

# 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.



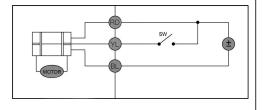
# THREADING

U.S. Solid Valves follow National Standards for pipe thread. In the U.S.A. we

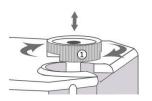
use NPT, while in Europe we use BSPT. We recommend use of teflon tape to ensure seal of the NPT threading, as shown in the figure to the left.

# 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), the valve will close and remain closed. Once closed, the valve is de-energized.



### HOW TO OPEN or CLOSE MANUALLY



- It is only permitted to use when power is off.
- 2. Lift the

hand-wheel gently and turn it left or right until the valve is in place.

- 3. The valves is fully closed when the red line on the position indicator points to "CLOSED"(vertical to the pipe). Likewise, the valve is fully open when it points to "OPEN"(parallel to the pipe).
- 4. Press down hand-wheel when manual override operation is finished so that the valve can work properly when power is supplied.



#### 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: Yes.

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.

#### **SPECIFICATIONS**

Models:		203	205	206 207
USS-IVISVUU	202	204		
Bore Type	Full			Standard
Valve Body	SS304		Brass	
Material				
Max. Torque	2.5 N m			
Open/Close Time	<8s			
Voltage	9V-24V AC/DC			
Max. Power	2 W			
IP Rating	IP65			
Max. Pressure	1.0 MPa			
Flow Medium	0°C to 00° C			
Temp. Range	0°C to 90° C			
Ambient Temp.	-5°C to 40° C			
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

