

BV03 Series

GENERAL

BV03 series ball valves are widely used in central air-conditioning cool/heat water system. It can accurately control the flow of cool/heat medium depending upon the requirements of the given application, and can not result in sudden change of temperature and to control the room temperature accurately.

The valve is driven by bi-directional motor, which is connected with the floating thermostat by common, open and close terminals. The floating thermostat will continuously collect the data and make processing, and send out control signals to operate or stop the motor so as to modulate angle of the valve. Then the chilled/hot water will enter into the fan coil, and cool/heat air will be supplied to the room. When the room temperature reaches the set point, the thermostat will make the valve power off. So the opening angle of the valve will be always at the best state, and the room temperature will be kept within the set range of the thermostat.

ORDER GUIDE

	BV03	G□	D□	S□	/□
Actuator Code	_____	_____	_____	_____	_____
Structure	_____	_____	_____	_____	_____
G2: 2-way; G3A: 3-way (side) ; G3B: 3-way (base)					
Caliber	_____	_____	_____	_____	_____
15: DN15; 20: DN20; 25: DN25; 32: DN32					
Connection	_____	_____	_____	_____	_____
SA: Internal Screw; SB: External Screw					
Power Supply	_____	_____	_____	_____	_____
24: AC24V; 220: AC220V					

Motorized Ball Valves



FEATURES

- Well waterproof and dustproof features (IP65)
- Actuator can not 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 up to 1MPa and strict closure
- High flux and 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

SPECIFICATIONS

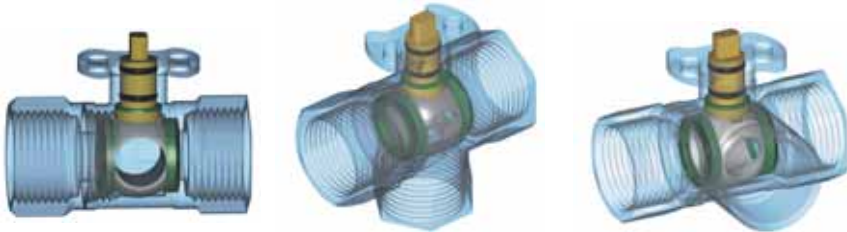
- Medium: Cool/heat water or 60% glycol
- Caliber: DN15, DN20, DN25, DN32
- Structure: Two way or Three way
- Operating Mode : on/off or 3-point control (24VAC)
- Power Supply : AC110V , AC220V , AC24V etc.
- Power Consumption : 5W (during valve position change)
- Running Times : 15 sec.
- Pipe Fitting : NPT internal thread

Optional: BSPP external thread
 BSPP internal thread
 BSPT internal thread
 compression external thread

MATERIALS

- 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
- Types : 2-way Valve , 3-way Valve (side) ; 3-way Valve (base)

BODY STRUCTURE SCHEMATIC

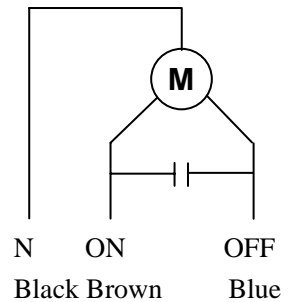


2- way Valve

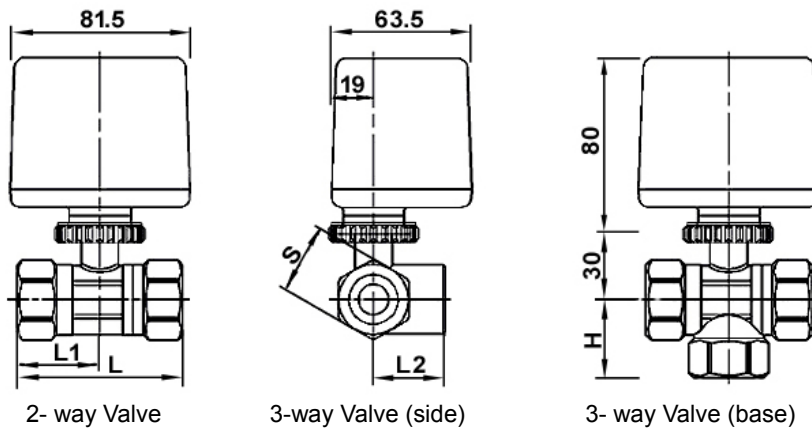
3- way Valve (base)

3-way Valve (side)

WIRING DIAGRAMS



Dimension



2- way Valve

3-way Valve (side)

3- way Valve (base)

Caliber inch(mm)	Kv Value	L	L1	L2	H	S
1/2" (DN15)	4.62	67	33.5	34	34	27
3/4" (DN20)	7.50	66	33	36	36	32.5
1" (DN25)	13.02	88	44	38	40	40
1 1/4" (DN32)	25.97	100	50	—	—	48



- Make sure the arrow on the valve conforms to the flow direction.
- Please check the power supply of actuator carefully, make sure it is suitable for actuator to avoid damaging motor.