

Thank you for purchasing your U.S. Solid USS-ZSV Solenoid 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.

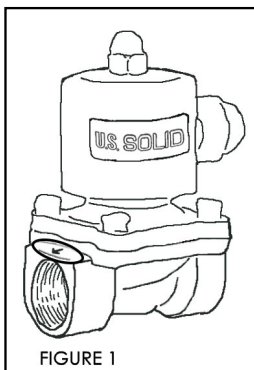


FIGURE 1

**FLOW DIRECTION**

Make note of the arrow on your valve. Most U.S. Solid valves are unidirectional. This means they are intended for flow in one direction only, in the direction of the arrow. See Figure 1 for location of arrow. If connected in opposite direction, the valve will not actuate properly (will not close for Normally Closed valves). Additionally, be sure the medium passing through is filtered. If not, particles will cling to the gasket over time, which can cause it to not seal properly.

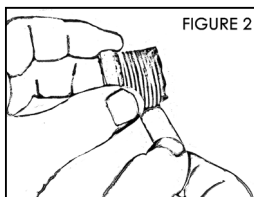


FIGURE 2

**THREADING**

U.S. Solid Valves follow National Standards for pipe thread. In the U.S.A. we use NPT, while in Europe we use G. We recommend use of teflon tape to ensure seal of the NPT threading, as shown in Figure 2.

**POLARITY**

All U.S. Solid USS-ZSV solenoid valves are 2 wire set-up, the valves will actuate regardless of which terminal each wire is connected to (+ or -).

**VALVE BODY**

U.S. Solid USS-ZSV solenoid valves come with a zinc-alloy valve body. It has a softer texture than brass. The hardness of the valve body becomes soft under high temperature or high pressure, which will cause the fixing screws to not fit tightly, resulting in air leakage and water leakage. To make the valve work normally, please use it in an environment where the temperature is lower than 176°F (80°C) and the pressure is between Air/Water: 0-8 Bar, Oil: 0-5 Bar. Avoid using in humid environments. High humidity will cause the surface of the valve body to be oxidized and black (the use will not be affected).

**WARNING-** Please be careful of the following to help ensure your safety and optimal performance over time.

**INSTALLATION**

Install the valve horizontally in the direction of the port.

The valve is suitable for indoor and outdoor use, but it is necessary to avoid being exposed to rain when used outdoors to prevent short circuit of the coil.

**OVERHEATING**

These valves are not intended to be energized for more than 6 hours continuously. The coils are in a contained area, and can burnout if energized for too long. If necessary to energize continuously for extended periods, we recommend a computer fan to keep the coil cool.

**PRESSURE**

All solenoid valves need some pressure to actuate. This is especially true of pilot or indirectly operated valves.

**Contact**

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](mailto:service@ussolid.com)  
Website: [www.ussolid.com](http://www.ussolid.com)

**PARTICLE FREE**

Make sure whatever medium is flowing through the valve is free of particles.

These particles can attach themselves to the gasket and will lead to poor performance or leakage over time.

**WATER RESISTANCE**

All U.S. Solid solenoid valves are splash resistant but NOT water proof. Take care to not have the valve exposed directly to rain or submerged in liquid.

**INSTRUCTIONS on ENVIRONMENTAL  
PROTECTION**

UK D53670YF

At the end of its life cycle, please do not dispose of this equipment by throwing it in the usual

Instead, hand it over at a collection point for the recycling of electrical and 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.

**WARRANTY:** All U.S. Solid USS-ZSV solenoid valves come with a one year warranty.