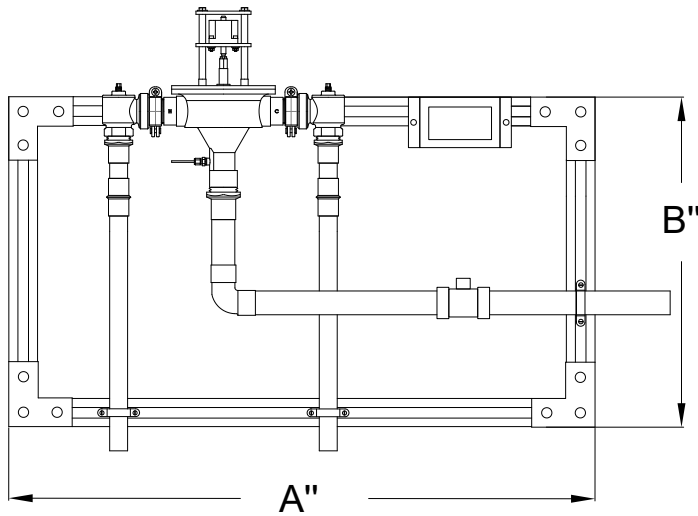


# DIGITAL ELECTRONIC EMERGENCY MIXING VALVE

Submittal Data Sheet S-ENV-6100-LF-R

December, 2025

## ENV-6100-LF-R



A = 48" ± 4"    B = 22 ± 4"

### STANDARD CONTROL BOX



SEE SELECTABLE OPTIONS PAGE 2



ASSE 1071 Certified



CSA Certified



Valve electronics are UL Certified



**WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information, go to [www.P65Warnings.Ca.gov](http://www.P65Warnings.Ca.gov)

This product is certified to meet Low Lead requirements of wetted surface area containing less than 0.25% lead by weight

- Digital Electronic Emergency Mixing Valve
- 1-1/4" copper tubing inlets, 1-1/2" copper tubing outlet (32mm X 38mm)
- Valve controls at times of no use, 0.0 GPM\*\*
- Maximum operating pressure: 125 PSIG (862 KPA)
- Controls water temperature to +/- 2°F in accordance with ASSE 1071
- Controls water temperature to +/- 2°F during times of low / no system demand
- Self-Balancing, do not need to adjust or balance recirculation
- Self-Cleaning, daily shuttle sweep keeps shuttle free of debris
- Automatic Hot Water shutoff upon cold water inlet supply failure
- Automatic cold water bypass of 40 GPM (in accordance with ASSE 1071) upon hot water inlet supply failure
- Alerts user when unit requires maintenance
- User programmable set point range between 65°F and 90°F, Displays outlet temperature
- Simple/intuitive user setup
- Reminder to test weekly as per ANSI Z358.1-2014 (ability to turn on / off)
- Fully mounted on strut, valve, flow switch and control box all mounted, easy installation
- UL Listed control box and 120V plug in power supply with 6' cord
  - Option for Backup Uninterruptable Power Supply in the event of primary power loss w/ approx. two hours run time

**\*\*NOTE:** The valve will maintain temperature with 0.0 GPM flow from the emergency loop when properly installed near the hot water source with a continuously operating recirculation pump at minimum flow of 5 GPM.

### OPTIONS:

\_\_\_\_ BPS – Back-up Power Supply, uninterruptable power supply with up to 2 hours run time in case of primary power loss



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Email: [info@leonardvalve.com](mailto:info@leonardvalve.com)

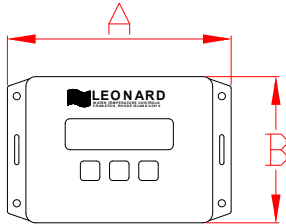
Web Site: <http://www.leonardvalve.com>

# CONTROLLER OPTIONS

## Standard Controller 1.0 Version



A = 6"      B = 4"  
Depth = 1-3/4"



## STANDARD CONTROLLER:

\_\_\_\_ 1.0 – See PAGE 1 for info

## ENHANCED CONTROLLER OPTIONS:

UL Listing Pending on 2.0, 2.5 and 3.0 controllers

Note: Boxes not field upgradeable

\_\_\_\_ 2.0 – Enhanced Neutron Controller with Programmable Disinfection Mode

### Options:

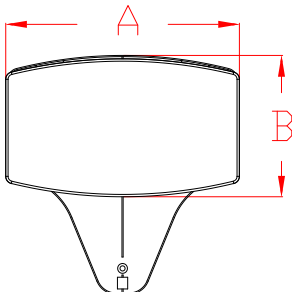
\_\_\_\_ REL – 5 Relay Contacts that Switch during Alarm State

- Helpful for Remote Alerts Within Building to Assist Maintenance and Service Personnel
- 5 Unique States:
  - Loss of Power
  - Broken Temperature Probe
  - "Out of Range" Temperature ( $\pm 10^{\circ}\text{F}$ )
  - Motor Connectivity and Operation
  - Maintenance (Service Required) @ <90% Full travel

## Enhanced Controller 2.0, 2.5, 3.0 Versions



A = 8"      B = 4-3/4"  
Depth = 1-1/4"



\_\_\_\_ 2.5 – Enhanced Neutron Controller including all of 2.0 as well as BACnet MS/TP Connection which provides ability to serve up all data to BMS system

### Options:

\_\_\_\_ 3T – Three Additional Temperature Sensors for Monitoring of Inlet Hot, Inlet Cold, and Return Temperatures

\_\_\_\_ REL – 5 Relay Contacts that Switch during Alarm State (as shown above)

\_\_\_\_ 3.0 – Enhanced Neutron Controller including all of 2.5 as well as all items below as standard,

- WiFi – Wifi enabled
- 3T - 3 Additional Temperature Sensors for Monitoring of Inlet Hot, Inlet Cold and Return Temperatures
- REL - 5 Relay Contacts that Switch during Alarm State

\*\*AVAILABLE  $\approx$  2<sup>nd</sup> Quarter 2023

Leonard Valve Company reserves the right of product, or design modifications without notice or obligation.



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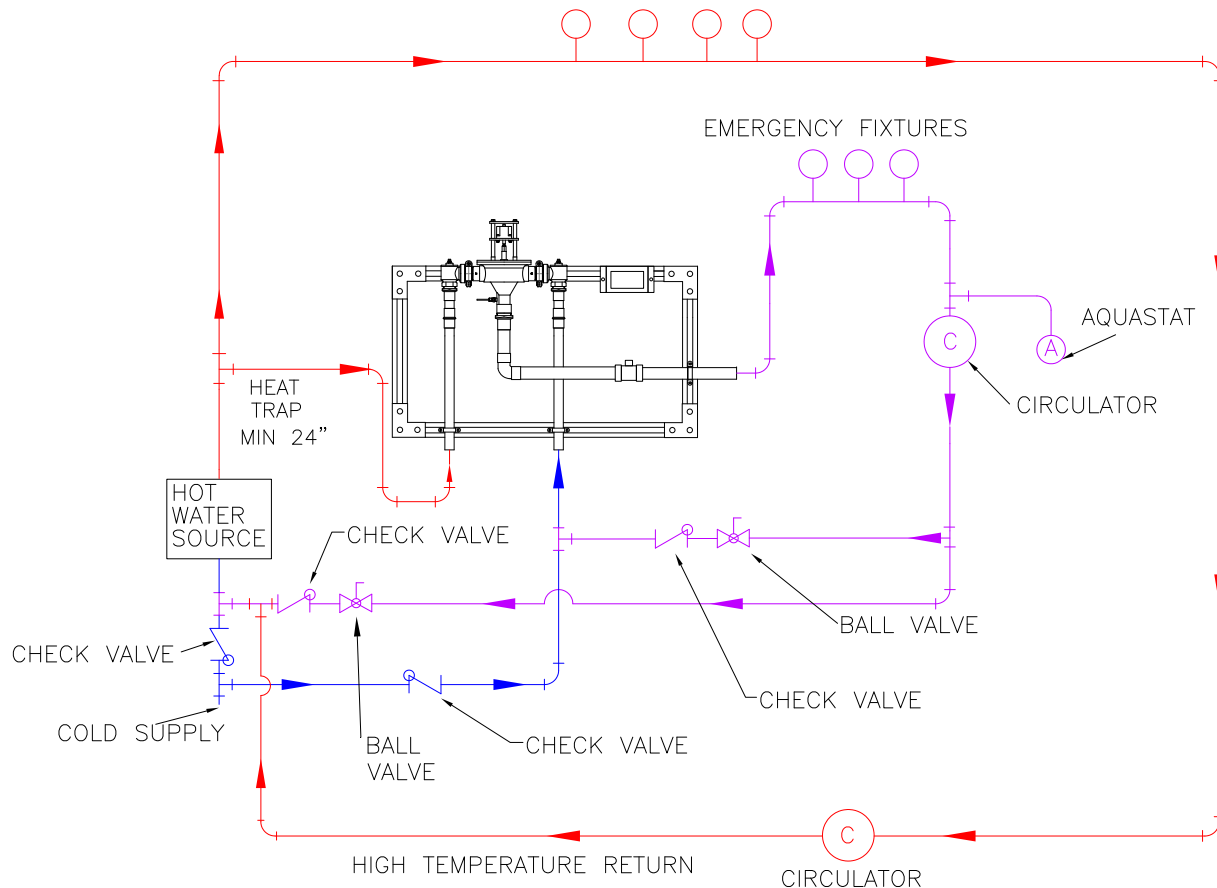
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MINIMUM FLOW	PRESSURE DROP										
	5	10	15	20	25	30	35	40	45	50	PSI
	.3	.7	.97	1.4	1.7	2.1	2.4	2.8	3.1	3.4	BAR
3.0	30	40	47	52	57	60	66	71	76	80	GPM
11.4	114	151	178	197	216	227	250	269	288	303	l/min

HIGH TEMPERATURE FIXTURES (IF APPLICABLE)



**CAUTION!** All thermostatic water mixing valves have limitations. They will NOT provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart and DO NOT OVERSIZE. Minimum flow must be no less than as indicated.

**NOTE:** Flow rates will vary depending on existing field conditions. Leonard Valve Company always recommends using CASPAK® sizing software for proper valve sizing and model number applications.

#### Engineer's Approval

Job # \_\_\_\_\_

Arch/Eng. \_\_\_\_\_

Contractor \_\_\_\_\_

Note: The models shown represent Leonard Products which are believed to be equivalent in type and function to items specified. Leonard Valve Company is not responsible for errors or omissions due to differences in interpretations of information provided.

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