

# Technical and Operational Instructions For BV06 Series Motorized Ball Valves

## General

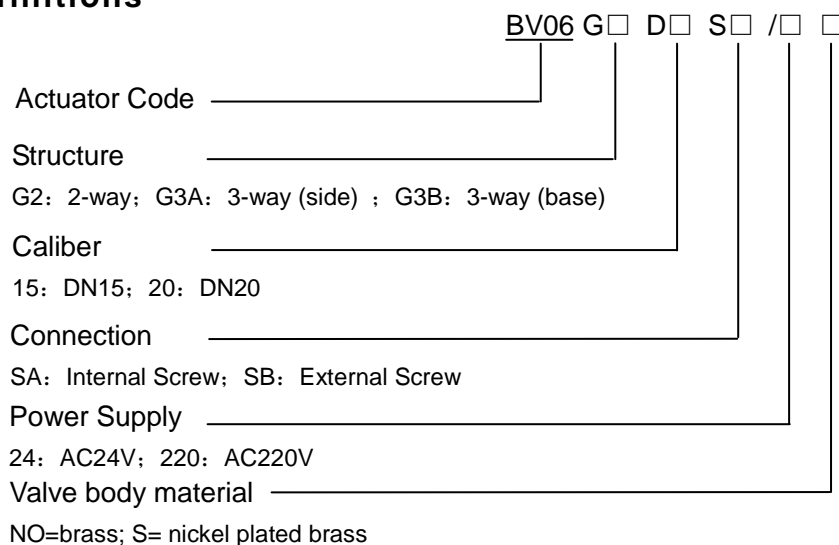
BV06 series ball valves are widely used in the control of cool/heat water in central air-conditioning system. The valve is driven by bi-directional motor, which is connected with the thermostat by null line, live line, and signal cable. The thermostat will continuously collect the data and make processing, and send out control signals to operate or stop the motor so as to control the on/off of the valve. Then the chilled/hot water in fan coil will be circulated, or cut off, to supply the room with cool/heat air. When the room temperature doesn't reach the set point, the thermostat will send the signal to open the valve; when the room temperature reaches the set point, the thermostat will send the signal to close the valve, and the room temperature will be kept within the set range of the thermostat.



## Features

- Well waterproof and dustproof features (IP65)
- Actuator cannot be affected by temperature of valve and environment
- Quick and easy replacement of moving actuator
- The actuator can be installed after the application and pipe was fixed that is efficient for installation,
- Valve can be mounted near to wall because of actuator's off-center configuration
- Valve can be operated by general tools when actuator has been removed
- The actuator is available for all of 1/2" — 1 1/4" ball valves
- Actuator installation allows for 2 different wiring orientations, thus providing ease of wiring and service
- High Differential pressure and strict closure
- No sediment due to direct flow through of valve
- Soft shut-off and open, to eliminate water hammer in most applications
- Motor don't bear any forces when valve is not in motion, extending service life

## Model Definitions

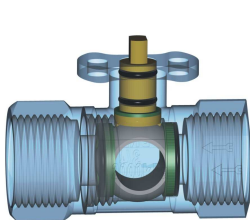


Specifications	Materials
<ul style="list-style-type: none"> <li>•Medium: Cool/heat water or 60% glycol</li> <li>•Caliber: DN15, DN20, DN25, DN32</li> <li>•Structure: Two way or Three way</li> <li>•Operating Mode: on/off or 3-point control (24VAC)</li> <li>•Power Supply: AC120V, AC220V, AC24V etc.</li> <li>•Power Consumption: 6W (during valve position change)</li> <li>•Running Times: 15 sec.</li> <li>•Pipe Fitting: NPT internal thread               <ul style="list-style-type: none"> <li>Optional: BSPP external thread</li> <li>BSPP internal thread</li> <li>BSPT internal thread</li> <li>compression external thread</li> </ul> </li> </ul>	Body: forged brass, nickel plated Ball: chrome plated brass Stem: brass Seats: fiberglass reinforced teflon PTFE Seal: 2 EPDM O-rings, lubricated Pressure Rating: 2MPa Media Temp. Range: 34°F to 203°F (1°C to 95°C) Max. Differential Pressure: 1MPa Protection Grade: IP65 Maintenance: Free Maintenance Types: 2-way Valve, 3-way Valve (side); 3-way Valve (base)

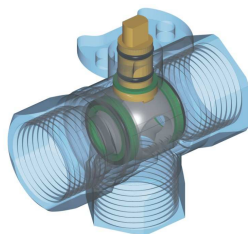
### Model Listing

No.	Model	Caliber	Kv Value
1	BV06-G2-1/2	1/2"(15mm)	4.62
2	BV06-G2-3/4	3/4"(20mm)	7.5
3	BV06-G2-1	1" (25mm)	13.02
4	BV06-G3-1/2	1/2"(15mm)	4.62
5	BV06-G3-3/4	3/4"(20mm)	7.5
6	BV06-G3-1	1" (25mm)	13.02

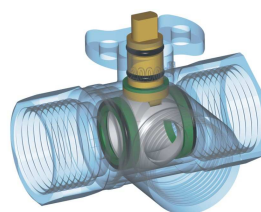
### Structure Schematic of Valve Bodies



2- way Valve

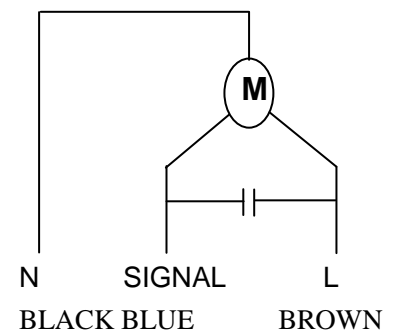


3- way Valve (base)

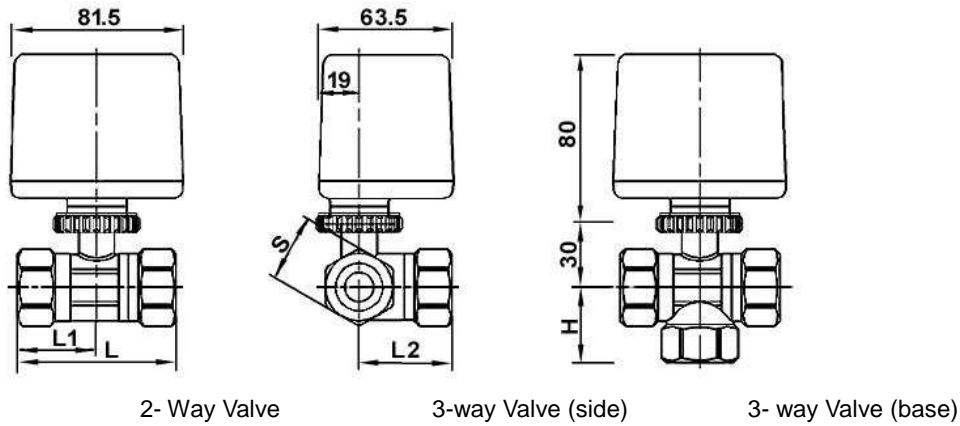


3-way Valve (side)

### Wiring Diagrams



**Dimension**



Caliber inch(mm)	L	L1	L2	H	S
1/2" (DN15)	67	33.5	39	34	27
3/4" (DN20)	66	33	39	36	32.5
1" (DN25)	88	44	48	40	40
1 1/4" (DN32)	100	50	60	—	48

**Operation & Installation**

- Connect the same phase live line of thermostat and ball valve when install
- Please check the power supply of actuator carefully, make sure it is suitable for actuator to avoid damaging motor.