

Manual NO.13636

2-Way 3-Piece Motorized Ball Valve

The MSV Series 2-Way 3-Piece Motorized Ball Valve is an electrically actuated ON/OFF control valve designed for automatic fluid regulation in water, air, oil, and other compatible media systems. This valve features a 3-piece (three-piece) body construction, which consists of two end caps and a central valve body. This design allows the valve to be easily disassembled for maintenance or repair without removing the entire valve from the pipeline, significantly improving serviceability and reducing downtime.

INSTALLATION GUIDELINES

Mounting Position

- Recommended: horizontal piping with actuator upright.
- Avoid installing the valve in areas with dripping water, excessive vibration, high humidity, or corrosive environments.

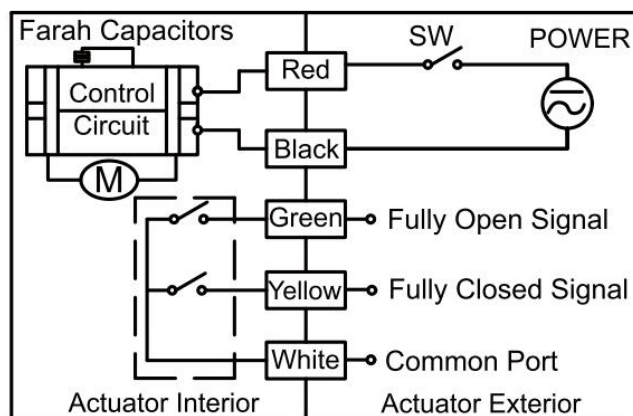
Piping Installation

- Use proper gaskets and tighten connections evenly.
- Do not overtighten to avoid valve damage.
- Support piping to prevent external stress on the valve.

COMPONENTS

Components	Material	Specification
Bonnet	Stainless Steel	304
Valve Seat	PTEE	
Ball	Stainless Steel	304
Sealing Gasket	PTEE	
Gasket	PTEE	
O-ring	FKM	
Valve Body	Stainless Steel	304
Packing	PTEE	
Valve Stem	Stainless Steel	304
Packing Gland	Stainless Steel	304
Bolt	Stainless Steel	304
Spring Washer	Stainless Steel	304
Nut	Stainless Steel	304
Actuator	PPO	

WIRING SCHEMATIC



Normally Closed

- Red connect with positive, Black connect with negative.
- SW CLOSE, valve OPEN, maintain after fully open, Green connect with White.
- SW OPEN, valve CLOSE, maintain after fully closed, Yellow connect with White.

Normally Open

- Red connect with positive, Black connect with negative.
- SW CLOSE, valve CLOSE, maintain after fully closed, Yellow connect with White.
- SW OPEN, valve OPEN, maintain after fully open, Green connect with White

Electrical Specifications

- Suitable Working Voltage: DC9-35V, DC9-60V, DC12-24V, AC24V, AC110-230V
- Exceeding the working voltage is forbidden
- Feedback Signal Load Capacity: 0.3A 24VAC/DC (Resistive Load)

Pre-Installation Checks:

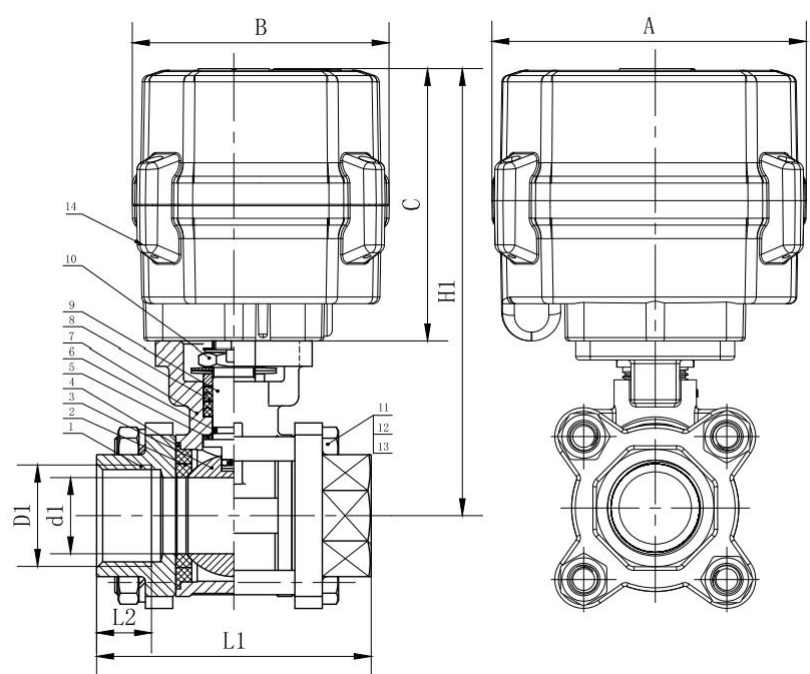
- Ensure pipeline pressure, temperature, and medium compatibility meet valve specifications.
- Ensure the power supply is OFF before wiring.

SPECIFICATIONS

Specification	Value
Circulation Medium	Fluid, air
Working Current	<= 1.5 A
Cable Length	0.5 m
Environment Temperature	-15°C to 50°C
Liquid Temperature	2°C to 90°C
Manual Operation	Yes
Open/Close Indicator	Yes
Protection Class	IP67

Specification	MSV40081	MSV40084	MSV40088	MSV40090	MSV40093	MSV40096	MSV55007	MSV55008
Maximum Working Pressure	232 PSI	232 PSI	232 PSI	232 PSI	145 PSI	145 PSI	145 PSI	145 PSI
Open/Close Time	<= 12 s	<= 12 s	<= 12 s	<= 12 s	<= 15 s	<= 15 s	<= 15 s	<= 15 s
Life Time	70,000 cycles	70,000 cycles	70,000 cycles	70,000 cycles	30,000 cycles	30,000 cycles	30,000 cycles	30,000 cycles
Ball Type	Full Port	Full Port	Full Port	Full Port	Standard Port	Standard Port	Standard Port	Standard Port
Torque	15 N*m	15 N*m	15 N*m	15 N*m	50 N*m	50 N*m	50 N*m	50 N*m

SSEMBLE DIAGRAM



SKU	Size	A	B	C	D1±0.5	d1±0.5	L1±2	L2±1	H1±2
JFMSV40081	1/2"	92.6	75.7	80.4	1/2"	15	68	14	123.4
JFMSV40084	3/4"	92.6	75.7	80.4	3/4"	20	80	16	127.4
JFMSV40088	1"	92.6	75.7	80.4	1"	25	87	17	136.4
JFMSV40090	1-1/4"	92.6	75.7	80.4	1-1/4"	32	100	18	140.4
JFMSV40093	1-1/2"	126.4	105.8	88.8	1-1/2"	38	109	22	160.8
JFMSV40096	2"	126.4	105.8	88.8	2"	49	134	27	167.8
JFMSV55007	2-1/2"	126.4	105.8	88.8	2-1/2"	65	165	34	184.8
JFMSV55008	3"	126.4	105.8	88.8	3"	80	192.5	38	197.8

