

Series

- 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

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 metal 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)



Models

Size	3-Way NPT	Cv	Kv
1/2" (DN15)	B3A0004PS1	0.3	0.26
	B3A0005PS1	0.46	0.4
	B3A0008PS1	0.8	0.7
	B3A0012PS1	1.2	1
	B3A0019PS1	1.9	1.64
	B3A0030PS1	3	2.6
	B3A0047PS1	4.7	4
	B3A0074PS1	7.4	6.4
3/4" (DN20)	B3B0047PS1	4.7	4
	B3B0074PS1	7.4	6.4
	B3B0100PS1	10	8.6
	B3B0140PS1	14	12
1" (DN25)	B3C0074PS1	7.4	6.4
	B3C0100PS1	10	8.6
	B3C0190PS1	19	16

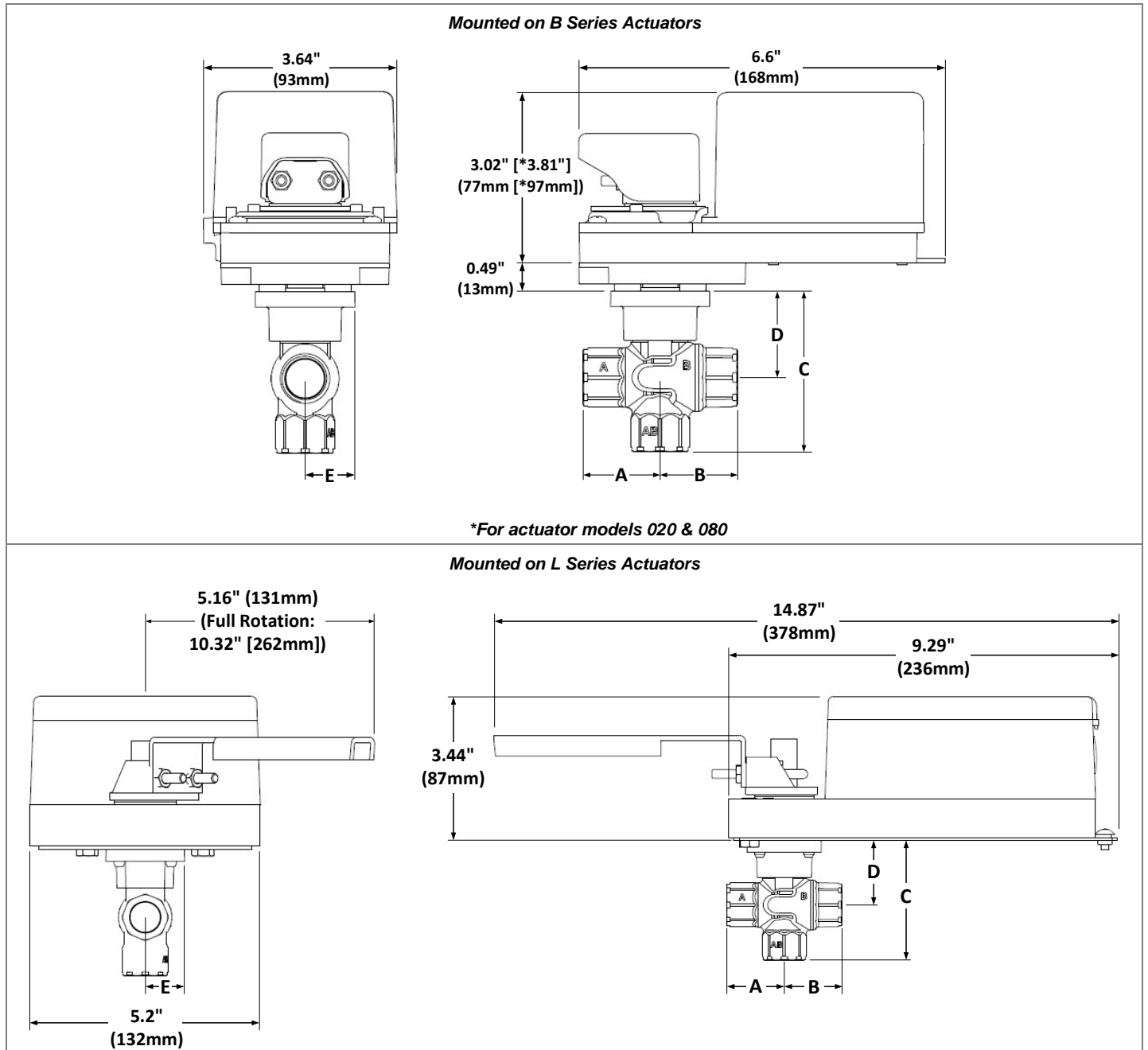
Size	3-Way NPT	Cv	Kv
1 1/4" (DN32)	B3D0100PS1	10	8.6
	B3D0190PS1	19	16
	B3D0290PS1	29	25
	B3D0350PS1	35	30
1 1/2" (DN40)	B3E0190PS1	19	16
	B3E0290PS1	29	25
	B3E0370PS1	37	32
2" (DN50)	B3F0290PS1	29	25
	B3F0370PS1	37	32
	B3F0460PS1	46	40
	B3F0570PS1	57	49
	B3F0660PS1	66	57
	B3F0850PS1	85	74



Technical Data

Specification		All Models	
Actuator Compatibility		All Neptronic B series and L series actuators	
Sizes		1/2" to 2" [DN15 to DN50]	
Cv [Kv]	Range	0.3 to 85 [0.26 to 74]	
Media	Type	Water, Glycole 60%	
	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	A-AB Port	0%	
	B Port	0%	
Materials	Body	Nickle-Plated Forged Brass	
	Ball and Stem	Stainless-Steel	
Materials	Seats	PTFE	
	Characterized Disc	Brass Characterized	
	Stem O-Rings	EPDM	
Flow Characteristic	A to AB	Equal %	
	B to AB	Modified 75% of (A to AB)	
Flow Pattern	Mixing	Yes	
	Diverting	Yes	
Rangeability		100:1	
Valve	Connection	Female NPT	

Dimensions



Size	½" [DN15]	¾" [DN20]	1" [DN25]
A	1.38" (35mm)	1.53" (39mm)	1.89" (48mm)
B	1.38" (35mm)	1.63" (42mm)	1.89" (49mm)
C	2.85" (73mm)	3.19" (81mm)	3.76" (96mm)
D	1.53" (39mm)	1.69" (43mm)	1.87" (48mm)
E	0.89" (23mm)	0.89" (23mm)	0.94" (24mm)

Size	1¼" [DN32]	1½" [DN40]	2" [DN50]
A	2.15" (55mm)	2.18" (56mm)	2.76" (70mm)
B	2.2" (56mm)	2.2" (56mm)	2.76" (70mm)
C	4.44" (113mm)	4.44" (113mm)	5.6" (142mm)
D	2.2" (56mm)	2.2" (56mm)	2.73" (69mm)
E	1.2" (31mm)	1.2" (31mm)	1.75" (45mm)

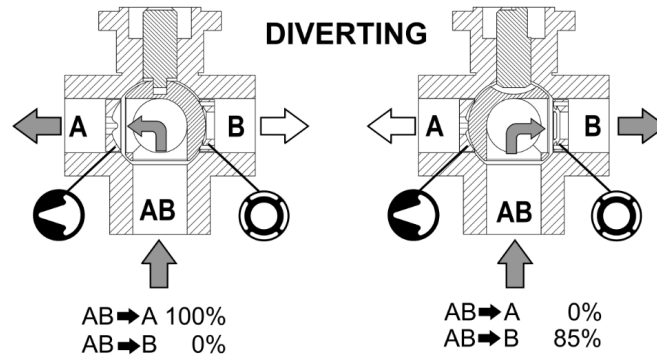
Mechanical Installation

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.

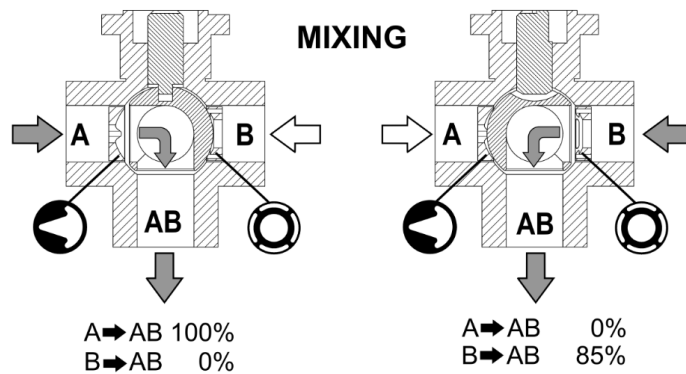
If the terminal unit body is used with direct acting actuators, the valve functions as a normally open valve assembly. If the terminal unit body is used with reverse acting actuators, the valve functions as a normally closed valve assembly.

3-Way CVW (Characterized Valve Water) B3 series



The A-port must be piped to the coil to maintain proper control

3-Way CVW (Characterized Valve Water) B3 series



The A-port must be piped to the coil to maintain proper control

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.

