

# 2-Way Water Control Ball Valve (Brass)

Specification and Installation Instructions

### **Series**

B2AxxxxPP1: 2-way, 1/2" (DN15), female NPT B2BxxxxPP1: 2-way, 3/4" (DN20), female NPT B2CxxxxPP1: 2-way, 1" (DN25), female NPT B2DxxxxPP1: 2-way, 1 1/4" (DN32), female NPT B2ExxxxPP1: 2-way, 1 1/2" (DN40), female NPT B2FxxxxPP1: 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 Neptronic 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
½" (DN15)	B2A0003PP1	0.3	0.26
	B2A0005PP1	0.46	0.4
	B2A0008PP1	0.8	0.7
	B2A0012PP1	1.2	1
	B2A0019PP1	1.9	1.64
	B2A0030PP1	3	2.6
	B2A0047PP1	4.7	4
	B2A0074PP1	7.4	6.4
	B2A0100PP1	10	8.6
	B2A0160PP1	16	14
³∕₄" (DN20)	B2B0047PP1	4.7	4
	B2B0074PP1	7.4	6.4
	B2B0100PP1	10	8.6
	B2B0140PP1	14	12
	B2B0240PP1	24	21
1" (DN25)	B2C0074PP1	7.4	6.4
	B2C0100PP1	10	8.6
	B2C0190PP1	19	16
	B2C0300PP1	30	26

Size	2-Way NPT	Cv	Kv
1¼" (DN32)	B2D0100PP1	10	8.6
	B2D0190PP1	19	16
	B2D0250PP1	25	22
	B2D0370PP1	37	32
1½" (DN40)	B2E0190PP1	19	16
	B2E0290PP1	29	25
	B2E0370PP1	37	32
	B2E0460PP1	46	40
2" (DN50)	B2F0290PP1	29	25
	B2F0370PP1	37	32
	B2F0460PP1	46	40
	B2F0570PP1	57	49
	B2F0660PP1	66	57
	B2F0850PP1	85	74
	B2F1200PP1	120	104
	B2F2300PP1	230	199



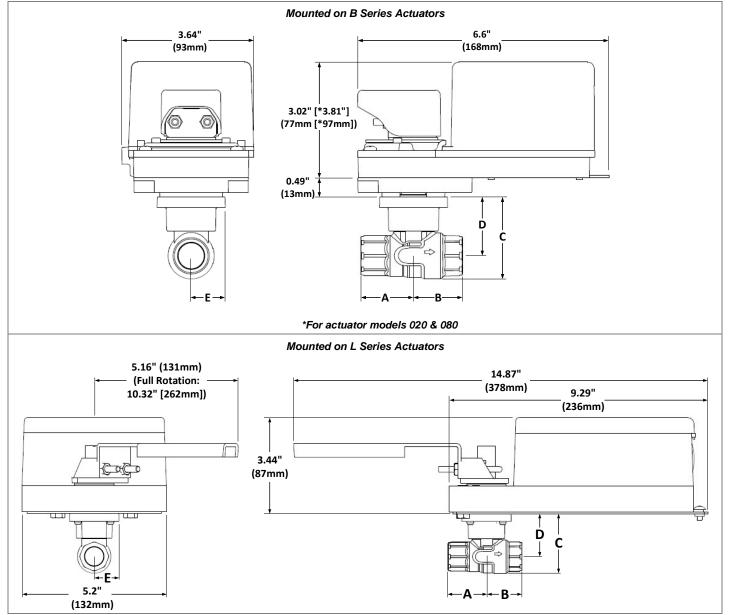
## **Technical Data**

Specification		n	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]
Madia	Туре		Water, Glycol 60%
Media	Temperature Range		0°F to 250°F [-18°C to 120°C]
	Body	1⁄2" [DN15]	600 psi [4137 kPa]
		3⁄4" [DN20]	600 psi [4137 kPa]
		1" [DN25]	400 psi [2758 kPa]
Dressure		1¼" [DN32]	400 psi [2758 kPa]
Pressure		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%
Materials	Body		Nickle-Plated Forged Brass
	Ball and Stem		Chrome Platted Brass
	Seats		PTFE
	Characterized Disc		Brass Characterized
	Stem O-Rings		EPDM
Flow	A to AB		Equal %
characteristic	Control angle		75°
Flow Pattern	Mixing		N/A
	Diverting		N/A
Rangeability			100:1
Valve	Connection		Female NPT



# 2-Way Water Control Ball Valve (Brass) Specification and Installation Instructions

### **Dimensions**

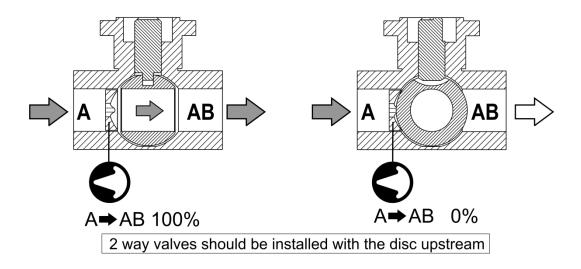


Size	½" [DN15]	¾" [DN20]	1" [DN25]
A	1.38" (35mm)	1.53" (39mm)	1.89" (48mm)
В	1.28" (33mm)	1.48" (38mm)	1.89" (48mm)
С	2.13" (54mm)	2.46" (63mm)	2.81" (72mm)
D	1.53" (39mm)	1.69" (43mm)	1.87" (48mm)
E	0.89" (23mm)	0.89" (23mm)	0.94" (24mm)
	1	1	
Size	1¼" [DN32]	1½" [DN40]	2" [DN50]
A	2.15" (55mm)	2.18" (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)



# **Mechanical Installation**

### Flow Pattern (2-Way)



### 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.

