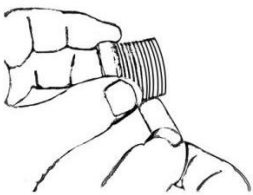
U.S. SOLID
High Quality Valves

INSTALLATION AND MAINTENANCE MOTORIZED BALL VALVES

Thank you for purchasing your U.S. Solid Motorized Ball valve. We are happy to have you as a customer! We want you to get the most out of your new equipment, so we have included a few pointers to get you started. Unfold this manual for simple wiring diagrams, schematics, and specifications on your valve.

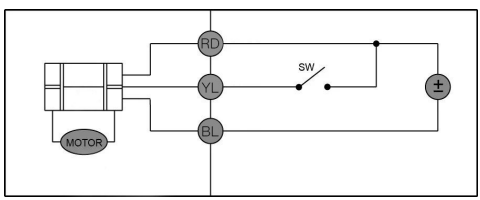


THREADING

U.S. Solid Valves follow National Standards for pipe thread. In the U.S.A. we use NPT, while in Europe we use BSPT. We recommend use of teflon tape to ensure seal of the NPT threading, as shown in the figure to the left.

WIRING SCHEMATIC

1. When the circuit is closed (switch connecting the valve is on), the valve will open, and remain open. Once open, the valve is de-energized.
2. When the circuit is open (switch connecting the valve is off or power is lost), th e valve will close and remain closed. Once closed, the valve is de-energized.



In direct current (DC) situations, the red wire connects to the positive pole, and the blue wire connects to the negative pole. The valve opens when the yellow wire is simultaneously connected to the positive pole with the red wire, and the valve closes when the yellow wire is disconnected and the red wire is connected to the positive pole alone. This means that the red and blue wires are always connected to the positive and negative poles, respectively, and the valve is controlled by parallel or disconnection of the third yellow wire with the red wire.

In alternating current (AC) situations, polarity is not a concern. Simply connect the red and blue wires to any two poles of the power source. When the yellow wire is connected in parallel with the red wire to one pole, the valve opens. Conversely, when the yellow wire is disconnected and only the red wire is connected to one pole, the valve closes.

FREQUENTLY ASKED QUESTIONS

1)Does the valve require water or air pressure to work?
Answer: No! One of the benefits of motorized ball valves is they can work with little water pressure. This means a motorized ball valve can work even with gravity fed arrangements.
2)Can this valve be actuated manually?
Answer: Yes.
3)Will this return to closed if power goes out?
Answer: No. It will still.

4)Can this valve be used outside?

Answer: The motorized ball valves all have a rating of IP65, which means they can withstand spray from water. However, if permanently installed outdoors, it is recommended that you enclose the motorized ball valve in some protective housing.

5)Can this motorized ball valve be powered continuously?

Answer: Due to the power limiting features of these valves, they can be hooked up to power non-stop without risk of overheating.

INSTRUCTIONS OF ENVIRONMENT PROTECTION

At the end of its life cycle, please do not dispose of this equipment by throwing it in the usual garbage. Instead, hand it over at a collection point for the recycling of electrical an electronic appliances. It does not contain dangerous nor toxic products for humans, but inadequate disposal could still damage the environment. The materials are recyclable as mentioned. By recycling material or through other forms or repurposing old appliances, you are making an important contribution to the protection of our environment. Please inquire with your local community authorities for the proper disposal location.

***How to wire this valve** ☞ Watch Video

SPECIFICATIONS

Models: USS-MSV00	213	211 212	214	215 216
Bore Type	Full			Standard
Valve Body Material	SS304		Brass	
Max. Torque	6 N m	2 N m		
Open/Close Time	<8s	<5s		
Voltage	9V-24V AC/DC			
Max. Power	5 W	2 W		
IP Rating	IP65			
Max. Pressure	1.0 MPa			
Flow Medium Temp. Range	0°C to 90° C			
Ambient Temp. Range	-5°C to 40° C			

WARRANTY

All U.S. Solid motorized ball valves come with a one year warranty. We realize that other questions or concerns may arise during the installation and operation of your valve. Please contact us or visit our website for help.

Phone: 800-209-4177
Email: service@ussolid.com
Website: www.ussolid.com

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