



#### temperedwater.com

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



## Neptune EMX 125 Electronic Mixing Valve Eng. No. 943020

Pressure Drop PSI		5	10	20	30
Valve	Inlet Size	CA			
NEPTUNE EMX 125	1-1/4"	41.4	58.6	83	101

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)

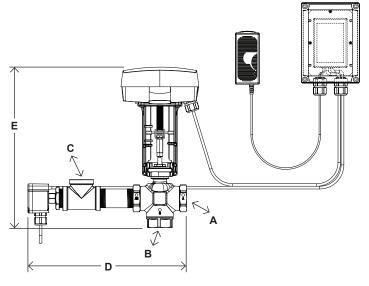
- 1" inlets and outlet
- · Stainless Steel Construction
- · ASSE 1017 and NSF 372 (lead free) listed
- Maximum operating pressure: 150 psi
- Controls water temperature to +/- 2°F in accordance with ASSF 1017
- Low Load algorithm keeps temperature steady in low demand periods
- · Fails "last position"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





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#### **DIMENSIONS**

Valve Number	A N.P.T.	B N.P.T.	C N.P.T.	D	Е
EMX 125	1-1/4"	1-1/4"	1-1/4"	15"	15"

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

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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

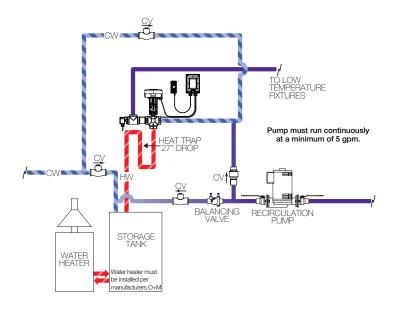


Figure 2

# When used in a dual temperature recirculating system

