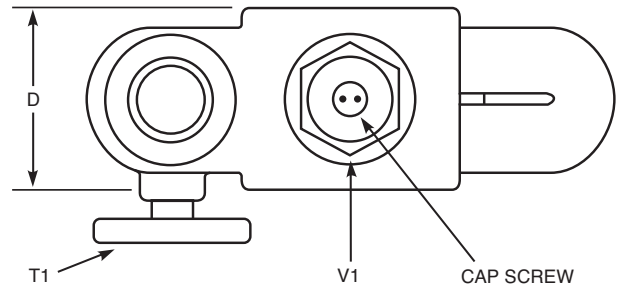
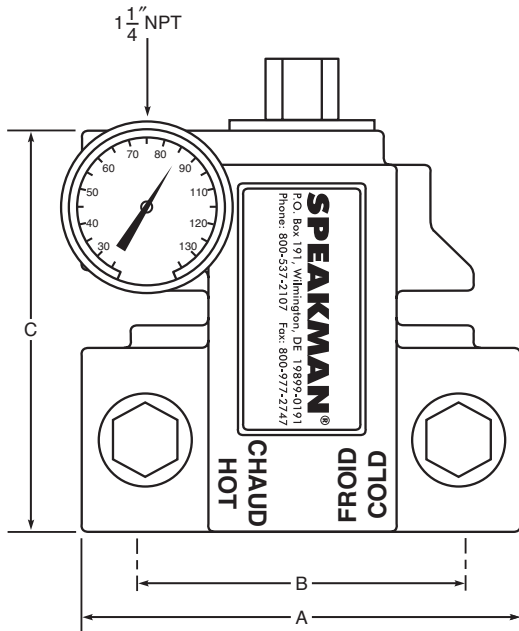


# SE-360

## Drench Shower & Eyewash Valve



**DIMENSIONS:**

Valve Number	A	B	C	D
SE-360	7"	5"	6 1/2"	3"

**CAPACITIES - SE-360**

Pressure Drop PSI	5	10	20	30	45
Tempered Flow GPM	9	13	17	25	27
Tempered Flow LPM	34	49	64	94	102

**BYPASS CAPACITIES - SE-360**

Pressure Drop PSI	5	10	20	30	45
Cold Bypass GPM	7	10	14	21	22
Cold Bypass LPM	26	37	53	79	83

**Caution:** When maintaining and adjusting the mixing valve, the delivered flushing fluid temperature shall be 60°F (15°C) to 95°F (35°C). In circumstances where chemical reaction is accelerated by flushing fluid temperature, a medical advisor should be consulted for the optimum temperature for each application.

### Setting the Mixing Valve

**Caution:** When maintaining and adjusting the mixing valve, all fixtures should be isolated from use. Speakman recommends that you work safely at all times and in a manner consistent with the OSHA Lock/Tagout standard, 29 CFR 1910.147 and other applicable standards.

This mixing valve has been set at the factory to deliver 85°F outlet flow. Should the valve require adjustment, or an application require a different set temperature, proceed as follows:

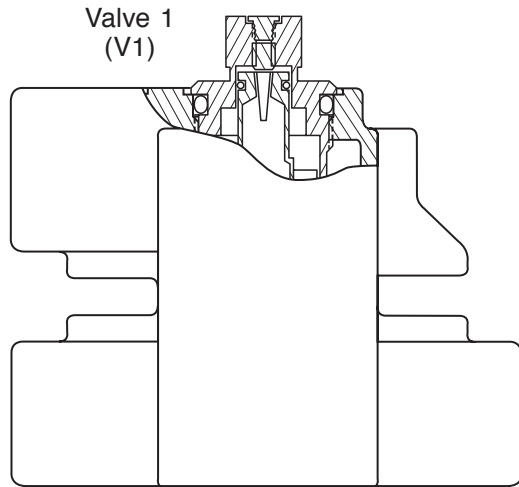
1. Contact the proper medical and safety authorities to determine the correct water temperature for the specific application.

2. Use a spanner wrench to remove the tamper-resistant cap screw of valve cartridge (V1).
3. Create a draw on the mixing valve by opening a downstream eyewash fixture.
4. Insert a 5/32" allen key into the adjustment screw (not shown) in the cap screw opening of valve cartridge (V1). Set the outlet temperature by turning the adjustment screw: clockwise to reduce temperature, counterclockwise to increase temperature. Use the dial thermometer (T1) to measure the outlet temperature.
5. Replace cap screw.

**Note:** Valve must be installed with check valves. If shut off valves are installed in the shower line for maintenance purposes, provisions shall be made to prevent unauthorized shut off.

## Testing the Mixing Valve

The mixing valve and the emergency fixtures it serves should be tested weekly for proper operation.



Valve temperature test procedure is as follows:

1. Activate eyewash fixture to observe and record the temperature of the dial thermometer (T1). If the temperature of the thermometer is not correct, readjust the mixing valve according to the section "Setting the Mixing Valve".
2. Observe the flow from the emergency fixtures to ensure an adequate flow of water.

In addition to testing for proper temperature, the cold water by-pass and hot water shut down features of the mixing valve should be tested weekly.

The test procedure is as follows:

1. Test valve temperature as described in Step 1 and Step 2 above.
2. Shut off the hot water supply to the mixing valve. Observe the outlet flow from the emergency fixtures to ensure an adequate flow of cold water. A slight drop in flow may occur after shutting down the hot water supply to the mixing valve; however, the drop should be minimal and for a short duration.
3. Open the hot water supply to the mixing valve. The thermometer should return to the set temperature.
4. Shut off the cold water supply to the mixing valve. The flow of water should shut down rapidly.
5. Open the cold water supply. The thermometer should return to the set temperature.

**Note:** The thermometer (T1) should be checked at least every six months.

## Replacing the Thermostat Cartridge

The thermostat replacement procedure is as follows:

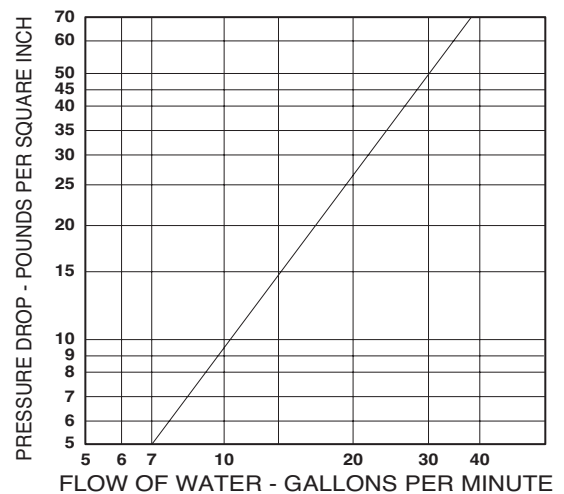
**Note:** Speakman recommends that you work safely at all times and in a manner consistent with the OSHA Lock/Tagout standard, 29 CFR 1910.147 and other applicable standards.

1. Shut off the hot water supply and cold water supply to the mixing valve.
2. Unscrew valve cartridge (V1) and install a new cartridge assembly.
3. Open the hot water supply and the cold water supply to mixing valve. Check the temperature to see if the replacement cartridge is operating correctly. If the temperature requires adjustment refer to the section "Setting the Mixing Valve."

## Operating Principle

This SE-360 Emergency Eyewash mixing valve is made of a thermostat housed in a brass casting. The thermostatic cartridge responds to temperature changes in the hot and cold water supplies. The SE-360 valve requires testing and maintenance on a regular basis. In the event the element fails the valve should provide full cold water flow.

### CAPACITY OF THE SE-360 THERMOSTATIC MIXING VALVE FOR EMERGENCY SHOWERS



**Note:** Gallon per minute ratings may vary dependent upon incoming water temperatures and pressures. Hot and cold water inlet pressures must be equal.

## Installation

After installing the mixing valve, be sure to flush the system thoroughly. Speakman recommends isolation and check valves for proper maintenance.

### Typical Installation *Figure 1*

When installed at or near the water heater and without a recirculation system.

Install the valve as shown in *Figure 1* with the mixing valve positioned below the hot water tank or heater. If this is not possible, pipe in heat trap as shown.

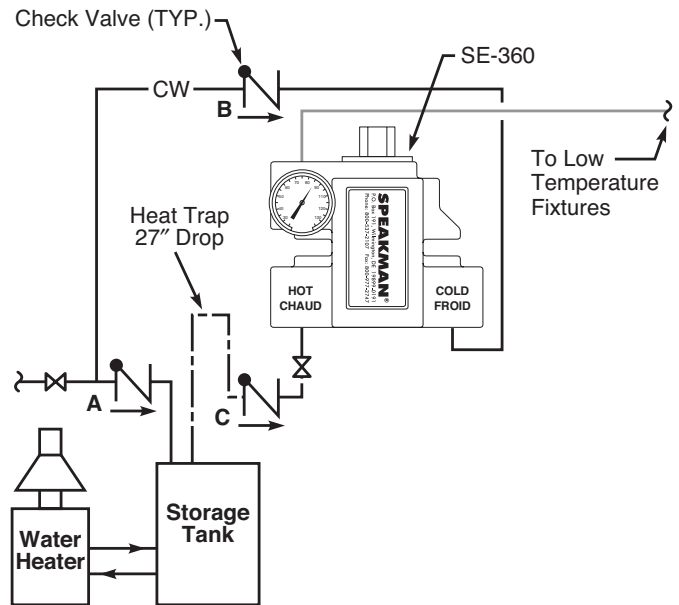
### Typical Installation *Figure 2*

When installed away from the water heater with a recirculating pump on the hot water supply line.

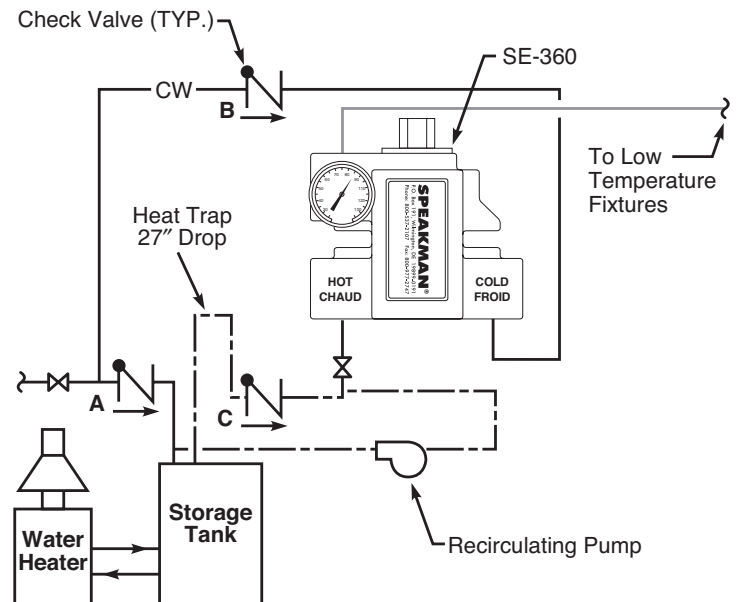
**Note:** If the valve is installed 20 feet or more from the water heater, it is important to recirculate the hot water supply to the mixing valve.

Install the mixing valve as shown in *Figure 2*. The non-circulated loop should be limited to 10 feet and must be flushed periodically.

**Figure 1**  
Typical installation. Valve must be installed with check valves.



**Figure 2**  
Typical recirculating installation. Valve must be installed with check valves.



**Caution:** The cold water line must be installed so that it is not effected by excessively hot ambient temperatures. An example of hot ambient temperature is a long run of pipe exposed to direct sunlight. Cold water pipe installed in the ceilings of boiler rooms or rooms that increase ambient temperature require a recirculating pump.

**Caution:** When maintaining and adjusting the mixing valve, the delivered flushing fluid temperature shall be 60°F (15°C) to 95°F (35°C). In circumstances where chemical reaction is accelerated by flushing fluid temperature, a medical advisor should be consulted for the optimum temperature for each application.

## GUARANTEE

We guarantee the Speakman Mixing Valve to be free from defects in workmanship and material, and, for a period of one year from date of purchase, will replace any parts found by Speakman to be defective. Speakman will not be held

responsible, however, for any labor incidental to, or for any damages caused by, defective material. Each mixing valve is thoroughly inspected and tested under actual conditions at our factory.

# SE 360 Test Record

Location \_\_\_\_\_

YEAR		Date	T1	YEAR		Date	T1	YEAR		Date	T1
YEAR		Jan		YEAR		July		YEAR		Jan	
		Feb				Aug				Feb	
		March				Sept				March	
		April				Oct				April	
		May				Nov				May	
		June				Dec				June	
		July				Jan				July	
		Aug				Feb				Aug	
		Sept				March				Sept	
		Oct				April				Oct	
		Nov				May				Nov	
		Dec				June				Dec	
YEAR		Jan		YEAR		July		YEAR		Jan	
		Feb				Aug				Feb	
		March				Sept				March	
		April				Oct				April	
		May				Nov				May	
		June				Dec				June	
		July				Jan				July	
		Aug				Feb				Aug	
		Sept				March				Sept	
		Oct				April				Oct	
		Nov				May				Nov	
		Dec				June				Dec	
YEAR		Jan		YEAR		July		YEAR		Jan	
		Feb				Aug				Feb	
		March				Sept				March	
		April				Oct				April	
		May				Nov				May	
		June				Dec				June	

*Before you use this chart please make a copy for future testing records.*