

## Two-way Valves

1/2 to 1-inch

Normally Open or Normally Closed



Powermite MZ Series  
Two-way Globe Valve.

### Description

The Powermite MZ Series Two-way Globe Valves are designed to work with the SSB MZ Series Actuator with a 7/32-inch (5.5 mm) stroke.

### Features

- Direct-coupled universal bonnet/no tools required for installation
- ANSI Leakage Class IV (0.01% of Cv)
- ANSI Class 250 body
- Variety of actuators available
  - 0 to 10 V non-spring return
  - Floating control non-spring return
- Choice of end connections
- Greater than 100:1 rangeability for  $C_v \geq 1$
- Orderable as a valve only or as a complete valve/actuator assembly

### Applications

The Powermite MZ Series Two-way Globe Valves are used for control of hot or chilled water for convectors, fan coil units, unit conditioners, radiation, reheat coils, and similar terminal units requiring an actuator that delivers a minimum of 45 lbf. (200 N) of force.

### Recommendation:

Use only with the MZ Series SSB Valve Actuators.

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Valves



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A MechTronics Controls Company

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Phone (877) 632-4876



## Two-way MZ Series Valve Body Specifications

Valve Size ..... 1/2 to 1" (15 to 25 mm)  
 Body Style ..... Globe  
 Seat Style ..... Metal to Metal  
 Action ..... NO/NC  
 Valve Body Rating ..... ANSI Class 250  
 Stem Travel (Stroke) ..... 7/32" (5.5 mm)  
**Materials**  
 Body ..... Forged Brass C37700 (1/2 and 3/4 inch)  
                                 or UNS CA 844 Bronze (1 inch)  
 Trim ..... Brass  
 Stem ..... Stainless Steel ASTM A 582 Type 303  
 Packing ..... EPDM O-rings  
 Controlled Medium ..... Water, Glycol Solutions up to 50%  
 Medium Temperature Range ..... 35 to 250°F (2 to 120°C)

**Max. Recommended Differential Pressure for Modulating Service** ..... 25 psig (173 kPa)  
**Rangeability**  
 Cv<1 ..... >50:1  
 Cv≥1 ..... >100:1  
**Close-off Ratings** ..... According to ANSI/FCI 70-2  
**Leakage Rate** ..... Class IV (0.01% of Cv)  
**Flow Characteristics** ..... Modified Equal Percentage  
**Mounting Location** ..... NEMA 1 (Interior Only)


 Refer back to the Selection Charts at the beginning of this section to make sure the configuration is valid.

## Two-way MZ Series Valve Body Product Ordering


Normally Open/Normally Closed, Brass Trim



Connection	Valve Size		Flow Rate		Normally Open Part No.	Normally Closed Part No.
	in.	(mm)	Cv	(Kvs)		
Female x Female	1/2	(15)	0.4	(0.34)	599-01115	599-01100
	1/2	(15)	0.63	(0.54)	599-01117	599-01102
	1/2	(15)	1	(0.85)	599-01119	599-01104
	1/2	(15)	1.6	(1.37)	599-01121	599-01106
	1/2	(15)	2.5	(2.14)	599-01123	599-01108
	1/2	(15)	4	(3.42)	599-01126	599-01110
	3/4	(20)	6.3	(5.38)	599-01129	599-01112
	1	(25)	10	(8.55)	599-01131	599-01114
Female x Union Male	1/2	(15)	0.4	(0.34)	599-01116	599-01101
	1/2	(15)	0.63	(0.54)	599-01118	599-01103
	1/2	(15)	1	(0.85)	599-01120	599-01105
	1/2	(15)	1.6	(1.37)	599-01122	599-01107
	1/2	(15)	2.5	(2.14)	599-01124	599-01109
	1/2	(15)	4	(3.42)	599-01127	599-01111
	3/4	(20)	6.3	(5.38)	599-01130	599-01113
Angle Female x Union Male	1/2	(15)	2.5	(2.14)	599-01125	—
	1/2	(15)	4	(3.42)	599-01128	—

**There are no repair parts for this product. Replace the entire valve body if inoperative.**

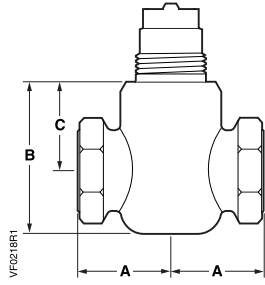
## Two-way MZ Series Valve Actuator Product Ordering

Description	Part No.	Actuator Prefix Code
 Electro-Mechanical	24 V, floating Non-Spring Return	SSB81U 254
	24 V, 0-10 V Non-Spring Return	SSB61U 255

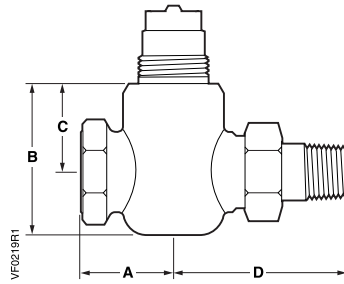
Accessories & Service Kits

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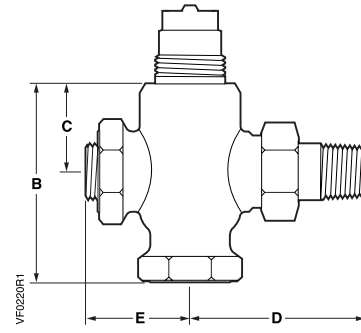
## Dimensions and Weights



Female NPT by Female NPT  
(FxF)



Female NPT by Union Male  
(FxUM)



Angle Female by Union Male  
(AFxUM)

Valve Size in.	Dimensions						Weight		
	A	B		C	D	E			
		FxF & FxUM	AFxUM (NO Only)			(NO Only)	FxF	FxUM	AFxUM
1/2" (15 mm)	1-3/8" (35 mm)	2-1/4" (57 mm)	2-15/16" (74 mm)	1-5/16" (33 mm)	2-5/8" (67 mm)	1-1/2" (38 mm)	1.3 lb. (0.6 kg)	1.5 lb. (0.7 kg)	1.8 lb. (0.8 kg)
3/4" (20 mm)	1-5/8" (41 mm)	2-3/8" (59 mm)	—	1-5/16" (33 mm)	3-1/8" (79 mm)	—	1.8 lb. (0.8 kg)	2.2 lb. (1 kg)	—
1" (25 mm)	1-15/16" (49 mm)	2-3/4" (69 mm)	—	1-9/16" (39 mm)	—	—	2.6 lb. (1.2 kg)	—	—

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