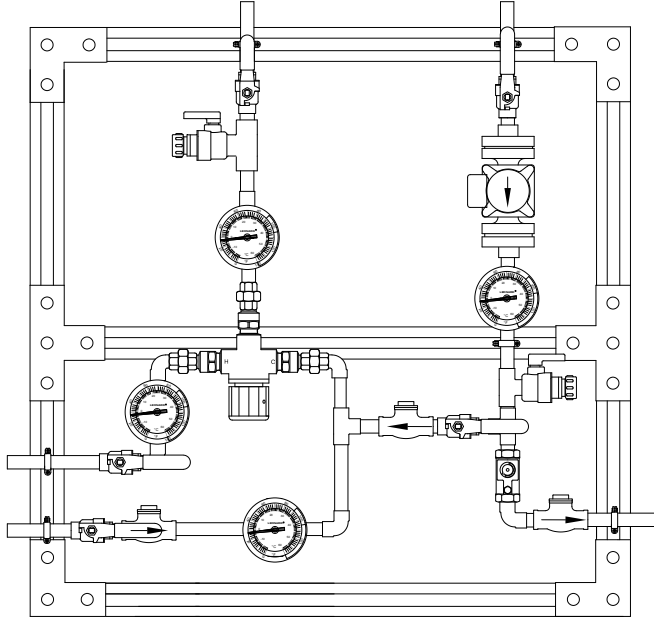


# COMPLETE WATER TEMPERATURE CONTROL STATION *ECO-MIX*™

## MEGATRON® MODEL 270LF MODEL 270 LF, 1/2"



**MATERIALS:**

- Minimum flow 0.25 GPM \*
- Locked temperature adjustment cap (vandal resistant)
- Copper encapsulated thermostat assembly with polymer thermoplastic shuttle
- Stainless steel springs
- Integral check valves on hot and cold inlets
- 1/2" copper tube connections, inlets and outlet
- Maximum operation pressure: 125 PSI (860 KPA)
- Temperature selector handle with scale: COLD-HOT
- Dial thermometer (range 0 to 140°F, -10 to 60°C) on outlet
- Temperature adjustment range, 90-140°F (32-60°C) \*\*
- Outlet Test Connection ball valve and 3/4" hose connection with cap
- Full port ball valve mixed water outlet of the system
- Inlet piping with full port ball valves and dial thermometers (20 to 240°F, -7 to 116°C on hot supply, 0 to 140°F, -10 to 60°C on cold supply) on hot and cold supply inlets
- Return piping, 1/2", with circulator (TACO 006e3 Circulator), dial thermometer (0 to 140°F, -10 to 60°C), balancing valve (with positive shutoff) to balance system, and check valve
- Bypass piping, 1/2" with check valve and isolation ball valve to cold inlet of mixing valve
- System mounted on strut, galvanized, strut shall be assembled with three hole flange angle plate on corners, four hole tee plates or two hole flat plate connectors on all other support pieces using 3/8" grip lock nuts and 3/8" x 1" hex head cap screws, washers and lock washers
- Factory pre-assembled and tested as a complete system
- All electrical connections to be completed by Electrical Contractor
- TACO 006e3 standard
  - 006e3® ECM High-Efficiency Hot Water Circulator is an infinitely variable fixed speed, high-efficiency wet rotor circulator with an ECM permanent magnet

Valve assembly is certified to meet Low-Lead requirements of wetted surface area containing less than 0.25% lead by weight. All other fittings and components, the sum total of which comprise the wetted surface of this product contains less than one quarter of one percent of lead by weight.

Product is non-cancellable and non-returnable from date from order with factory. Signed submittal required with purchase order.

\*\*NOTE: For temperatures outside of this valve's stated range, please see our line of bi-metal valves.



**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)

\* 0.25 GPM minimum flow certified to ASSE 1070

Job # _____ Arch/Eng. _____ Contractor _____	<b>Engineer's Approval</b>
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**Certifications:**

Valve is ASSE 1017, 1070 certified



Valve is CSA certified



Valve is CUPC certified



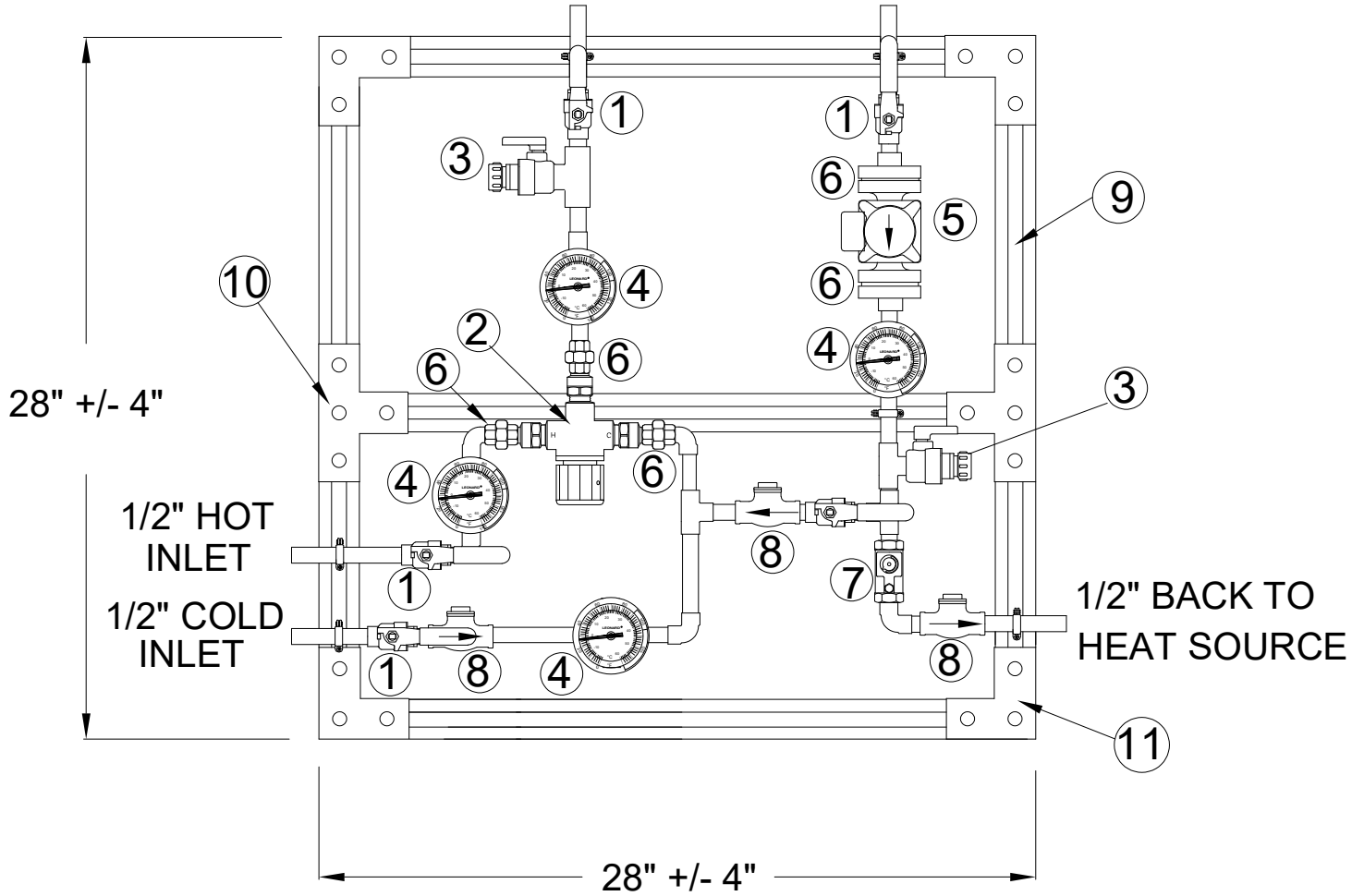
Valve is Certified to NSF61 thru the ASSE 1070 testing process



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# MEGATRON® MODEL 270 LF

1/2" OUTLET    1/2" RETURN



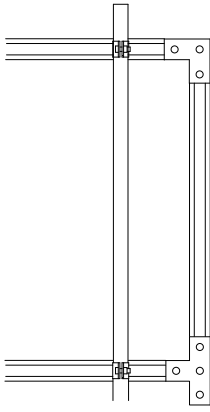
- |    |                      |     |                  |
|----|----------------------|-----|------------------|
| 1. | FULL PORT BALL VALVE | 7.  | BALANCING VALVE  |
| 2. | MIXING VALVE         | 8.  | FLAPPER CHECK    |
| 3. | TEST CONNECTION      | 9.  | GALVANIZED STRUT |
| 4. | DIAL THERMOMETER     | 10. | TEE BRACKET      |
| 5. | TACO 006e3           | 11. | CORNER BRACKET   |
| 6. | UNIONS               |     |                  |

MODEL	IN	OUT	MINIMUM FLOW (GPM)	PRESSURE DROP										PSI
				5	10	15	20	25	30	35	40	45	50	
270 LF	1/2"	1/2"	0.25	3.5	5.5	6.5	7.5	8.5	9.5	10	10.5	11.5	12	GPM
			.95	13	21	25	28	32	36	38	40	43	45	L/MIN

**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.

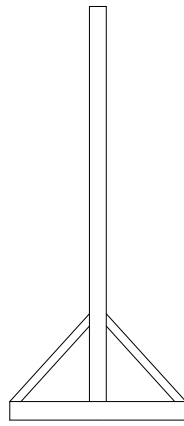
**\*NOTE:** A limit stop, set for 110°F (43°C), is simply a mechanical setting to prevent excessive handle rotation. If incoming water is hotter than 135°F (57°C), the temperature of the factory test, the valve when turned to full HOT may deliver water in excess of 110°F and the limit stop MUST BE RESET BY THE INSTALLER

# OPTIONS



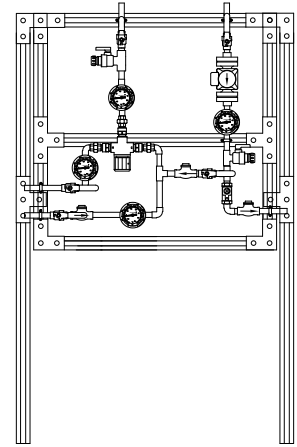
**LC**

Megatron® furnished without a circulator. Tie return line here



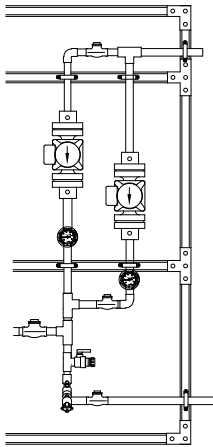
**FM**

Megatron® with 3 legs, 3 ½” feet and 45 degree braces front and back for mounting to floor in center of room.



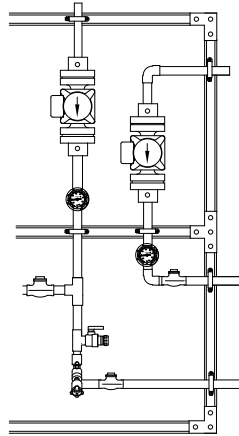
**FS**

Megatron® with legs to floor to support the unit without hangers.



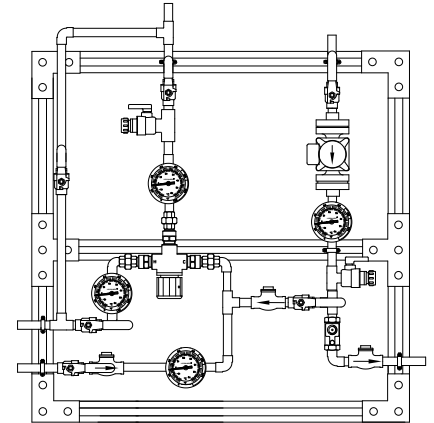
**2 PUMPS R**

Redundant recirculation pump



**2 PUMPS H**

High temperature loop recirculation pump



**HBP**

High temperature by-pass flush with locking ball valve

**OPTIONS \***

- LC** Less circulator
- FM** Floor mount
- FS** Free standing
- 2 PUMP R** Redundant recirculator pump
- 2 PUMP H** High temperature loop recirculator pump
- HBP** High temperature by-pass flush
- 265-1** Timer, Analog, 24 hour
- 265-3** Timer, Digital, 7 day
- HOA** HOA switch

**OPTIONS (shown on next page) \***

- AL** Audio Visual Alarm
- RDU** Remote Display Unit
- LMS-188-4P** Monitoring System
- LMS-188-4P-BMS** with BMS
- DA** Digital Aquastat
- DG** Digital Gauges
- User chosen pump**  
(specify on next page)



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**\* Any option chosen will alter pricing**



### OPTION AL: Leonard Single Probe Digital Temperature Alarm

- Single Point Temperature Probe - Range: -148°F to 212°F Resolution: 1°F
- User adjustable high / low set points, initial alarm delay period, audible & visual alarms
- Remote alarm contacts (SPDT) with adjustable relay delay period
- AL option replaces analog outlet dial thermometer with a single digital display



### OPTION RDU: Leonard Remote Display Unit

- Activation by Primary Alarm's (pictured above) remote alarm contacts
- Alarm Delay Module with yellow, red, green LED indicators
- Recommended maximum distance from controller to RDU is 500'



### OPTION LMS-188-4P: Leonard 4 Point Digital Monitoring with Alarm

- Four (4) Temperature Probes - Range: -148°F to 212°F Resolution: 1°F
- User adjustable high / low set points, initial alarm delay period, audible & visual alarms
- Remote alarm contacts (SPDT) with adjustable relay delay period
- 10/100 Ethernet Connection, Web Server Interface for Setup & Commissioning
- Unit can send an E-mail of alarms / temperatures for up to 8 contacts daily
- LMS-188-4P option replaces analog dial thermometers with a single digital display for all 4 temperatures, incoming hot, incoming cold, outlet and return



### OPTION LMS-188-4P-BMS: Leonard 4 Point Digital Monitoring System with Alarm & Enhanced Protocol Communication Interface Module

#### Primary Alarm Box includes:

- Same as above

#### ProtoNode Accessory Box includes:

- Interface Module to connect LMS-188-4P-BMS to Building Management System (-BMS) Network, Complete Protocol Package
- Supported protocols include BACnet MS/TP, BACnet IP, Modbus RTU, Modbus TCP/IP, SNMP, JC N2, available simply by selecting the proper DIP switches
- LMS-188-4P-BMS option replaces analog dial thermometers with a single digital display for all 4 temperatures, incoming hot, incoming cold, outlet and return



### OPTION DA: Digital Aquastat

- Electronic digital aquastat with Nema 1 case and SPDT Relay Output



### OPTION DG: Digital Gauges

- Replaces all analog gauges with digital gauges, inlet hot, inlet cold, outlet and return temperature

## OPTION USER CHOSEN PUMP

Standard pump is TACO 006e3, if another manufacturer is preferred please specify, but note that ANY change from standard pump will result in a **PRICE INCREASE**

