

# Installation & Maintenance Instructions

2-WAY DIRECT-ACTING SOLENOID VALVES  
 NORMALLY CLOSED OPERATION – STEAM & HOT WATER SERVICE  
 1/4" and 3/8" NPT

**SERIES  
 8263H**

I&M No.V9578

**IMPORTANT:** See separate solenoid installation and maintenance instructions for information on: Wiring, Solenoid Temperature, Causes of Improper Operation, and Coil or Solenoid Replacement.

## DESCRIPTION

Series 8263 valves are 2-way direct-acting solenoid valves designed for steam and hot water service. Valve bodies are made of rugged brass or stainless steel. Series 8263 valves may be provided with a general purpose or watertight/explosionproof solenoid enclosure.

## OPERATION

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

## INSTALLATION

Check nameplate for correct catalog number, pressure, voltage, frequency, and service. Never apply incompatible fluids or exceed pressure rating of the valve. Installation and valve maintenance to be performed by qualified personnel.

### Temperature Limitations

For maximum valve ambient and fluid temperatures, refer to the following table. The temperature limitations listed are for UL applications. For other valves and non-UL applications, higher ambient and fluid temperature specifications are available. Consult factory. Use catalog number, coil prefix, suffix, and watt rating on nameplate to identify the maximum ambient and fluid temperatures.

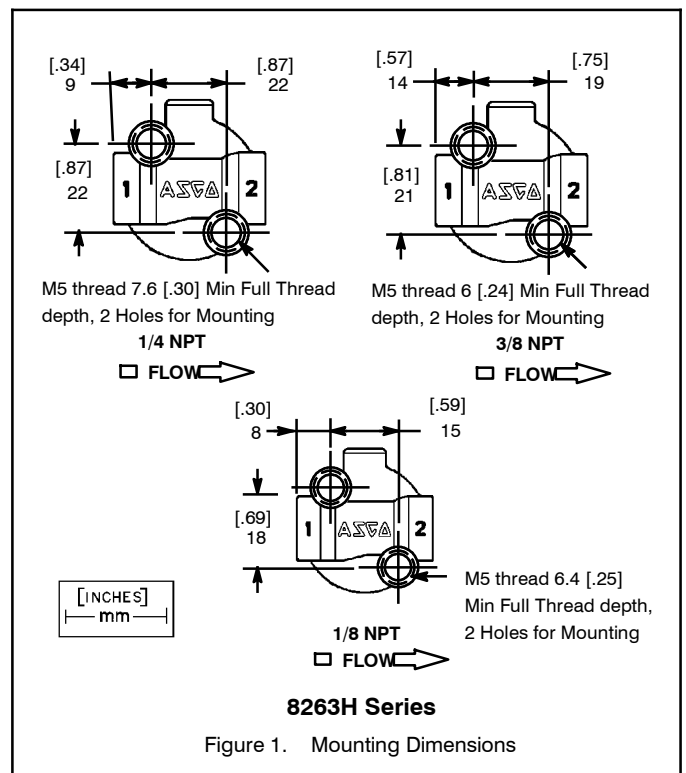
Catalog Numbers	Max Temp					Min Temp		
	Ambient		Fluid		Hot H <sub>2</sub> O		Ambient and Fluid	
	°C	°F	°C	°F	°C	°F	°C	°F
8263H053	55	131	148	298	99	210	0	32
8263H303, H308, H321			153	307				
8263H301, H306, H320			158	316				
8263H059			167	331				
8263H300, H305, H319			173	344				
8263H304, H305, H319			178	353				

## Positioning

These valves are designed to perform properly when mounted in any position. However, for optimum life and performance, the solenoid should be mounted vertically and upright to reduce the possibility of foreign matter accumulating in the solenoid base sub-assembly area.

## Mounting

Two (2) M5 threaded holes are provided in the valve body for mounting. See Figure 1. M5 threads will accept standard 10-32 screw. Optional mounting bracket can be obtained with valve as Suffix MB or separately as a kit



## 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.

**IMPORTANT:** 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.

## Solenoid Temperature

Standard catalog valves are supplied with coils designed for continuous duty service. When the solenoid is energized for a long period, the solenoid enclosure becomes hot and can be touched with the bare hand momentarily. This is the safe operating temperature. Any excessive heating will be indicated by the smoke and odor of burning coil insulation.

## MAINTENANCE

**▲ WARNING: To prevent the possibility of death, serious injury or property damage, turn off electrical power, depressurize valve, and vent fluid to a safe area before servicing the valve.**

NOTE: It is not necessary to remove the valve from the pipeline for repairs.

### Cleaning

All solenoid valves should be cleaned periodically. The time between cleanings will vary depending on the medium and service conditions. In general, if the voltage to the coil is correct, sluggish valve operation, excessive noise or leakage will indicate that cleaning is required. In the extreme case, faulty valve operation will occur and the valve may fail to open or close. Clean strainer or filter when cleaning the valve.

### Preventive Maintenance

- Keep the medium flowing through the valve as free from dirt and foreign material as possible.
- Periodic exercise of the valve should be considered if ambient or fluid conditions are such that corrosion, elastomer degradation, fluid contamination build up, or other conditions that could impede solenoid valve shifting are possible. The actual frequency of exercise necessary will depend on specific operating conditions. A successful operating history is the best indication of a proper interval between exercise cycles.
- Depending on the medium and service conditions, periodic inspection of internal valve parts for damage or excessive wear is recommended. Thoroughly clean all parts. Replace any worn or damaged parts.

### Causes of Improper Operation

- **Incorrect Pressure:** Check valve pressure. Pressure to valve must be within the range specified on the nameplate.
- **Excessive Leakage:** Disassemble valve (see Maintenance) and clean all parts. If parts are worn or damaged, install a complete ASCO Rebuild Kit.

## Valve Disassembly (see Figure 2)

1. Disassemble valve using exploded views for identification of parts.
2. Remove solenoid, see separate instructions.
3. Unscrew solenoid base sub-assembly with wrench. Remove core assembly, core spring, and solenoid base gasket from valve body.
4. All parts are now accessible to clean or replace. If parts are worn or damaged, install a complete ASCO Rebuild Kit.

## Valve Reassembly

1. Use exploded views for identification, orientation and placement of parts.
2. Lubricate all gaskets with DOW CORNING® 200 Compound lubricant or an equivalent high-grade silicone oil.
3. Replace solenoid base gasket, core assembly with core spring and solenoid base sub-assembly. Note: For core assemblies with internal type core springs, install wide end of core spring in core assembly first, closed end of core spring protrudes from top of core assembly. (see Figure 1)
4. Torque solenoid base sub-assembly to  $175 \pm 25$  in-lbs [ $19,8 \pm 2,8$  Nm].
5. Install solenoid. See separate solenoid instructions. Then make electrical hookup to solenoid.

**▲ WARNING: To prevent the possibility of death, serious injury or property damage, check valve for proper operation before returning to service. Also perform internal seat and external leakage tests with a nonhazardous, noncombustible fluid.**

6. Restore line pressure and electrical power supply to valve.
7. After maintenance is completed, operate the valve a few times to be sure of proper operation. A metallic *click* signifies the solenoid is operating.

## ORDERING INFORMATION FOR ASCO REBUILD KITS

Parts marked with an asterisk (\*) in the exploded views in Figure 2 are supplied in Rebuild Kits. When Ordering Rebuild Kits for ASCO valves, order the Rebuild Kit number stamped on the valve nameplate. If the number of the kit is not visible, order by indicating the quantity of kits required, and the Catalog Number and Serial Number of the valve(s) for which they are intended.

## Torque Chart

Part Name	Torque Value Inch-Pounds	Torque Value Newton-Meters
Solenoid base sub-assembly	$175 \pm 25$	$19,8 \pm 2,8$

