

HTW-W27 SERIES

Motorized Valve Technical and Operating Manual



Type A



Type B

1. General

HTW-W27 Series Motorized Valves are used to control the flow of hot water/chilling water, in heating/cooling or air-conditioning applications so as to control room temperature indirectly. It consists of Actuator and Valve Body. The valve is normally closed. When thermostat(with NTC sensor)transfers a signal to actuator, which switch on power supply, and then opens valve letting hot water or chilling water to fan coil unit. If the room temperature reaches set-point, the thermostat transfers a signal to actuator to cut off the power supply and spring return switches the valve off, and stops the flow of hot or chilling water. Therefore, the room temperature could be kept as a constant temperature through valve opened or closed.

2. Characteristics & Materials

- ⊙Valve Body: Forged Brass
 - ⊙Actuator plate: Stainless Steel ⊙Cover: Aluminum
 - ⊙Valve Stem: Brass
 - ⊙Single direction motorized drive, stainless steel spring return
 - ⊙Configuration: Normally Closed Two-way and Diverting Three-way
- The power supply and connection type can be made as requested
Actuator and Valve Body can be easily assembled and disassembled and installed without any tools*

3. Main parameters:

- ⊙Power Supply: AC220V/AC110V/AC24V±10% 50/60Hz
- ⊙Consumption: 6.5W
- ⊙Compressive Strength: 1.6Mpa
- ⊙Valve Working Time:
 - 3-way valve: Opening Time:14~18s Closing Time:5~7s
 - 2-way Valve: Opening Time:8~12s Closing Time:3~5s
- ⊙Working Temperature: 5~40℃
- ⊙Pipe Water Temperature:5~90℃
- ⊙Model, Size, Specifications, Flow, Parameter as following:

Model	Connection Size	Valve Type	Configuration	Kv.	Differential Pressure(Mpa)
HTW-W27-215	G1/2	2-way	Normally Closed	2.0	0.2
HTW-W27-220	G3/4		Normally Closed	3.2	0.18
HTW-W27-225	G1		Normally Closed	6.8	0.15
HTW-W27-315	G1/2	3-way	Diverting	4.3	0.2
HTW-W27-320	G3/4		Diverting	4.6	0.18
HTW-W27-325	G1		Diverting	6.5	0.15

4. Size

Fig. 1. 2 is the Attached motorized valve's size

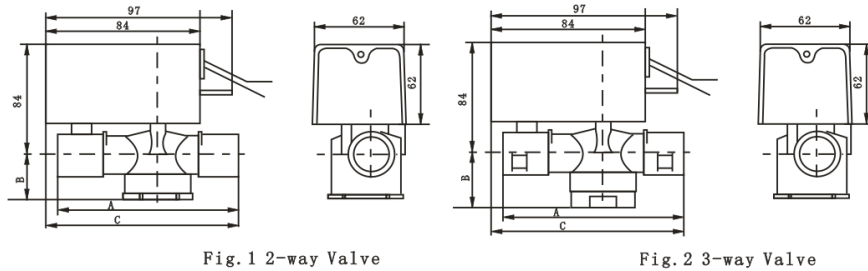


Fig. 1 2-way Valve

Fig. 2 3-way Valve

Fig. 3, 4 is the Detached motorized valve's size

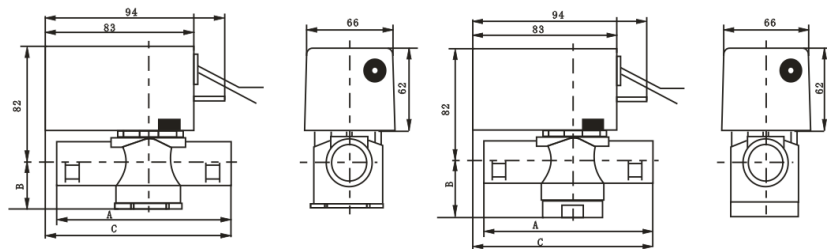


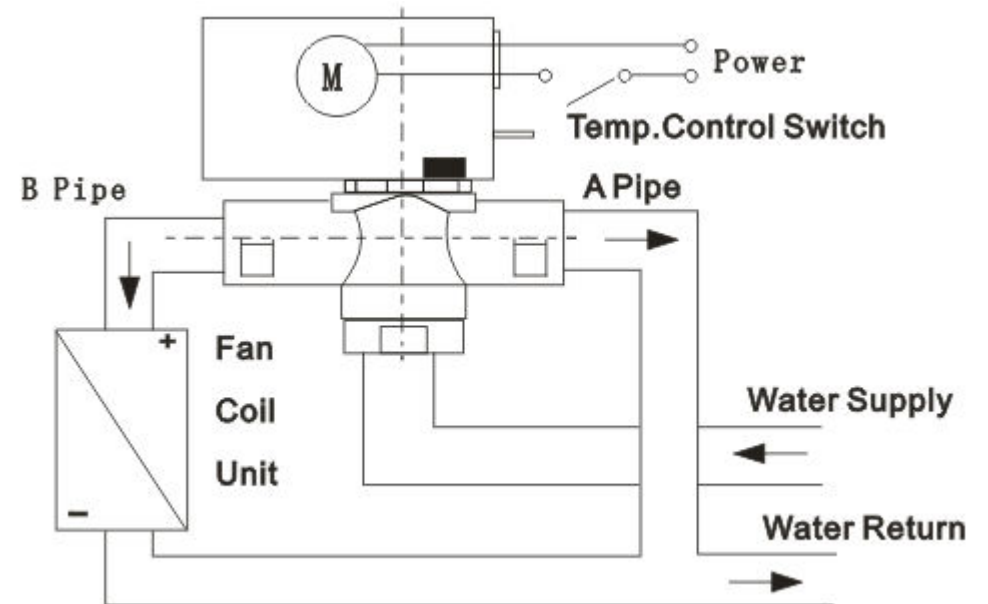
Fig. 3 2-way Valve

Fig. 4 3-way Valve

Model	A	B	C
HTW-W27-215	70	23	86
HTW-W27-220	87	23	93
HTW-W27-225	94	25	95
HTW-W27-315	70	33	86
HTW-W27-320	87	27	93
HTW-W27-325	94	43	95

5. Installation Instructions

- ⊙ The differential pressure between water supply pipe and return pipe should be controlled at the admitted range;
- ⊙ The valve shall be set at a place easy for installation and maintenance;
- ⊙ Horizontal installation is top-priority, it can prevent from dampness,
- ⊙ Please notice that B is inlet when installing Two-way valve (A, B signs at the bottom of valve body);
- ⊙ When installing Three-way valve, the inlet is at the bottom of valve (no marks).
NOTICE: Three-way Valve inlet B is normally closed, A is normally opened. Therefore, B should be connected to main pipe, and bypass pipe by A.



For operating with manual operation on motorized valve, slowly and steadily drive the manual shaft to the outside, so that it reaches the end of the position, then softly turn it downwards to lock position. To put the motorized valve back to normal operation, simply by releasing the pin from lock position and it will automatically drive itself back to close and normal stage.