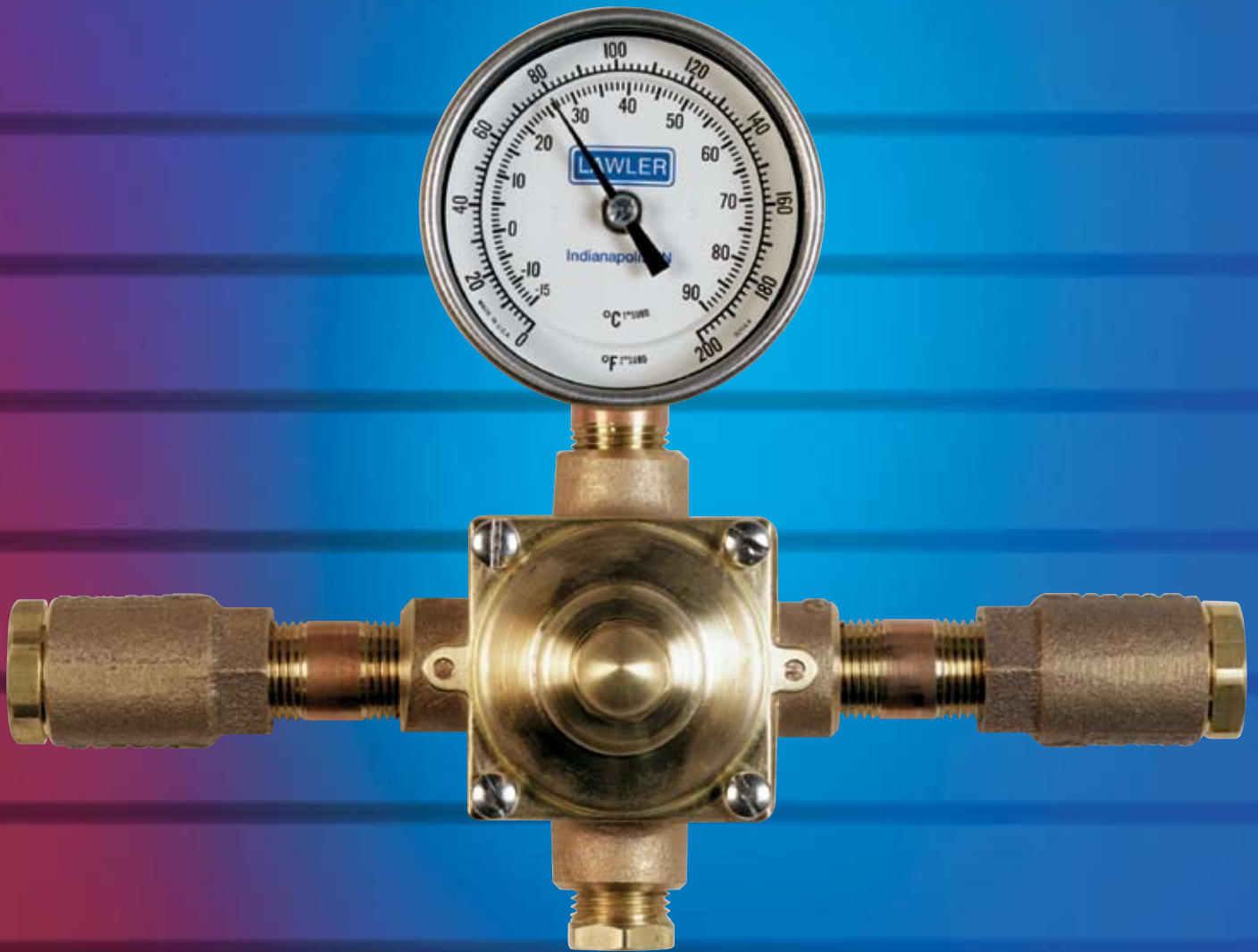


**LAWLER**



## MODEL 911<sup>®</sup>E/F THERMOSTATIC MIXING VALVE FOR EMERGENCY EYE/FACE WASH FIXTURES

Suitable for single eye/face wash fixtures

The best solution for meeting ANSI Standard Z358.1-2004

Tepid: Moderately warm; Lukewarm

(PAT NO. 5,011,074) (PAT NO. 5,379,936)

**LAWLER MANUFACTURING CO. INC., Indianapolis, IN**

# Lawler Model 911<sup>®</sup>E/F Thermostatic Water Controller

## The Solution

The Lawler Model 911E/F Water Controller thermostatically mixes hot and cold water for emergency eye/face wash fixture.

### Patented Design

The Model 911E/F's thermostatic element responds to changes in incoming hot and cold water temperatures to provide comfortable, tempered water. Cartridge design allows ease of maintenance and replacement while the valve is still on the supply line.

### Positive Hot Water Shut-off

Should the cold water supply to the valve fail, the Model 911E/F will shut-off all incoming hot water.

### Integral Cold Water Bypass

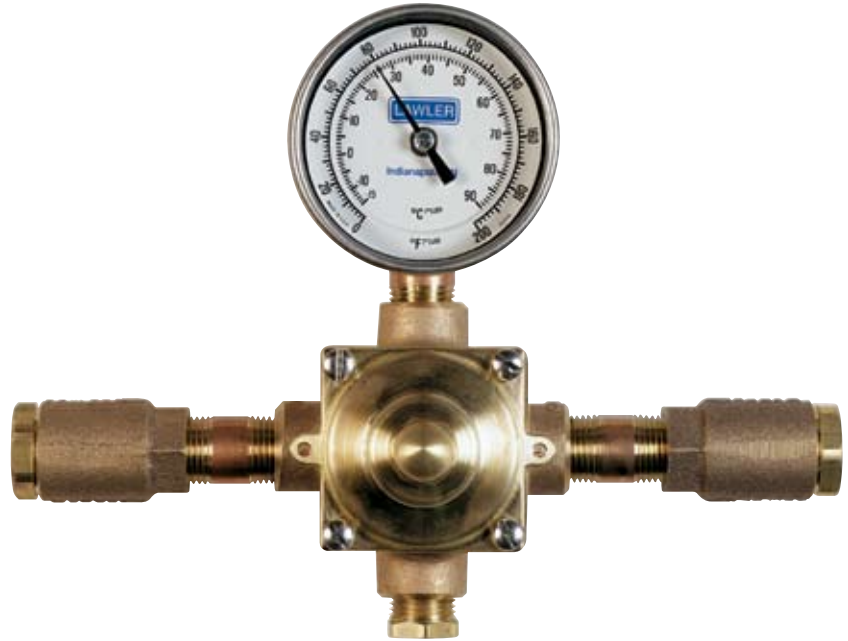
In the event the thermostatic element fails, or the hot water supply is interrupted, the 911 E/F will still deliver enough cold water to the emergency eye/face wash equipment to satisfy ANSI's minimum flow rate safety standard of 3 gpm.

### Low-Flow Capability

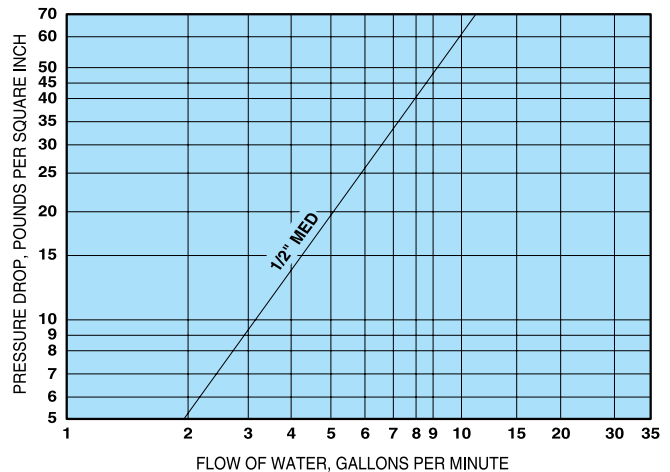
The Model 911E/F tempers water to a wide range of flows to meet your needs. Low-flow capability allows the valve to deliver safe, tempered water to emergency fixtures supplied by the same supply line. The 911 E/F will safely control water temperature to as little as 2 gpm. Low flow performance means the 911 E/F is your solution for virtually every emergency eye/face wash fixture application.

### Flexibility

The Model 911E/F is available in a variety of finishes, piping configurations and cabinet designs to meet your requirements. Bronze, brass, copper, and stainless steel construction assures years of dependable service.



**CAPACITY OF TYPE 911E/F  
THERMOSTATIC MIXING VALVE  
FOR EMERGENCY EYE/FACE WASH**



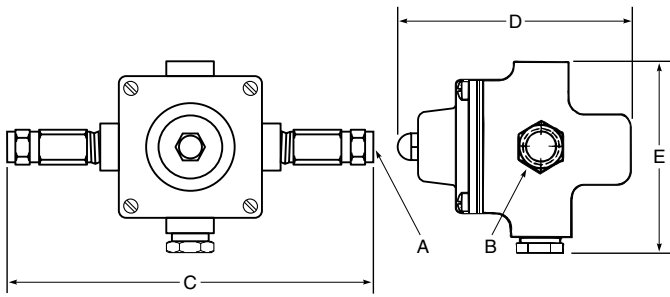
**CAPACITIES - MODEL 911E/F**

Pressure Drop PSI	5	10	20	30	45
Tempered Flow GPM	2	3	5	7	10
Tempered Flow LPM	7.5	11.3	19	26.5	38

**BYPASS CAPACITIES - MODEL 911E/F**

Pressure Drop PSI	5	10	20	30	45
Cold Bypass GPM	1	2	4	5	7
Cold Bypass LPM	3.7	7.5	15	19	26.5

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



### Dimensions:

Valve Number	A N.P.T.	B N.P.T.	C	D	E
911E/F	1/2"	1/2"	10"	5"	4"

### TYPICAL SPECIFICATION

The Emergency Eye/Face Wash Mixing Valve shall employ an independent control mechanism which blends the inlet water flows to the design temperature. The valve shall control outlet temperature over a wide range of flow. Temperature adjustment shall be vandal-resistant.

The control mechanism shall employ a liquid-filled thermostatic motor to drive the valve without additional power requirements. The control mechanism shall employ a stainless steel sliding piston control device with reverse seat closure.

In the event of interruption of the cold water supply, the control mechanism shall close off the hot water port, stopping all flow.

In the event of interruption of the hot water supply, the control mechanism shall allow cold water by-pass flow.

In the event that the liquid motor fails, the control mechanism shall close off the hot water port with the reverse seat and fully open the internal by-pass to allow cold water flow.

**Maximum Inlet Pressure:** 125 PSI

**Recommended Operating Pressure:** 65 PSI

**Recommended Inlet Temperature:** 120°F\*

**Connections:** 1/2" NPT

**Capacity:** 7 gpm at 30 PSI

\*When supplying 140°F or greater, additional outlet controls should be used.

## Lawler Model 911E/F Thermostatic Mixing Valve

### Benefits:

- Comfortable, tempered water for emergency Eye/Face Wash fixtures promotes proper usage.
- Low-flow capability.
- Installs into existing plumbing lines.
- Easy to replace thermostatic cartridge.
- Hands-off testing.

### Features:

- Powerful liquid filled thermostat.
- Compensates for supply line temperature and pressure changes.
- Outlet flow is full cold upon thermostat failure.
- Tamper-resistant control adjustment.
- Rugged design equipped with stainless steel piston and liner.
- Easy-maintenance valve can be completely repaired without being removed from the system.

### Performance

The Model 911E/F controller will maintain outlet temperature to within 5°F under any of the following conditions, providing the recommended minimum flow and minimum 20°F supply temperature differential is met:

- reduction to 2 gpm
- 30°F change in hot water temperature
- 30°F change in cold water temperature
- 50% drop in inlet supply pressure

**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.

**Note:** The valve body must be maintained at an ambient room temperature of above 50°F to prevent premature closure of the safety back-seat mechanism.

**Note:** The valve must be installed with inlet check valves, hot and cold water inlet pressures must be equal.

## Typical Installation

After installing the mixing valve, be sure to thoroughly flush the system of debris. The installation of these valves should include provisions to prevent unauthorized shut-off.

### 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 a heat trap as shown.

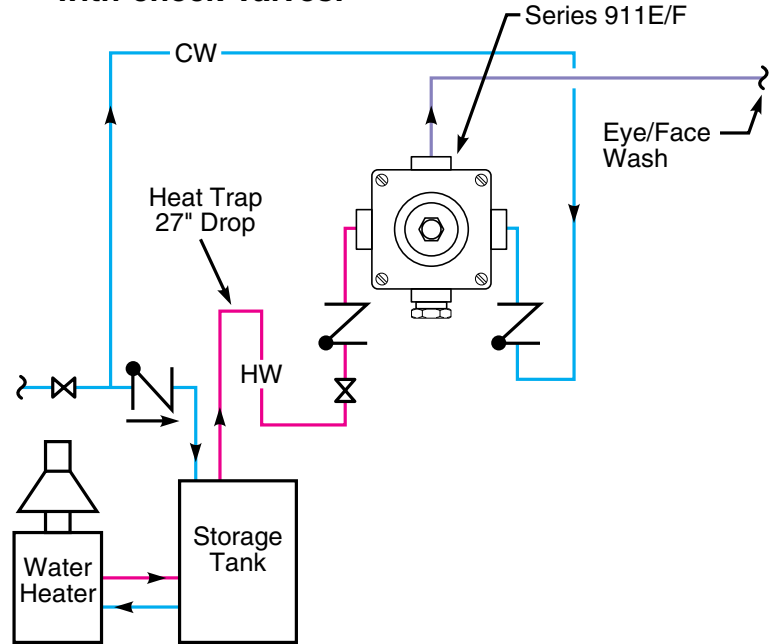
### Typical Installation Figure 2

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

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

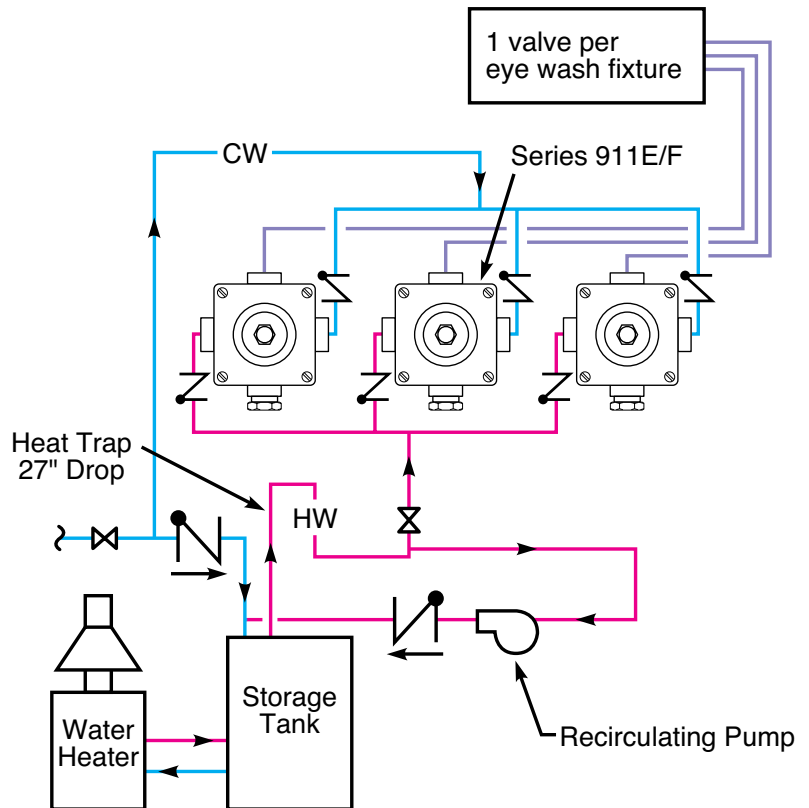
*Figure 1*

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



*Figure 2*

**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. Provisions shall be made to thermally isolate the valve. 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, all fixtures should be isolated from use. Lawler Manufacturing Co., Inc. 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.

**Note:** The mixing valve must be installed with inlet check valves and the Eyewash/Facewash fixture should be installed 4 to 10 feet from the mixing valve.

**LAWLER**

MANUFACTURING CO., INC.

5330 East 25th Street  
Indianapolis, Indiana 46218  
Phone (317) 261-1212  
Fax (317) 261-1208

[www.lawlervalve.com](http://www.lawlervalve.com)