

Submittal summary **Powermite MT Series**

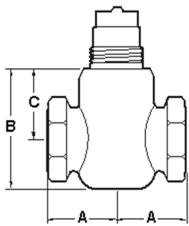
1/2 to 1-1/2 inch Terminal Unit Two- and Three-way Globe Valves

The Powermite 599 Series ANSI Class 250 MT Series Two- and Three-way Valve bodies work with any MT Series pneumatic or electronic actuator with a 7/32-inch (5.5-mm) stroke. They are suitable for normally open or normally closed control. Typical applications include control of hot or chilled water, glycol solutions up to 50%, or steam up to 15 psi (103 kPa). Compatible actuators deliver a minimum of 67 lbs. (300 N) of force.

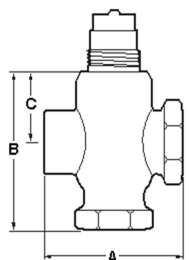
Features

- 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 body
- Available in 3 to 8 psi, 8 to 13 psi or 10 to 15 psi spring ranges with pneumatic actuation
- Rated for 15 psig steam
- Interchangeable pneumatic or electronic actuators
- Orderable as valve only or complete valve/actuator assembly

Specifications	
Line size	1/2 to 1-1/2-inch (15 to 25 mm)
Body	Globe style, Forged Brass C3770 or UNS CA 844 bronze, ANSI Class 250
Trim	Brass
Stem	Stainless steel ASTM A582 Type 303, 7/32-inch (5.5-mm) stroke
Seat	Metal-to-metal
Packing	Ethylene propylene O-ring
Close-off ratings	According to ANSI/FCI 70-2
Controlled medium	Water, steam, glycol solutions to 50%
Medium temperature	35 to 250°F (2 to 120°C)
Max. differential pressure for modulating service	
Liquid	25 psi (173 kPa)
Steam	15 psi (103 kPa)
Rangeability	Cv <1 = >50:1, Cv >1 = >100:1
Leakage rate	Class IV (0.01% of Cv)
Flow characteristics	Modified equal percentage
Mounting location	NEMA 1 (interior only)



2-way



3-way

	Size in. (mm)	Dimensions in. (mm)			Weight lb. (kg)
		A	B	C	
2-way (NC)	1/2 (15)	1-3/8 (35)	2-1/4 (57)	1-5/16 (33)	1.3 (0.6)
	3/4 (20)	1-5/8 (41)	2-3/8 (59)	1-5/16 (33)	1.8 (0.8)
	1 (25)	1-15/16 (49)	2-3/4 (69)	1-9/16 (39)	2.6 (1.2)
	1-1/4 (32)	2-1/2 (64)	3-7/8 (98)	1-11/16 (43)	4 (1.8)
	1-1/2 (40)	2-9/16 (65)	3-7/8 (98)	1-5/8 (41)	5 (2.3)
2-way (NO)	1/2 (15)	1-3/8 (35)	2-1/4 (57)	1-5/16 (33)	1.3 (0.6)
	3/4 (20)	1-5/8 (41)	2-3/8 (59)	1-5/16 (33)	1.8 (0.8)
	1 (25)	1-15/16 (49)	2-3/4 (69)	1-9/16 (39)	2.6 (1.2)
	1-1/4 (32)	2-1/2 (64)	4-1/4 (108)	2-3/16 (56)	4 (1.8)
	1-1/2 (40)	2-9/16 (65)	4-1/4 (108)	2-1/4 (57)	5 (2.3)
3-way	1/2 (15)	2-3/4 (70)	2-15/16 (74)	1-5/16 (33)	1.5 (0.7)
	3/4 (20)	3-1/4 (83)	3-9/16 (90)	1-5/16 (33)	2.3 (1.05)
	1 (25)	3-7/8 (98)	3-15/16 (99)	1-9/16 (39)	3.3 (1.5)
	1-1/4 (32)	4-15/16 (125)	4-1/4 (109)	1-11/16 (43)	4.0 (1.8)
	1-1/2 (40)	5-1/8 (130)	4-1/2 (114)	1-5/8 (41)	5.0 (2.3)

MT Series Valve Bodies

	Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	Part No.
2-way	Normally Closed (NC)	0.4 (0.34)	1/2 (15)	599-02000
		0.63 (0.54)	1/2 (15)	599-02002
		1 (0.85)	1/2 (15)	599-02004
		1.6 (1.37)	1/2 (15)	599-02006
		2.5 (2.14)	1/2 (15)	599-02008
		4 (3.42)	1/2 (15)	599-02010
		6.3 (5.38)	3/4 (20)	599-02012
		10 (8.55)	1 (25)	599-02014
	Normally Open (NO)	16 (13.8)	1-1/4 (32)	599-02085*
		25 (21.5)	1-1/2 (40)	599-02088*
		0.4 (0.34)	1/2 (15)	599-02030
		0.63 (0.54)	1/2 (15)	599-02032
		1 (0.85)	1/2 (15)	599-02034
		1.6 (1.37)	1/2 (15)	599-02036
		2.5 (2.14)	1/2 (15)	599-02038
		4 (3.42)	1/2 (15)	599-02041
		6.3 (5.38)	3/4 (20)	599-02044
		10 (8.55)	1 (25)	599-02046
3-way	Mixing	16 (13.8)	1-1/4 (32)	599-02084*
		25 (21.5)	1-1/2 (40)	599-02087*
		0.4 (0.34)	1/2 (15)	599-02064
		0.63 (0.54)	1/2 (15)	599-02065
		1 (0.85)	1/2 (15)	599-02066
		1.6 (1.37)	1/2 (15)	599-02067
		2.5 (2.14)	1/2 (15)	599-02068
		4 (3.42)	1/2 (15)	599-02069
		6.3 (5.38)	3/4 (20)	599-02070
		10 (8.55)	1 (25)	599-02071
		16 (13.8)	1-1/4 (32)	599-02086*
		25 (21.5)	1-1/2 (40)	599-02089*

*Can only be assembled with Electro-mechanical actuators

MT Series Valve Actuators

Description	Part No.	Actuator Prefix Code	
 2"	10-15 psi (69-103 kPa)	599-01088	256
	3-8 psi (21-55 kPa)	599-01088	257
	8-13 psi (55-90 kPa)	599-01088	258
 24 V	SSC61U SSC61.5U	261 262	Pneumatic
	SSC81U SSC81.5U	259 260	
 24 V 0-10 V NSR	SQS65U	264	Electro-Mechanical
 24 V 0-10 V SR	SQS65.5U	265	
 24 V 3P SR	SQS85.53U	266	

These selection tables only contain FXF end connections with brass trim and equal percentage flow characteristics.

For complete selection, refer to the current edition of *Master HVAC Products Catalog*.