



temperedwater.com

5330 East 25th St. Indianapolis, IN 46218 Phone (317) 261-1212 Fax (317) 261-1208



## Neptune EMX 200 RP Electronic Mixing Valve with Recirculation Piping Eng. No. 943140

Pressure Drop PSI		5	10	20	30
Valve	Inlet Size	CAPACITY GPM			
NEPTUNE EMX 200	2"	102	145	205	252

Minimum flowrate: 1/4 gpm when properly installed at or near the hot water source recirculating tempered water with a properly sized continuously operating recirculation pump. (5 gpm min per valve)

- · 2" inlets and outlet
- · Stainless Steel Construction
- · ASSE 1017 and NSF 372 (lead free) listed
- Maximum operating pressure: 150 psi
- Controls water temperature to +/- 2°F in accordance with ASSE 1017
- Low Load algorithm keeps temperature steady in low demand periods
- · Fails "last position" during power failure
- Automatic Hot/Cold water shutoff upon cold/hot water inlet supply failure
- Recommended recirculation pipe size: 1-1/4" or greater
- System includes recirculation piping, circuit setting balancing valve and check valves

- Programmable high temperature alarm function
- Programmable set point range between 95°F to 180°F (Default set temperature 120°F)
- Control box supplied with 4 ft. 120 VAC power cord and NEMA 4 enclosure
- · Modbus communication standard
- · Easy integration into BMS system
- Operating Voltage: 24 VDC
- · Simple user commissioning and setup
- · Displays outlet temperature
- Removeable and serviceable thermocouple probe
- Factory Assembled and Tested
- Minimum hot water supply temperature: 2°F (1°C) above set point with equal incoming pressures



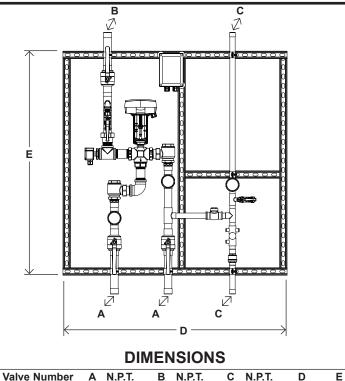
EMX 200



52"

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Dimensions are for reference purposes only. For rough-in dimensions please refer to Lawler's Revit/BIM models found at temperedwater.com.

1-1/4"

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## **Typical Installation**

Install the mixing valve below the hot water tank or heater. If this is not possible, pipe in a heat trap as shown in Figure 1 with an approximate 2' drop.

Connect a tempered water return line as shown in Figure 1. This allows flow through both ports of the mixing valve during periods of no draw.

If a dual temperature system is used, a separate recirculating loop and pump are required to return high temperature hot water to the water heater. See Figure 2.

Install the water heater per manufacturer's instructions.

Figure 1
When used in a single temperature recirculating system

2"

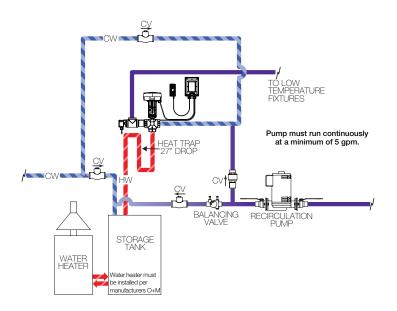


Figure 2
When used in a dual temperature recirculating system

