

Zone Globe Valve Bodies, Screwed, Two & Three Way



DESCRIPTION

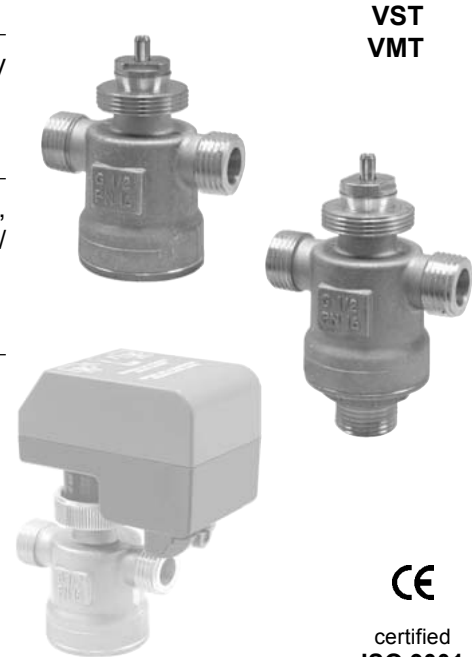
1/2" to 3/4" screwed, single seated, 2-way and 3-way, 232 PSIG body rated, hot and chilled water valves.

APPLICATION

Valves for 2-way or 3-way mixing or diverting configuration in heating, ventilation and air conditioning systems; i.e. fan coil units, reheat of VAV/VVT boxes, base boards, and other AC units.

FEATURES

- 232 PSIG body rated
- Hot & chilled water
- 3-way for mixing or diverting application
- 3-way bypass with reduced Cv's for balanced system pressure
- High turndown ratio
- Spring return, w/o actuator
- External manual override, screw-on cap
- Easy valve actuator pop-on
- Maintenance free
- Two-year warranty



VST
VMT



certified
ISO 9001

SPECIFICATIONS

Physical

Body rating 232 PSIG (1600 kPa)

Media

Water temperature 35°F to 203°F (2°C to 95°C)
 - w/ MVT actuator
 Glycol added Max. 50% of water contents

Pipe Connection

Screwed, NPT, male

Material/Characteristics

Valve body Brass, OT58
 - packing Double O-ring, buna N
 - stem CrNi stainless steel
 - plug IXEF, Rilsan coated
 - seat Brass, OT58, machined
 Stem stroke 0.22 in. (5.5 mm)
 Leakage None

Stroke Cv

- straight-way Equal percentage
 - angle-away Linear
 Turndown ratio 50:1
 (Rangeability)
 Max. flow 590 ft/min (3 m/sec)
 Spring return Springs back to stem-up, refer to table "Valve Action"
 Supplied black cap
 MVT actuator series

Manual override

Valve Actuator

Compatibilities

Manufacturing

Listings/Approvals

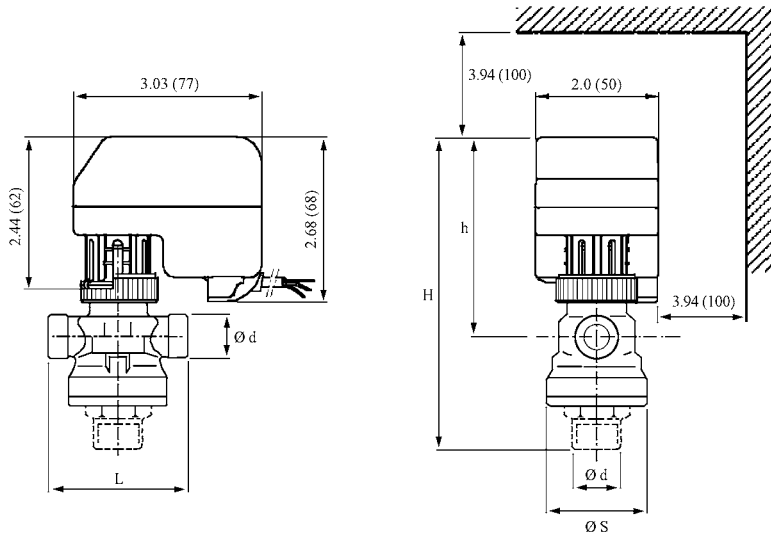
Warranty

Easy pop-on, screw connection
 ISO 9001 certified
 CE
 Two-year material and workmanship

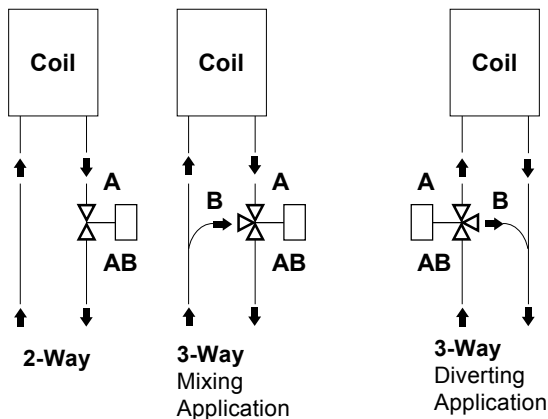
Size Inch (mm)	Flow Coefficient		Max. Differential Pressure PSIG (kPa)	Max. Close Off Pressure w/ Actuators MVT		Part Numbers	
	2 + 3-Way Straight A to AB Cv (Kv)	3-Way Angle B to AB Cv (Kv)		w/ Actuators MVT		2-Way	3-Way
				Mixing PSIG (kPa)	Diverting PSIG (kPa)		
1/2" (15)	0.29 (0.25)	0.29 (0.25)	51 (350)	51 (350)	34 (233)	VST09-PS2	VMT09-PS2
1/2" (15)	0.47 (0.4)	0.29 (0.25)	51 (350)	51 (350)	34 (233)	VST10-PS2	VMT10-PS2
1/2" (15)	0.70 (0.6)	0.47 (0.4)	51 (350)	51 (350)	34 (233)	VST11-PS2	VMT11-PS2
1/2" (15)	1.16 (1.0)	0.70 (0.6)	51 (350)	51 (350)	34 (233)	VST12-PS2	VMT12-PS2
1/2" (15)	1.87 (1.6)	1.16 (1.0)	51 (350)	51 (350)	34 (233)	VST13-PS2	VMT13-PS2
1/2" (15)	2.92 (2.5)	1.87 (1.6)	51 (350)	51 (350)	34 (233)	VST1-PS2	VMT1-PS2
3/4" (20)	4.67 (4.0)	2.92 (2.5)	37 (250)	37 (250)	25 (167)	VST2-PS2	VMT2-PS2

Valve Body Dimensions, Inch (mm)					
Size Ø d	L	Ø S	h	H VST	H VMT
1/2"	2.6 (66)	1.7 (42)	3.4 (85)	4.9 (124)	5.6 (142)
3/4"	3.1 (77)	1.8 (46)	3.5 (88)	5.2 (131)	5.8 (147)

Valve Body	Size	Weight lbs. (kg)
VST 2-way	1/2"	0.9 (0.4)
	3/4"	1.1 (0.5)
VMT 3-way	1/2"	1.0 (0.45)
	3/4"	1.2 (0.55)



VALVE PIPING & OPERATION



Valve markings on body for
 2-way: **A** and **AB**
 3-way: **A**, **B** and **AB**

To avoid valve clogging, all dirt, metal shavings, slag, sand, etc. located inside of piping must be removed/flushed out prior to installing the valve.

Avoid installing the valve in a location where it will be subjected to vibration.

The valve body should be piped up without the actuator assembled.

The valve can be piped in horizontal or vertical position, but not in the valve stem downwards position.

2-way valves must be piped with flow input **A** to output **AB**.

3-way valves should preferably be piped as mixing configuration (flow input **A** and input **B** to output **AB**). It can be piped as diverting configuration (flow input **AB** to two outputs **A** and **B**).

If piped incorrectly, valve performance may falter.

Valve Action	Without actuator coupled	MVT actuator coupled
Port A to AB	closed, stem-up (spring return)	Control signal increased/decreased
VST 2-way, and VMT 3-way	closed, stem-up (spring return)	moves into 0...100% open/closed position, in case of power failure stays in last position of operation

The valve can be manually opened, closed or put in any position by screwing the black cap up or down the valve stem. This operation is possible only if the actuator is not assembled.

