

Zone Globe Valve Bodies, Screwed, Two & Three-way

Specifications subject to change without notice. | USA 170316 | Page 1 of 3



VSX-VMX

DESCRIPTION

Ultra compact 1/2" and 3/4" screwed, 2-way and 3-way, spring-return hot and chilled water valves with zero-leakage seat.

Compatible with MVX.. and MVR.. series electro-thermal actuators for noiseless, spring return, normally open or closed flow control.

APPLICATION

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

FEATURES

- Ultra-compact design
- Hot & chilled water
- 232 PSIG rated body
- 3-way bypass with reduced Cv's for balanced system pressure
- Zero-leakage, tightly closed-off seat
- High turndown ratio
- Spring return, w/o actuator
- Optional manual override, screw-on cap
- Easy pop-on valve actuator
- Maintenance free
- Two-year warranty



certified
ISO 9000

SPECIFICATIONS

Physical

Body rating 232 PSIG (1600 kPa)

Media

Water temperature
- w/ MVX actuator 41°F to 203°F (5°C to 95°C)
Glycol added Max. 30% of water contents

Pipe Connection Screwed, NPT male

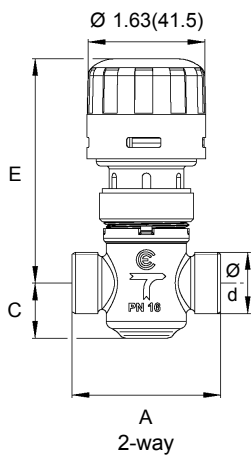
Material/Characteristics

Valve body Brass
- packing Double O-ring, Viton
V.X24/26P Double O-ring, EPDM
- stem Stainless steel
- plug NBR
- seat Technopolymer

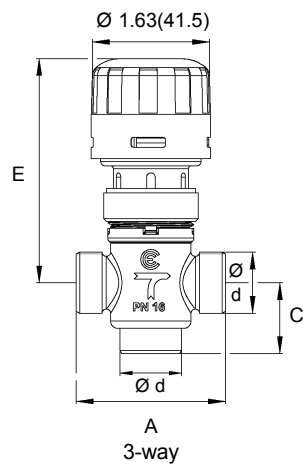
Stem stroke 0.1 in. (2.5 mm)
Leakage None, tightly closed off
Stroke Cv
- straight or angle-away Linear
Max. flow 590 ft/min (3m/sec)
Spring return, no actuator installed Part A to AB closed
Manual override With optional black cap "VXC-CAP"
Valve Actuator
Compatibilities MVX or MVR actuator series
Easy pop-on, screw connection
ISO 9000 certified
CE
Manufacturing
Listings/Approvals CE
Warranty Two-year material and workmanship

Size Inch (mm)	Flow Coefficient		Max. Differential Pressure A to AB PSIG (kPa)	Max. Close-Off Pressure A to AB PSIG (kPa)	Part Numbers		Actuator Compatibility
	2 & 3-way Straight A to AB Cv (Kv)	3-way Angle B to AB Cv (Kv)			2-way	3-way	
1/2" (15)	0.29 (0.25)	0.29 (0.25)	40 (250)	40 (250)	VSX09P-PS6	VMX09P-PS6	MVX41/21/57 "SR-N.C."
1/2" (15)	0.46 (0.4)	0.46 (0.4)	40 (250)	40 (250)	VSX10P-PS6	VMX10P-PS6	
1/2" (15)	0.69 (0.6)	0.69 (0.6)	40 (250)	40 (250)	VSX11P-PS6	VMX11P-PS6	
1/2" (15)	1.16 (1)	0.92 (0.8)	40 (250)	40 (250)	VSX12P-PS6	VMX12P-PS6	MVR... "SR-N.O."
1/2" (15)	1.85 (1.6)	1.16 (1)	40 (250)	40 (250)	VSX13P-PS6	VMX13P-PS6	
3/4" (20)	2.89 (2.5)	1.85 (1.6)	22 (150)	22 (150)	VSX21P-PS6	VMX21P-PS6	MVX42/22/52 "SR-N.C."
3/4" (20)	4.62 (4)	2.89 (2.5)	22 (150)	22 (150)	VSX24P-PS6	VMX24P-PS6	
3/4" (20)	6.94 (6)	4.62 (4)	22 (150)	22 (150)	VSX26P-PS6	VMX26P-PS6	

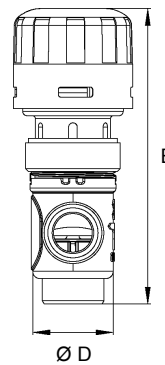
Valve with Actuator Dimensions, Inch (mm)									
Valve Body	Actuator	Size Ø d	A	B 2-way	B 3-way	C 2-way	C 3-way	Ø D	E
V.X09P-13P	+ MVX41/21	1/2"	2.05 (52)	3.76 (95.5)	3.98 (101)	0.77 (19.5)	0.98 (25)	1.10 (28)	2.99 (76)
V.X21P	+ MVX41/21	3/4"	2.20 (56)	3.76 (95.5)	4.33 (110)	0.77 (19.5)	1.34 (34)	1.10 (28)	2.99 (76)
V.X24P-26P	+ MVX42/22	3/4"	3.07 (78)	4.45 (113)	5.04 (128)	0.81 (20.5)	1.40 (35.5)	1.97 (50)	3.64 (92.5)
V.X09P-13P	+ MVX57	1/2"	2.05 (52)	4.43 (112.5)	4.65 (118)	0.77 (19.5)	0.98 (25)	1.10 (28)	3.66 (93)
V.X21P	+ MVX57	3/4"	2.20 (56)	4.43 (112.5)	5.00 (127)	0.77 (19.5)	1.34 (34)	1.10 (28)	3.66 (93)
V.X24P-26P	+ MVX52	3/4"	3.07 (78)	5.12 (130)	5.71 (145)	0.81 (20.5)	1.40 (35.5)	1.97 (50)	4.31 (109.5)
V.X09P-13P	+ MVR...	1/2"	2.05 (52)	4.49 (114)	4.72 (120)	0.77 (19.5)	0.98 (25)	1.10 (28)	3.72 (94.5)
V.X21P	+ MVR...	3/4"	2.20 (56)	4.49 (114)	5.06 (128.5)	0.77 (19.5)	1.34 (34)	1.10 (28)	3.72 (94.5)



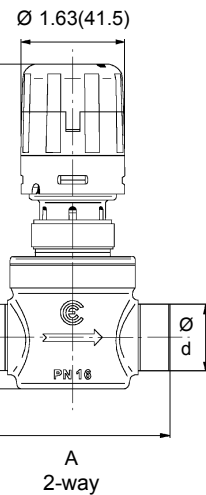
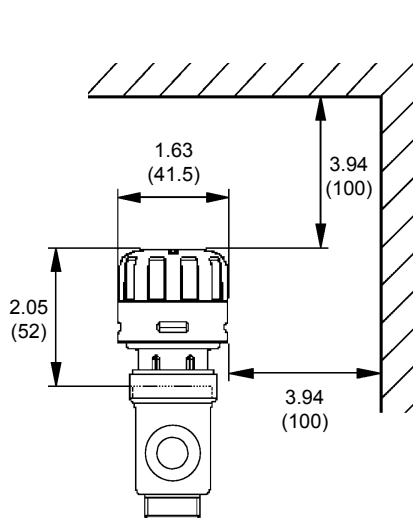
**VSX09P-13P
+MVX41/21**



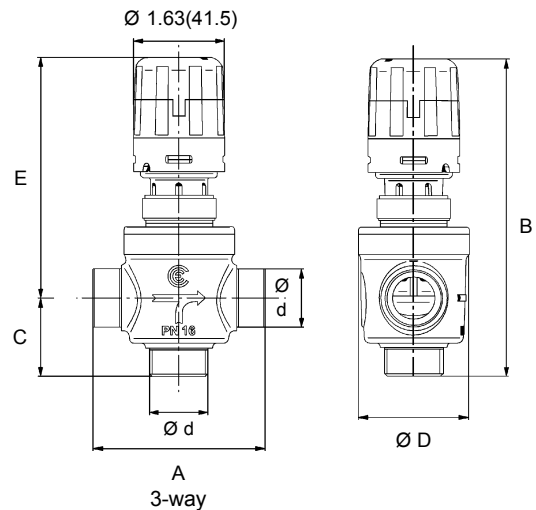
**VMX09P-13P
+MVX41/21**



Valve Body	Size	Weight lbs (kg)
V.X09P-13P 2-way, 3-way	1/2"	0.29 (0.13)
V.X21P 2-way, 3-way	3/4"	0.40 (0.18)
V.X24P-26P 2-way, 3-way	3/4"	0.90 (0.40)

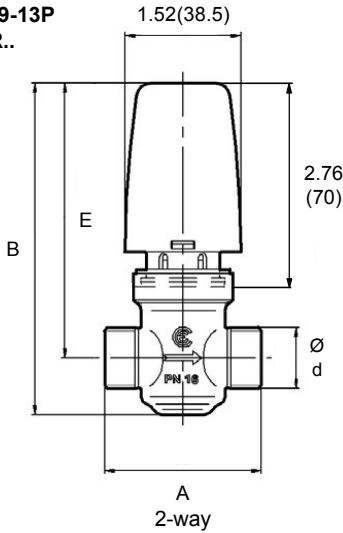


**VSX24P-26P
+MVX52**

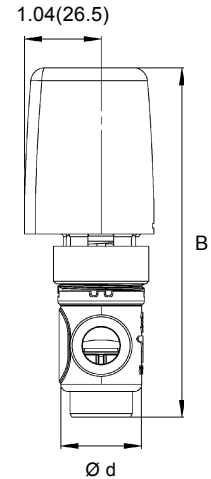
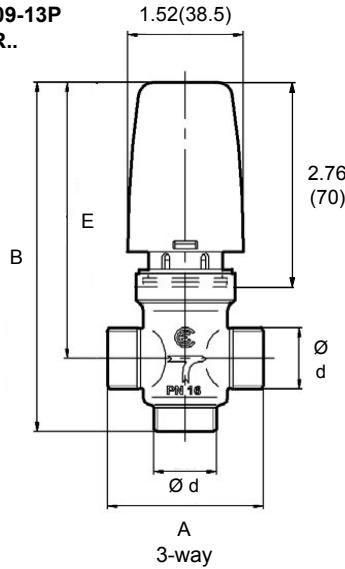


**VMX24P-26P
+MVX52**

VSX09-13P
+MVR..



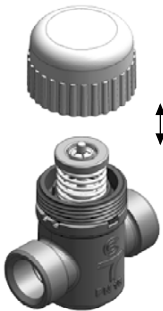
VMX09-13P
+MVR..



OPTIONS & ACCESSORIES

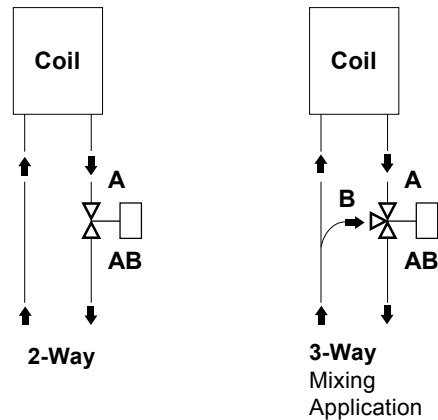
VXC-CAP

Manual override cap



The valve can be manually opened, closed, and put into any position by screwing the override cap onto the threaded neck portion of the valve body, and stroking up or down the valve stem.

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 the 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 a horizontal or vertical position, but not if the valve stem points downwards.

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

3-way valves should be piped as a mixing configuration (flow input **A** and input **B** to output **AB**.)

If piped incorrectly, valve performance may falter.

Valve Action	without actuator coupled	Actuator Coupled			
		MVX...		MVR...	
		0% Power	100% Signal Power	0% Power	100% Signal Power
Port A to AB - Spring return		closed stem up	open stem down	open stem down	closed stem up
VSX..P 2-way	closed stem up	closed stem up	open stem down	open stem down	closed stem up
VMX..P 3-way	closed stem up	closed stem up	open stem down	open stem down	closed stem up

