)
<b>Materials</b>	
Body	Forged Brass C37700 or UNS CA 844 Bronze
Trim	Stainless Steel or Brass
Stem	Stainless Steel ASTM A582 Type 303
Packing	EPDM O-rings
Controlled Medium	Water, Steam, Glycol Solutions up to 50%
<b>Spring Range</b>	
Standard – 2-Way	
Normally Closed	10 to 15 psig (69 to 103 kPa)
Normally Open	3 to 8 psig (21 to 55 kPa)
Optional – 2-Way	
Normally Closed	3 to 8 psig (21 to 55 kPa)
	8 to 13 psig (55 to 90 kPa)
Normally Open	8 to 13 psig (55 to 90 kPa)
	10 to 15 psig (69 to 103 kPa)
Standard – 3-Way Mixing	8 to 13 psig (55 to 90 kPa)
Optional – 3-Way Mixing	3 to 8 psig (21 to 55 kPa)
	10 to 15 psig (69 to 103 kPa)
Medium Temperature Range	35 to 250°F (2 to 120°C)
Standard Temperature Packing	20 to 250°F (-7 to 120°C)
<b>Max. Recommended Differential Pressure for Liquid Modulating Service</b>	
Brass Trim	25 psi (173 kPa)
Stainless Steel Trim	50 psi (345 kPa)
Steam Stainless Steel Trim	15 psi (103 kPa)
<b>Rangeability</b>	
$C_v < 1$	>50:1
$C_v \geq 1$	>100:1
Close-off Ratings	According to ANSI/FCI 70-2
Leakage Rate	Class IV (0.01% of $C_v$ )
<b>Flow Characteristics</b>	
Two-Way NO/NC	Modified Equal Percentage
Three-Way Mixing	
A→AB	Modified Equal Percentage
B→AB	Linear