

# Installation & Maintenance Instructions

2-WAY INTERNAL PILOTED-OPERATED SOLENOID VALVES  
NORMALLY CLOSED OPERATION — OIL SERVICE  
1/4" OR 3/8" NPT

SERIES

SV401

Form No. V8524R1

## ⚠ WARNING

To prevent the possibility of death, serious injury or property damage, the Series SV401 Oil Valve must be installed and serviced (tested) only by a qualified service technician avoiding the following hazards:

- **Electrical Hazard.** Turn off electrical power to solenoid.
- **Pressure Hazard.** Depressurize valve and vent hazardous or combustible fluid to a safe area before inspection or removing the valve from service.
- **Explosion/Fire Hazard.** Extinguish all open flames and avoid any type of sparking or ignition when leakage testing.

### Service Notices

Except for solenoid replacement, the Series SV401 valves are not repairable. When any performance problems are detected during routine inspection, replace valve immediately.

See separate solenoid installation and maintenance instructions for information on: Wiring, Solenoid Temperature, Cause of Improper Operation and Solenoid Replacement.

### DESCRIPTION

Series SV401 valves are 2-way normally closed internal pilot-operated solenoid valves designed for oil service. Valves are made of rugged forged brass. Series SV401 valves are provided with a general purpose/watertight solenoid enclosure.

### OPERATION

**Normally Closed:** Valve is closed when solenoid is de-energized; open when energized.

**NOTICE:** No minimum operating pressure differential required.

### INSTALLATION

Check nameplate for correct catalog number, pressure, voltage, frequency, and service. Never apply incompatible fluids or exceed pressure rating of the valve.

### Future Service Considerations

Provision should be made for performing seat leakage, external leakage, and operational tests on the valve with a nonhazardous, noncombustible fluid.

### Temperature Limitations

For valve ambient and fluid temperatures, refer to chart below.

Watt Rating Service	Minimum Ambient & Fluid Temp.	Maximum Ambient Temp.	Maximum Fluid Temp.
17.1 AC	32°F (0°C)	150°F (66°C)	250°F (121°C)

### Positioning

Valve must be mounted with solenoid vertical and upright.

### Piping

Connect piping to valve according to markings on valve body. Apply pipe compound sparingly to male pipe threads only. If applied to valve threads, the compound may enter the valve and cause operational difficulty. Avoid pipe strain by properly supporting and aligning piping. When tightening the pipe, do not use valve or solenoid as a lever. Locate wrenches applied to valve body or piping as close as possible to connection point.

**⚠ CAUTION:** To protect the solenoid valve, install a strainer or filter suitable for the service involved, in the inlet side as close to the valve as possible. Clean periodically depending on service conditions. See ASCO Series 8600, 8601 and 8602 for strainers.

### MAINTENANCE

#### Preventive Maintenance

- Prepare and follow a routine inspection schedule based on the media, environment, and frequency of use. This should include periodic internal and external leakage checks.
- Keep the medium flowing through the valve as free from dirt and foreign material as possible. Depending on medium and service conditions, clean valve strainer or filter as required to keep the valve free of contamination. In the extreme case, contamination will cause faulty valve operation and the valve may fail to open or close, and an explosion or fire can occur.
- While in service, the valve should be operated at least once a month to ensure proper opening and closing.

#### ORDERING INFORMATION FOR ASCO GENERAL CONTROLS SOLENOIDS OR REPLACEMENT VALVES

When Ordering ASCO General Controls Solenoids or Replacement Valves, specify catalog number, serial number, voltage and frequency.