

Models

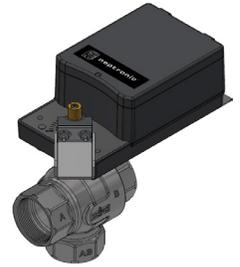
- B3AxxxxPS1: 3-way, 1/2" (DN15), female NPT
- B3BxxxxPS1: 3-way, 3/4" (DN20), female NPT
- B3CxxxxPS1: 3-way, 1" (DN25), female NPT
- B3DxxxxPS1: 3-way, 1 1/4" (DN32), female NPT
- B3ExxxxPS1: 3-way, 1 1/2" (DN40), female NPT
- B3FxxxxPS1: 3-way, 2" (DN50), female NPT



With B Series Actuators

Features

- 3-way valves available in 1/2" (DN15), 3/4" (DN20), 1" (DN25), 1 1/4" (DN32), 1 1/2" (DN40) and 2" (DN50)
- Compatible with B series (50 in.lb [5.6 Nm]) and L series (140 in.lb [16 Nm]) actuators
- Ideal applications such as fan coils, unit ventilators, heating and cooling coils and VAV re-heat coils
- Small dimensions allow for easier installation
- Maintenance free design
- Machined brass equal percentage characterized disc
- Cv range from 0.3 to 85 (Kv 0.26 to 74)
- Control signal options include on/off, floating point or modulating (proportional)



With L Series Actuators

Models

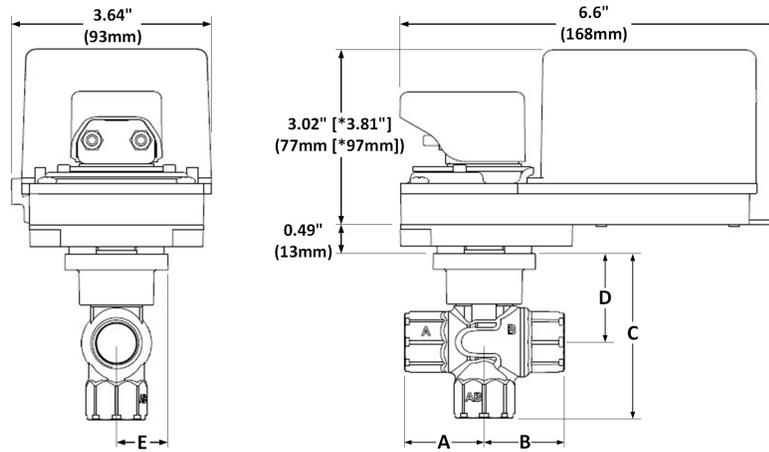
Size	3-Way Models	Cv	Kv	Size	3-Way Models	Cv	Kv
1/2" (DN15)	B3A0004PS1	0.3	0.26	1 1/4" (DN32)	B3D0100PS1	10	8.6
	B3A0005PS1	0.46	0.4		B3D0190PS1	19	16
	B3A0008PS1	0.8	0.7		B3D0250PS1	25	22
	B3A0012PS1	1.2	1		B3D0350PS1	35	30
	B3A0019PS1	1.9	1.64	1 1/2" (DN40)	B3E0190PS1	19	16
	B3A0030PS1	3	2.5		B3E0290PS1	29	25
	B3A0047PS1	4.7	4		B3E0350PS1	35	32
	B3A0074PS1	7.4	6.4		B3F0290PS1	29	25
3/4" (DN20)	B3B0047PS1	4.7	4	B3F0370PS1	37	32	
	B3B0074PS1	7.4	6.4	B3F0460PS1	46	40	
	B3B0100PS1	10	8.6	B3F0570PS1	57	49	
	B3B0140PS1	14	12	B3F0660PS1	66	57	
1" (DN25)	B3C0074PS1	7.4	6.4	B3F0850PS1	85	74	
	B3C0100PS1	10	8.6				
	B3C0190PS1	19	16				

Technical Data

Specification		All Models	
Actuator Compatibility		All Neptronic B and L series actuators	
Sizes		1/2" to 2" [DN15 to DN50]	
Range Cv [Kv]		0.3 to 85 [0.26 to 74]	
Media Type		Water, Glycol 60%	
Media Temperature Range		0°F to 250°F [-18°C to 120°C]	
Pressure	Body	1/2" [DN15]	600 psi [4137 kPa]
		3/4" [DN20]	600 psi [4137 kPa]
		1" [DN25]	400 psi [2758 kPa]
		1-1/4" [DN32]	400 psi [2758 kPa]
		1-1/2" [DN40]	400 psi [2758 kPa]
		2" [DN50]	400 psi [2758 kPa]
	Close-Off	200 psi [1379 kPa]	
	Differential	50 psi [345 kPa]	
Leakage		0%	
Materials	Body	Nickle-Plated Forged Brass	
	Ball and Stem	316 Stainless-Steel	
	Seats	PTFE	
	Characterized Disc	Brass Characterized	
	Stem O-Rings	EPDM	
Flow Characteristic	A to AB	Equal Percentage	
	Control Angle	Modified 75% of (A to AB)	
Flow Pattern	Mixing	Yes, 3-Way	
	Diverting	Yes, 3-Way	
Rangeability		100:1	
Valve	Connection	EPDM	

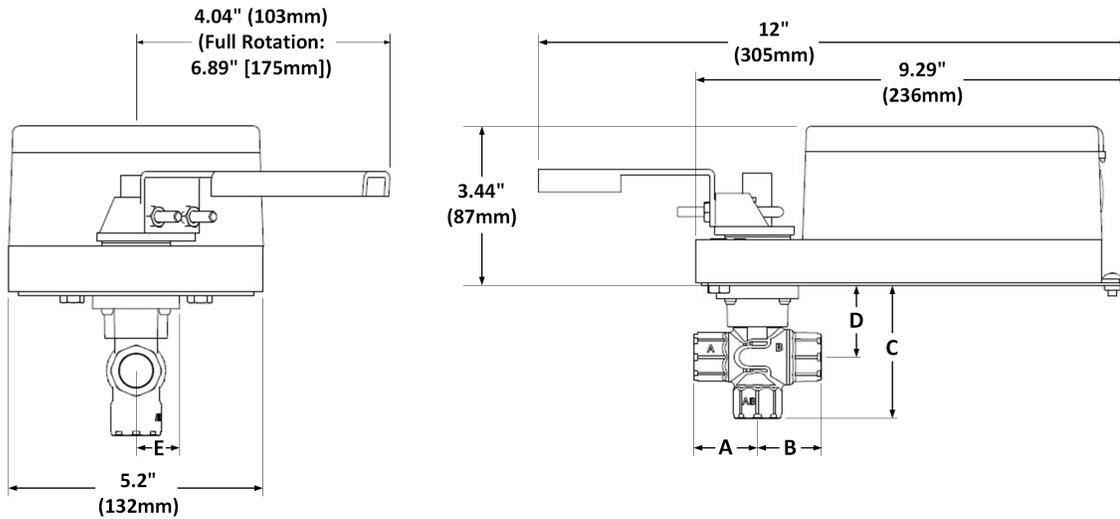
Dimensions

Mounted on B Series Actuators



*For actuator models 020 & 080

Mounted on L Series Actuators

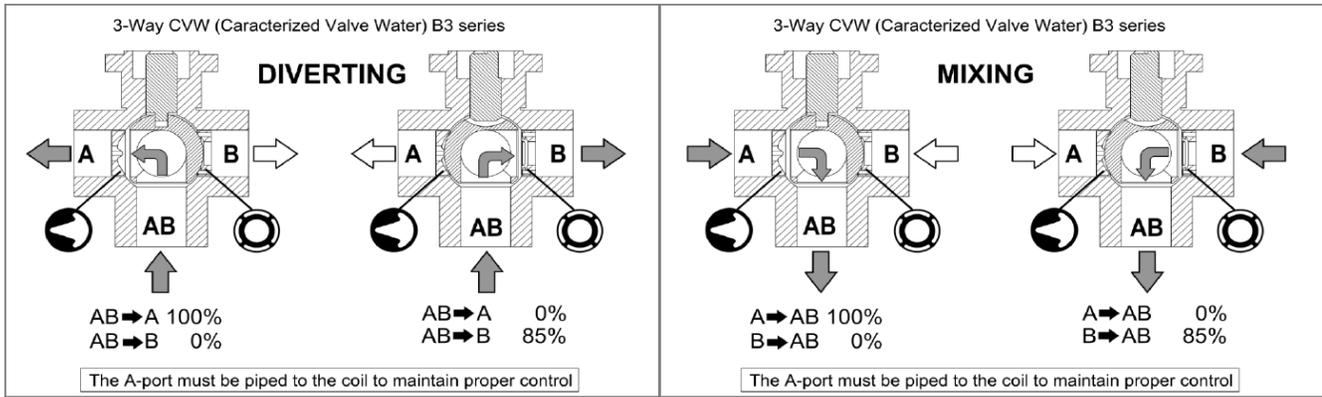


Valve Size	1/2" [DN15]	3/4" [DN20]	1" [DN25]	1-1/4" [DN32]	1-1/2" [DN40]	2" [DN50]
A	1.38" [35mm]	1.53" [39mm]	1.89" [48mm]	2.15" [55mm]	2.18" [56mm]	2.76" [70mm]
B	1.38" [35mm]	1.63" [42mm]	1.89" [48mm]	2.20" [56mm]	2.20" [56mm]	2.76" [70mm]
C	2.85" [73mm]	3.19" [81mm]	3.76" [96mm]	4.44" [113mm]	4.44" [113mm]	5.60" [142mm]
D	1.53" [39mm]	1.69" [43mm]	1.87" [48mm]	2.20" [56mm]	2.20" [56mm]	2.73" [69mm]
E	0.89" [23mm]	0.89" [23mm]	0.94" [24mm]	1.20" [31mm]	1.20" [31mm]	1.75" [45mm]

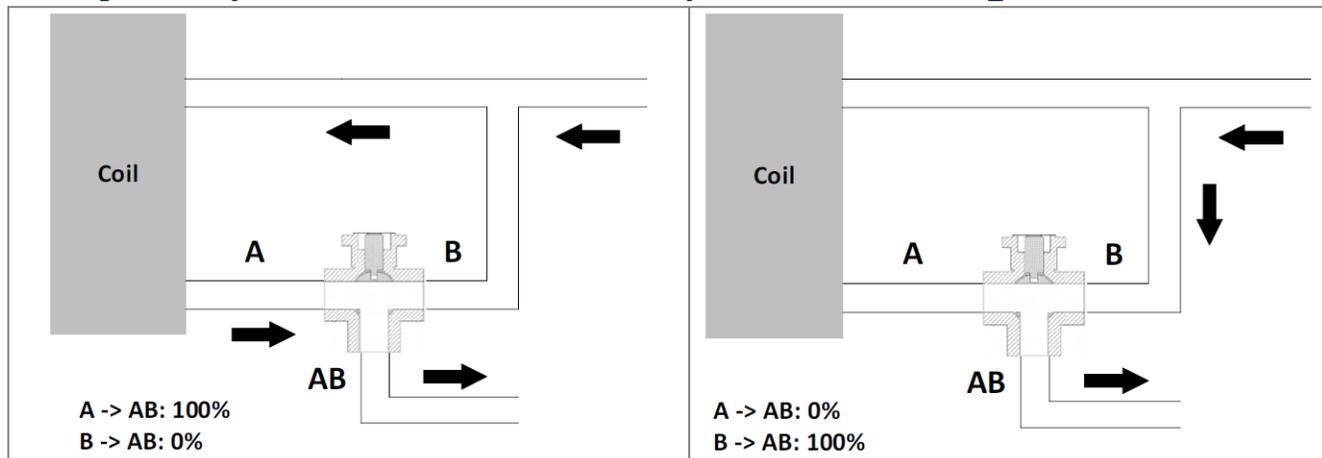
Mechanical Installation (Flow Pattern 3-Way)

The position of the stem indicates the status of the valve. If the stem is up, it indicates that the valve is open. If the stem is down, it indicates that the valve is closed.

If the terminal unit body is used with direct acting actuators, the valve functions as a normally open valve assembly. If the terminal unit body is used with reverse acting actuators, the valve functions as a normally closed valve assembly.

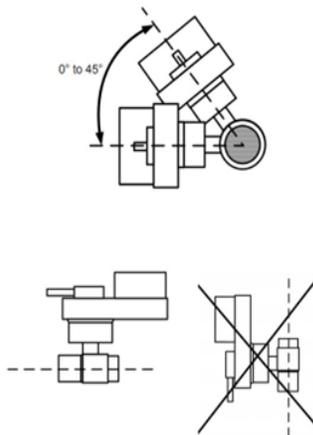


3-Way CVW (Characterized Valve Water) B3 series Mixing



Installation

Valve cannot be mounted vertically. If mounted horizontally valve must be 0° to 45° off the horizontal line across the center of the pipe. Do not install with actuator below pipe.



Recycling at end of life: please return this product to your Neptronic local distributor for recycling. If you need to find the nearest Neptronic authorized distributor, please consult www.neptronic.com.