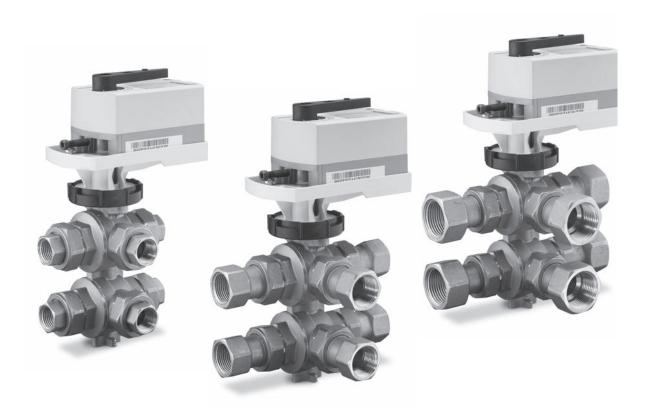
# 171C Series Six-Way Ball Valves



Because of its special design, a single 6-way ball valve and actuator switches between, and controls, both heating and cooling to a single coil or heated/chilled beam, when a four-pipe system is used. A modulating actuator controls heating in one half of the rotation and cooling in the other half, with the valve closing off both heating and cooling at mid stroke. The heating and cooling supplies are isolated from each other, without mixing in the valve. The valve can be ordered with different Cv for heating and cooling to maximize both heating and cooling transfer capabilities of the coil.

Less effort for installation, commissioning and cabling, as well as decreased space requirements, reduce the complexity of the plant and result in lower costs. Using a single valve, actuator and coil for both heating and cooling reduces equipment and installation costs, simplifies control, and reduces data points in the building automation system.







# Get the job done with ball valves

With line sizes ranging from ½" to 2" size (Cv ranging from 0.4 to 250), Siemens ball valves and valve actuators deliver comprehensive control solutions. We have the highest close-off in the industry and the largest selection of valve trim finishes for chrome plated brass and 316 stainless steel. Our premium grade materials and construction includes a better design blowout proof stem that withstands high pressure and a double O-ring stem packing.

Visit usa.siemens.com/valves to learn more.



75+ Years Innovating control valves



100% Factory tested



Product selection



Up to 5 Million Repositions for longer life



**Quality** Siemens standards



Up to 100 Thousand Full strokes



## Six-Way Ball Valves

24 Vac, Floating Control 1/2 to 1-inch Chrome-plated Balls and Stainless Steel Stem Non-Spring Return Actuator



1/2-inch Six-Way Ball Valve

#### **Description**

The 171C Series 6-Way Ball Valve Assembly comes with the GDE161.1P actuator to provide single valve and actuator changeover and control of hot and chilled water for heated/chilled beam applications or any four-pipe system.

#### **Features**

- Control two media sources (hot and chilled water) to a single coil with a one valve and actuator
- Large Cv range (0.3 to 4.7 Cv) for each media source
- 1/2", 3/4" and 1" line size connections
- Built in pressure compensation function
- 0% leakage for no mixing of hot and chilled water
- 232 PSI (16 bar) pressure rating
- 50 PSI (3.5 bar) close-off
- Chrome plated brass balls and stainless steel stem
- Blow-out proof stem
- Actuator and mounting bracket can easily be rotated (90 degree increments)
- Operating handle for manual operation

#### **Applications**

The 6-way ball valves changeover and control hot and chilled water (both similarly treated) in heated/chilled beams and any other four-pipe system utilizing the same coil to heat and cool.



### **Six-Way Ball Valve Specifications**

Materials	
Body	Hot-pressed brass CW617N
Balls	Chrome-plated brass
Stem	Stainless steel
	Stainless Steel
	EPDM o-rings
Ball Seals	Low friction PTFE
Operating	
Valve body rating	232 PSI (16 bar)
	41° to 194°F (5° to 90°C)
Controlled mediumWa	ater, water/glycol solutions up to 50%
Angle of rotation	0° to 90°
Maximum recommended differenti	ial pressure29 PSI (2 bar)
	50 PSI (3.5 bar)
	0%
	Linear
	.1/2-inch to 1-inch (15 mm to 25 mm)
Connection	Union Internal NPT

Actuator Specifications	
Operating voltage	24 Vac
Signal	0-10 Vdc
Failure mode	Non-spring return (fail-n-place)
	Yes
Run time	90 sec
Power consumption	2 to 3 VA
Miscellaneous  Mounting location	NEMA 1 (interior only)

#### **Assembly Product Ordering**

Select from any combination of Source A and B Cv value range. The assembly product number consists of a 171C prefix code, a hyphen, a 5-digit valve body code, a hyphen, the source A Cv value, a hyphen, and the source B Cv value.

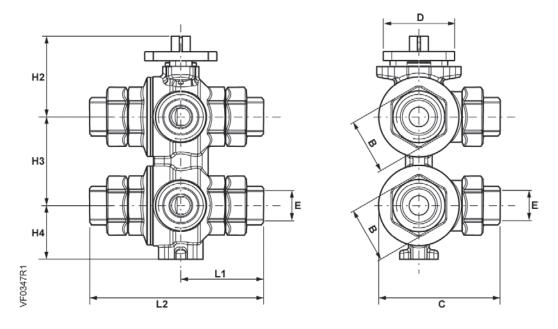
Valve Size in. (mm)	Source A and B Cv Value Range	Assembly Part No.
1/2 (15)	0.3 to 1.9 for 1/2 inch	171C-10600-0.3-0.3 - 171C-10600-1.9-1.9
3/4 (20)	0.8 to 4.7 for 3/4 inch	171C-10601-0.8-0.8 - 171C-10601-4.7-4.7
1 (25)	1.9 to 4.7 for 1 inch	171C-10602-1.9-1.9 - 171C-10602-4.7-4.7

## **Actuator Product Ordering**

		Description	Part No.	Actuator Prefix Code
0	Electronic Rotary	0-10V, Non-Spring Return	GDE161.1P	171C

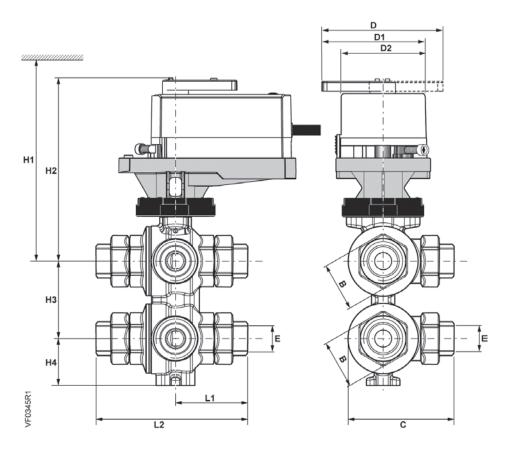


# **Dimensions and Weights**



Dimensions shown in inches (mm)

Line Size in. (mm)	В	С	D	E	L1	L2	H2	Н3	H4	Weight Ib (kg)
1/2 (15)		3-3/8 (86)	1.65 (42)	1/2 (15)	2-3/8 (60)	4-3/4 (121)	2.0 (50)	2.36 (60)	1.42 (36)	5.2 (2.36)
3/4 (20)	1-1/2 (38)	4-1/4 (108)		3/4 (20)	3-5/16 (84)	6-5/8 (168)				6 (2.72)
1 (25)		4-1/2 (114)		1 (25)	3-1/2 (89)	7 (178)				6.8 (3.08)



Dimensions shown in inches (mm)

Line Size in. (mm)	В	С	D	D1	D2	E	H1	H2	Н3	H4	L1	L2	Weight lb (kg)
1/2 (15)		3-3/8 (86)				1/2 (15)					2-3/8 (60)	4-3/4 (121)	6.8 (3.08)
3/4 (20)	1-1/2 (38)	4-1/4 (108)	3.98 (101.2)	3.44 (87.5)	2.91 (73.8)	3/4 (20)	13-3/4 (349)	5-3/4 (146)	2.36 (60)	1.42 (36)	3-5/16 (84)	6-5/8 (168)	7.6 (3.45)
1 (25)		4-1/2 (114)				1 (25)					3-1/2 (89)	7 (178)	8.4 (3.81)