

HMG Brass Series Electric Ball Valve

— Energy-efficient

Description



This series of electric ball valves are composed of two parts: the valve body and the driver. It has the advantages of simple structure, reliable work, strong fluid passing capacity and energy saving. It can be widely used for on-off control of cold and hot water in heating, central air-conditioning, solar water heating systems, and water treatment systems; it can also be used for on-off control of low-pressure steam. Varieties include two-position two-way and two-position three-way.

Features



- ◆ Built-in high-quality micro switch, the motor will not pass after the valve opening and closing process is completed Electricity, so long life, energy saving, and particularly safe.
- ◆ The shell is made of high-strength flame-retardant engineering plastic, which is durable.
- ◆ Adopt high-quality PTFE sealing ring, and install special elastic structure at both ends to ensure Ensure that the seal is stable and reliable and the seal life is greatly extended.
- ◆ Three-wire one-control ball valve driver has a built-in control circuit board, one-line control, It can be equipped with a three-speed switch, which can realize multiple valves in parallel and save thermostats.
- ◆ Good waterproof and dustproof function (IP54)
- ◆ Especially the second-line power-off reset, can replace the solenoid valve.



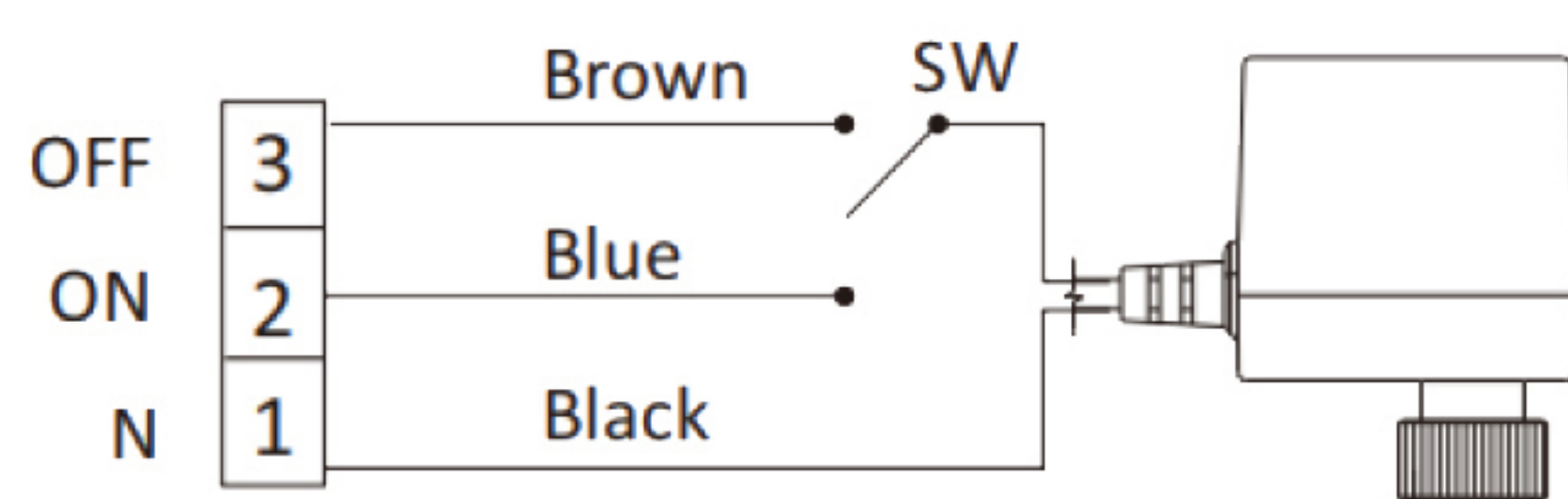
Technical Parameter



- ◆ Drive voltage: 220VAC (or AC 12V, 24V, 110V; DC 5V, 12V, 24V for choice)
 - ◆ Power consumption: AC 5W; DC 1.5W (only in the process of valve opening and closing)
 - ◆ Valve body pressure: 1.6MPa
 - ◆ Allowable pressure difference: ≤ 0.6 MPa
- Applicable medium: cold water, hot water and low-pressure steam (≤ 0.4 MPa)
- ◆ Opening and closing time: 360 degrees to two links for about 56 seconds, three links for about 108 seconds; 90 degrees to two and three links for about 36 seconds; DC open 8 seconds, off for 11 seconds.
 - ◆ Applicable medium temperature: 1-130°C
 - ◆ Applicable ambient temperature: 0-65°C
 - ◆ Connection method: pipe thread G, tapered inner pipe thread (also can be customized according to user requirements)

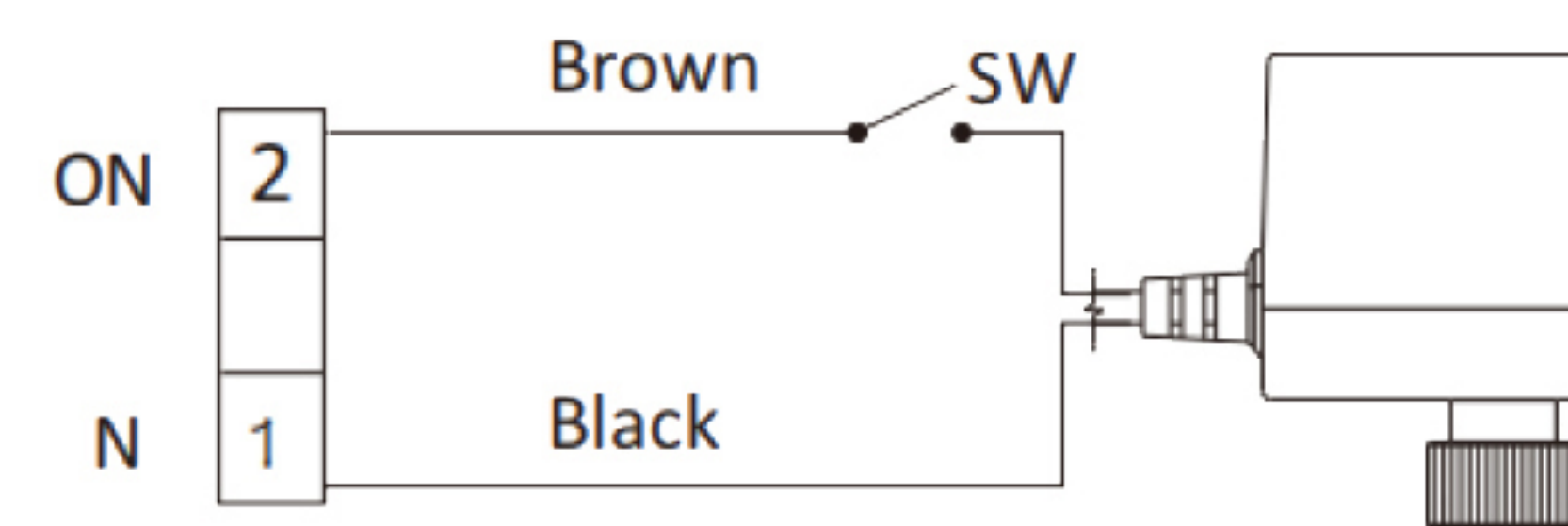
Wiring and Related Circuit Schematic Diagram

Three lines and two controls Voltage: 220VAC/12V/24V/110V; DC5V/12V/24V



1. The SW is connected with the blue wire, and the valve is open: When it is in place, the internal power will be automatically cut off, and the valve will remain in the open state.
2. The SW is connected to the brown wire, and the valve is closed: When it is in place, the internal power will be automatically cut off, and the valve will remain in the closed state.

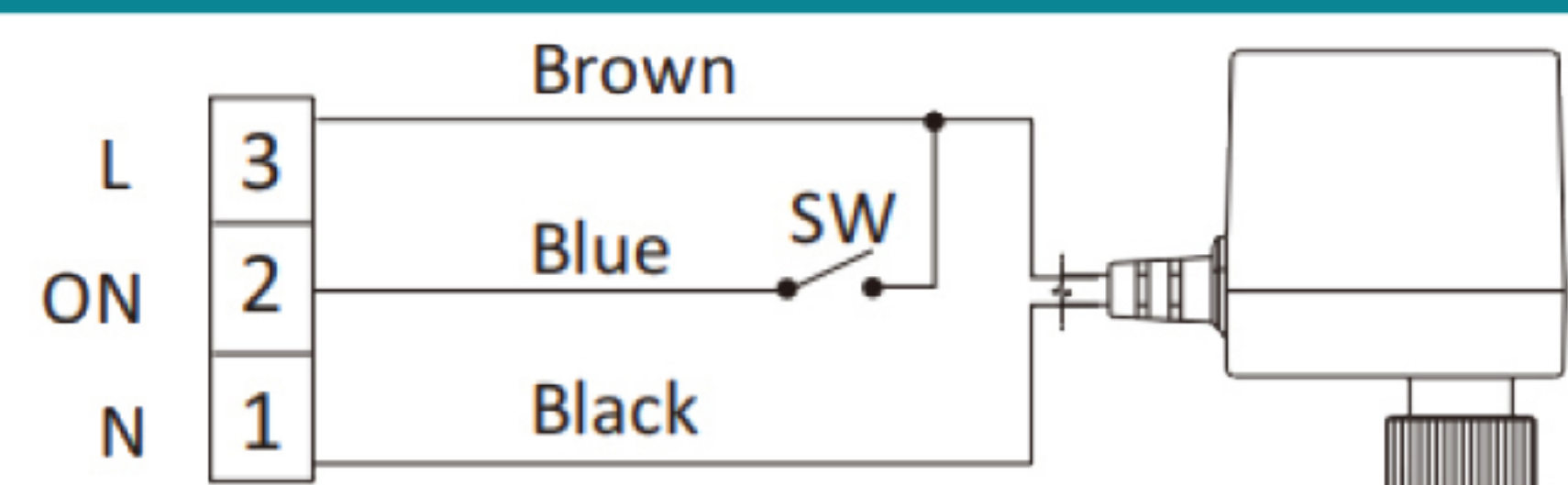
Two-wire power failure reset Voltage : 220VAC; DC9V/12V/24V



1. Normally closed control mode: when the brown wire is closed, the valve opens; when it is in place, the internal power is automatically cut off, and the valve remains in the open state.
 2. Normally closed control mode: when the brown wire is disconnected, the valve is closed; when it is in place, the internal power is automatically cut off, and the valve remains in the closed state.
 3. Normally open control mode: when the brown wire is closed, the valve is closed; when it is in place, the internal power is automatically cut off, and the valve remains in the closed state.
 4. Normally open control mode: when the brown wire is disconnected, the valve opens; when it is in place, the internal power is automatically cut off, and the valve remains in the open state.
- Note: The power-on time is not less than 2 minutes (otherwise the backup power supply cannot be triggered to close or open the valve)

Three lines and one control

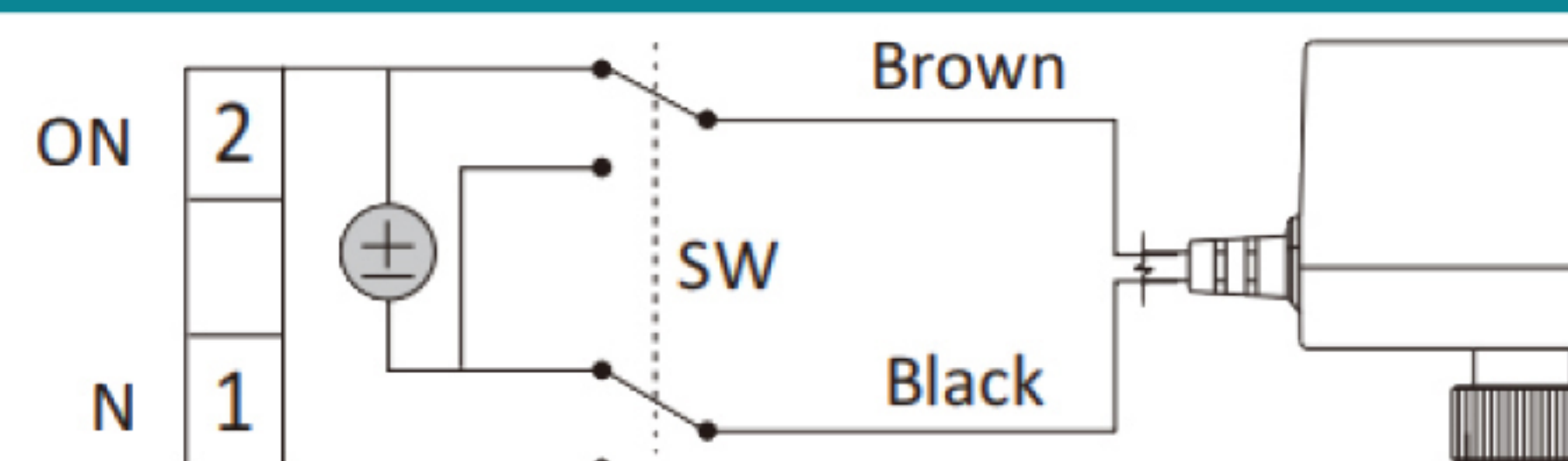
Voltage : 220VAC/110V



1. When the live wire and the neutral wire have power, the blue wire is closed and the valve is opened: the internal power is automatically cut off when it is in place, and the valve remains in the open state.
2. When the live wire and the neutral wire have electricity, the blue wire is disconnected and the valve is closed: when it is in place, the internal power is automatically cut off, and the valve remains in the closed state.

The second line is reversed

Voltage :DC5V/12V/24V



1. SW is a double switch, SW is connected with the black wire, and the valve is open: when it is in place, the internal power will be automatically cut off, and the valve will remain in the open state.
2. The SW is connected to the brown wire, and the valve is closed: When it is in place, the internal power will be automatically cut off, and the valve will remain in the closed state.

Installation and Commissioning Requirements

◆ The two-way ball valve has no medium flow direction regulation; the medium flow direction of the bottom three-way ball valve is from bottom to left or right-out, or left-in or right-in to bottom-out; side-out tee, middle-in to left-out or right-out, or those who enter left or enter right to exit in the middle.

◆ The driver can be installed at any angle, but it must be above the level of the valve body, and there should be at least 30mm space is used for disassembly and assembly, and sufficient maintenance must be maintained with the surrounding pipelines, equipment, and buildings. The repair operation space must be installed in a place that can be reached by maintenance personnel through the manhole.

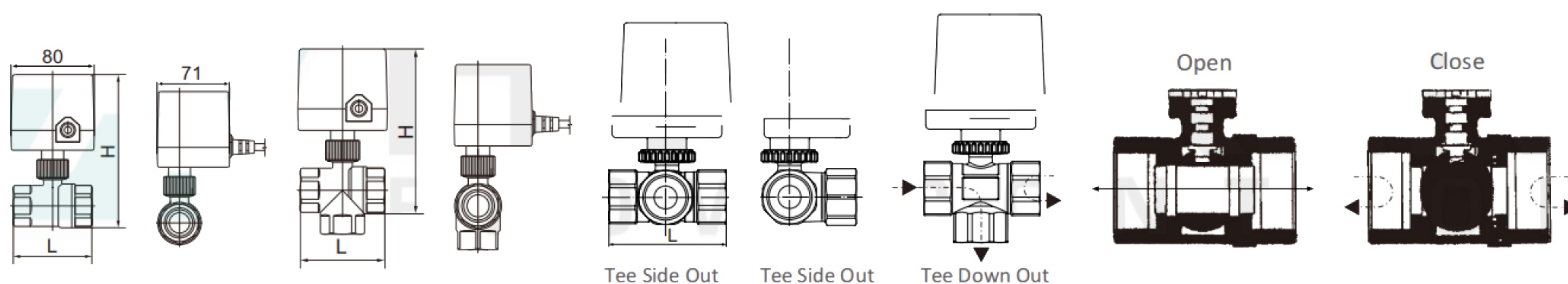
◆ Never apply force to the drive during installation, otherwise the drive will be damaged.

◆ When removing the valve body and installing it, never apply force to the valve stem, otherwise the valve stem will deform and cause malfunction.

◆ When debugging, it must be observed whether the drive can start or stop reliably. If the ball rotates continuously. The driver must be exchanged, otherwise the seal life will change



Ball Valve Shape and Cross-Sectional View



Dimension

Model	Model	Size	Ball Diameter	L	H	Kv	
Two-way electric ball valve	HMG-215(B)	1/2"	DN15	14	55	124	10
	HMG-220(B)	3/4"	DN20	18	62	130	15
	HMG-225(B)	1"	DN25	22	71	135	23
	HMG-232(B)	1 1/4"	DN32	25	75	142	31
	HMG-240(B)	1 1/2"	DN40	30	89	152	38
	HMG-250(B)	2"	DN50	39	101	164	48
Three-way electric ball valve	HMG-315(B)	1/2"	DN15	10	58	120	7
	HMG-320(B)	3/4"	DN20	14	61.5	125	10
	HMG-325(B)	1"	DN25	18	67	135	15
	HMG-332(B)	1 1/4"	DN32	25	97	142	31
	HMG-340(B)	1 1/2"	DN40	30	89	152	38
	HMG-350(B)	2"	DN50	39	101	164	48
	HMG-315L(B)	1/2"	DN15	10	61	124	7
	HMG-320L(B)	3/4"	DN20	14	67.5	130	10
	HMG-325L(B)	1"	DN25	18	76.5	135	15