

# 2-Way Water Control Ball Valve (SS)

Specification and Installation Instructions

## **Series**

B2AxxxxPS1: 2-way, 1/2" (DN15), female NPT B2BxxxxPS1: 2-way, 3/4" (DN20), female NPT B2CxxxxPS1: 2-way, 1" (DN25), female NPT B2DxxxxPS1: 2-way, 1 1/4" (DN32), female NPT B2ExxxxPS1: 2-way, 1 1/2" (DN40), female NPT B2FxxxxPS1: 2-way, 2" (DN50), female NPT

#### **Features**

- 2-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 for fan coils, unit ventilators, heating and cooling coils and VAV re-heat coils
- Small dimensions allow for easier installation
- Machined metal equal percentage characterized disc
- CV range from 0.3 to 230 (Kv 0.26 to 199)
- Control signal options include on/off, floating point or modulating (proportional)



With B Series Actuators



With L Series Actuators

## **Models**

Size	2-Way NPT	Cv	Kv
	B2A0003PS1	0.3	0.26
	B2A0005PS1	0.46	0.4
	B2A0008PS1	0.8	0.7
	B2A0012PS1	1.2	1
1/2"	B2A0019PS1	1.9	1.64
(DN15)	B2A0030PS1	3	2.6
	B2A0047PS1	4.7	4
	B2A0074PS1	7.4	6.4
	B2A0100PS1	10	8.6
	B2A0160PS1	16	14
	B2B0047PS1	4.7	4
	B2B0074PS1	7.4	6.4
3/4" (DN20)	B2B0100PS1	10	8.6
(D1420)	B2B0140PS1	14	12
	B2B0240PS1	24	21
1" (DN25)	B2C0074PS1	7.4	6.4
	B2C0100PS1	10	8.6
	B2C0190PS1	19	16
	B2C0300PS1	30	26

Size	2-Way NPT	Cv	Kv
1¼" (DN32)	B2D0100PS1	10	8.6
	B2D0190PS1	19	16
	B2D0250PS1	25	22
	B2D0370PS1	37	32
	B2E0190PS1	19	16
1½"	B2E0290PS1	29	25
(DN40)	B2E0370PS1	37	32
	B2E0460PS1	46	40
	B2F0290PS1	29	25
	B2F0370PS1	37	32
2" (DN50)	B2F0460PS1	46	40
	B2F0570PS1	57	49
	B2F0660PS1	66	57
	B2F0850PS1	85	74
	B2F1200PS1	120	104
	B2F2300PS1	230	199



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# **Technical Data**

Specification		on	All Models
Actuator Compatibility			All Neptronic B and L series actuators
Sizes			1/2" to 2" [DN15 to DN50]
Cv [Kv]	Range		0.3 to 230 [0.26 to 199]
Media	Туре		Water, Glycol 60%
ivieula	Tempe	rature Range	0°F to 250°F [-18°C to 120°C]
		½" [DN15]	600 psi [4137 kPa]
	Dadu	¾" [DN20]	600 psi [4137 kPa]
		1" [DN25]	400 psi [2758 kPa]
Pressure	Body	1¼" [DN32]	400 psi [2758 kPa]
Fiessule		1½" [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%
	Body		Nickle-Plated Forged Brass
	Ball and Stem		Stainless-Steel
Materials	Seats		PTFE
	Characterized Disc		Brass Characterized
	Stem O-Rings		EPDM
Flow	A to AB		Equal %
characteristic	Control angle		75°
Flance Datterna	Mixing		N/A
Flow Pattern	Diverting		N/A
Rangeability			100:1
Valve	Connec	tion	Female NPT

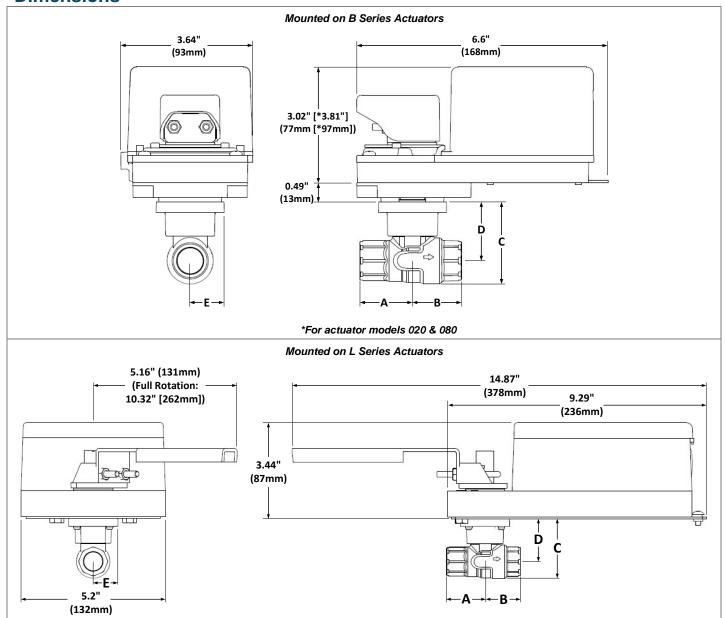
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# **Dimensions**



Size	½" [DN15]	3/4" [DN20]	1" [DN25]
A	1.38" (35mm)	1.53" (39mm)	1.89" (48mm)
В	1.28" (33mm)	1.48" (38mm)	1.89" (48mm)
С	2.13" (54mm)	2.46" (63mm)	2.81" (72mm)
D	1.53" (39mm)	1.69" (43mm)	1.87" (48mm)
Е	0.89" (23mm)	0.89" (23mm)	0.94" (24mm)

Size	1¼" [DN32]	1½" [DN40]	2" [DN50]
Α	2.15" (55mm)	2.18" (56mm)	2.76" (70mm)
В	2.01" (51mm)	2.2" (56mm)	2.76" (70mm)
С	3.4" (86mm)	3.4" (86mm)	4.48" (114mm)
D	2.2" (56mm)	2.2" (56mm)	2.73" (69mm)
E	1.2" (31mm)	1.2" (31mm)	1.75" (45mm)

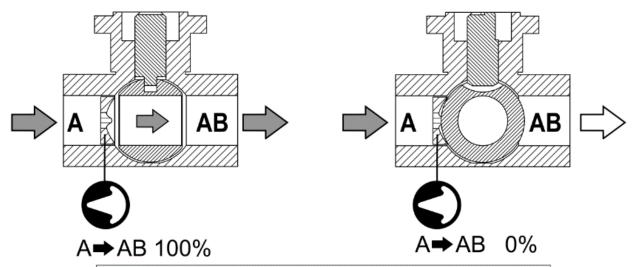
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## **Mechanical Installation**

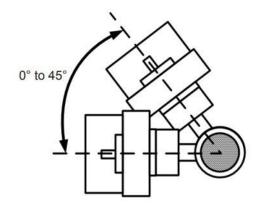
Flow Pattern (2-Way)

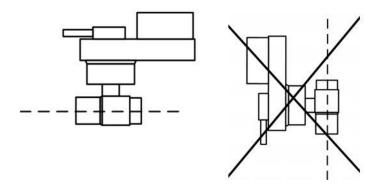


2 way valves should be installed with the disc upstream

## 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.





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