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

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**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





Œ certified **ISO 9000** 

# **SPECIFICATIONS**

Physical		Stem stroke	0.1 in. (2.5 mm)
Body rating	232 PSIG (1600 kPa)	Leakage	None, tightly closed off
Media		Stroke Cv	
Water temperature		<ul> <li>straight or angle-away</li> </ul>	Linear

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

**Pipe Connection** Screwed, NPT male

Material/Characteristics

Valve body Brass

Double O-ring, Viton - packing V.X24/26P Double O-ring, EPDM

Stainless steel - stem

**NBR** - plug

Technopolymer seat

590 ft/min (3m/sec) Max. flow 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

Manufacturing ISO 9000 certified

Listings/Approvals CE

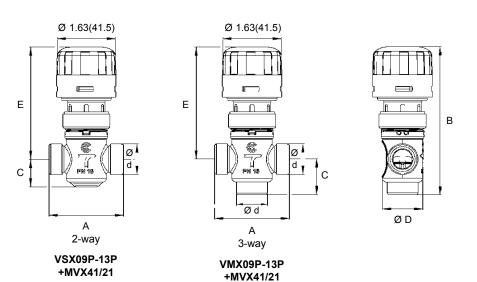
Two-year material and Warranty

workmanship

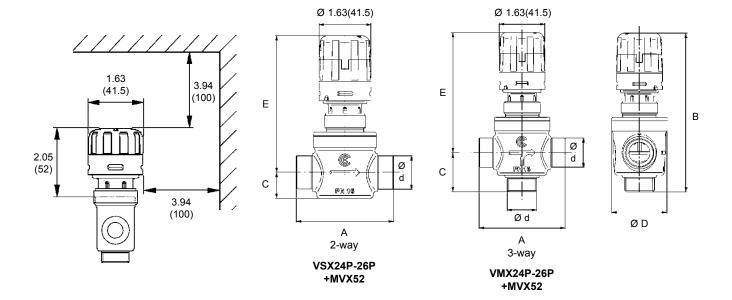
Size	Flow Coeffi	cient	Max.		_	Max. Part N			Actuator
Inch (mm)	2 & 3-way Straight A to AB Cv (Kv)	3-way Angle <b>B to AB</b> Cv (Kv)	Pres A to	erential ssure AB G (kPa)	Pres A to	se-Off ssure AB G (kPa)	2-way	3-way	Compatibility
1/2" (15) 1/2" (15) 1/2" (15)	0.29 (0.25) 0.46 (0.4) 0.69 (0.6)	0.29 (0.25)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



Valve with Ac	Valve with Actuator Dimensions, Inch (mm)								
Valve Body	Actuator	Size Ø d	Α	B 2-way	B 3-way	C 2-way	C 3-way	ØD	E
V.X09P-13P + V.X21P +	MVX41/21 MVX41/21	1/2" 3/4"	2.05 (52) 2.20 (56)	3.76 (95.5) 3.76 (95.5)	3.98 (101) 4.33 (110)	0.77 (19.5) 0.77 (19.5)	0.98 (25) 1.34 (34)	1.10 (28) 1.10 (28)	2.99 (76) 2.99 (76)
V.X24P-26P +		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 + V.X21P +	MVX57 MVX57	1/2" 3/4"	2.05 (52) 2.20 (56)	4.43 (112.5) 4.43 (112.5)	4.65 (118) 5.00 (127)	0.77 (19.5) 0.77 (19.5)	0.98 (25) 1.34 (34)	1.10 (28) 1.10 (28)	3.66 (93) 3.66 (93)
V.X24P-26P +		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 + V.X21P +	MVR	1/2" 3/4"	2.05 (52) 2.20 (56)	4.49 (114) 4.49 (114)	4.72 (120) 5.06 (128.5)	0.77 (19.5)	0.98 (25) 1.34 (34)	1.10 (28) 1.10 (28)	3.72 (94.5) 3.72 (94.5)

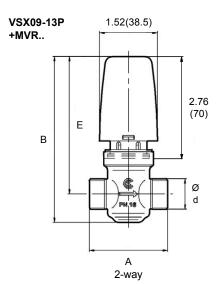


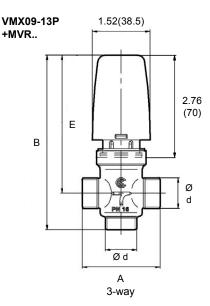
Valve Body	Size	Weight lbs (kg)
<b>V.X09P-13P</b> 2-way, 3-way	1/2"	0.29 (0.13)
<b>V.X21P</b> 2-way, 3-way	3/4"	0.40 (0.18)
<b>V.X24P-26P</b> 2-way, 3-way	3/4"	0.90 (0.40)

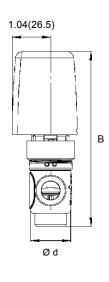


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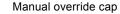






### **OPTIONS & ACCESSORIES**

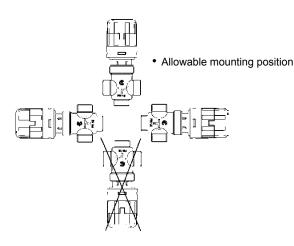
### VXC-CAP



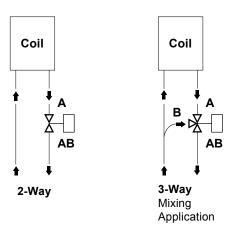


The valve can be manually opened, closed, and put into any position by screwing the override cap onto the threaded neck portion of the valve body, and stroking up or down the valve stem.

Valve Action	without actuator coupled	Actuator Coupled					
		M'	VX	MVR			
Port A to AB - Spring return		0% Power	100% Signal Power	0% Power	100% Signal Power		
VSXP 2-way VMXP 3-way	closed stem up	closed stem up	open stem down	open stem down	closed stem up		



## **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.