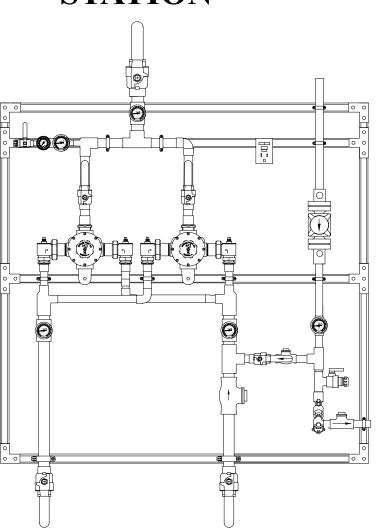
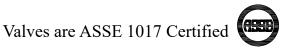
COMPLETE WATER **TEMPERATURE CONTROL STATION**

MEGATRON® MODEL XL150-2P-LF

- 2" HOT & COLD INLETS
- 2" MIXED OUTLET
- 1 1/2" RETURN PIPING METHOD W
- 6 to 260 GPM (22 to 984 l/min)





Valves are CUPC Certified



See page 2 for Specification detail

See page 3 for Drawing detail

See page 4 for Flow capacity chart

See page 5 for **Options**



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

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.

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



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

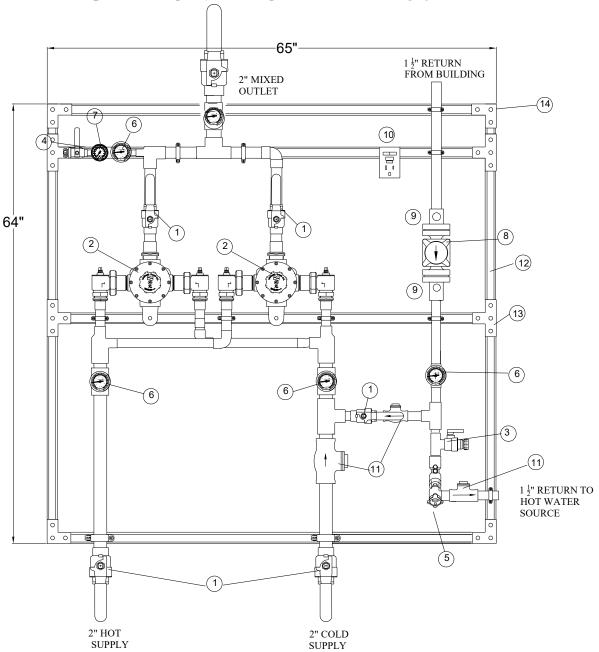
MEGATRON® MODEL XL150-2P-LF

LEONARD MEGATRON® MODEL XL150-2P-LF Complete Water Temperature Control Station (6 - 2609 GPM, 22 to 984 l/min) to include:

- 2" bottom inlet connections (copper tube)
- 2" top outlet connection (copper tube)
- 1 ½" return line size with piping method #W
- Copper encapsulated thermostatic assembly with Teflon coated shuttle
- Locking temperature regulating handle set for 120°F (49°C)
- Full port ball valve, pressure gauge and thermometer on mixed water outlet piping of mixing valve.
- Dial thermometer (range:0 to 140°F, -10 to 60°C) and pressure gauge on mixed water outlet of the system.
- Outlet Test Connection with ball valve and 3/4" hose connection with cap
- Full port ball valve mounted downstream of test connection on mixed water outlet of the system
- Inlet piping manifold 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 ½", Taco 2400-50-S circulator, dial thermometer (0 to 140°F, -10 to 60°C), balancing valve (with positive shutoff) to balance system, and check valve
- GFCI* switch. The GFCI switch will be used to turn the circulator on or off for setup. *Ground Fault Interrupter
- Bypass piping, 1 ½" with check valve and isolation ball valve to cold inlet of mixing valve
- Maximum operating pressure: 125 PSIG (860KPA)
- System mounted on strut, galvanized. Strut shall be assembled with three hole flat 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 2400-50-S standard pump, optional pumps available

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

MEGATRON® MODEL XL150-2P-LF



Dimensions may vary with the addition of options see page #5

LEGEND

- 1. Full port ball valve
- 2. Mixing valve
- 3. Tee Drain
- 4. Test connection
- 5. Balancing Valve

- 6. Dial thermometer
- 7. Pressure gauge
- 8. Circulator-As specified by Engineer
- 9. Pump shut-offs
- 10. Circulator power switch

- 11. Flapper check
- 12. Galvanized Strut
- 13. Tee bracket
- 14. Corner Bracket

MEGATRON® MODEL XL-150-2P-LF (6 TO 260 GPM) Flow Capacity

DOUBLE FLOWRATE WHEN BOTH VALVES ARE OPERATING

SINGLE VALVE ASSEMBLY FLOWRATES SHOWN (MINIMUM FLOW RATE HAS BEEN DOUBLED TO 6 GPM)

VALVE	PRESSURE DROP*											
	MIN ^{+**} FLOW	5	10	15	20	25	30	35	40	45	50	PSI
		0.3	0.7	1	1.4	1.7	2.1	2.4	2.8	3.1	3.4	BAR
XL-150	6	44	61	74	86	95	103	110	117	124	130	GPM
	22	167	231	280	326	360	390	416	443	469	492	I/min

+NOTE: The valve will maintain temperature with 0.5GPM flow from the domestic hot water loop when properly installed near the hot water source with a continuously operating recirculation pump.

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

Note: The XL150-2P-LF model must be selected based upon the following:

Maximum system demand for mixed water

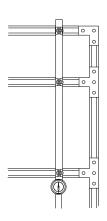
System pressure drop*

Designer's estimated minimum mixed water flow requirement

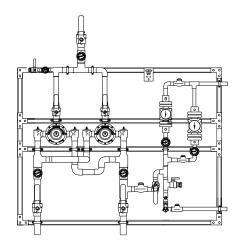
*System pressure drop= the pressure available at the inlet of the mixing valve unit minus the pressure required to operate the farthest fixture, i, e,. Shower valves, in the building.

EXTENDED THERMOSTAT WARRANTY

Call the factory at 1-800-222-1208 for details on Leonard's exclusive Extended Limited Warranty for High Low System Thermostats. Note! Specifications are subject to change without notice.!!!!



LC
Megatron® furnished without a circulator.



2 PUMPS R
Redundant recirculation
pump

OPTIONS *

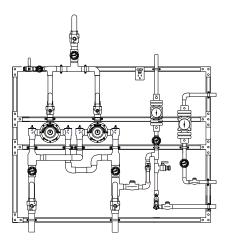
LC Less circulator
FM Floor mount
FS Free standing
2 PUMP R Redundant recirculator
pump
2 PUMP H High temperature loop
recirculator pump
HBP High temperature by-pass flush
265-1 Timer, Analog, 24 hour
265-3 Timer, Digital, 7 day
HOA HOA switch

OPTIONS



FM

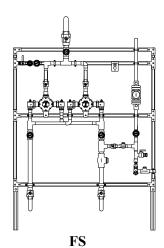
Megatron® with 3 legs, 3 ½" feet and 45 degree braces front and back (shipped loose), attaches to channel of existing megatron to support mounting to floor in center of room.



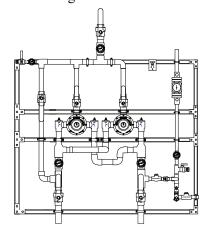
2 PUMPS H
High temperature loop recirculation pump

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



Megatron® with separate legs to the floor (shipped loose), attaches to channel of existing megatron to support the unit without hangers.



HBP
High temperature by-pass
flush with locking ball
valve

PIPING OPTIONS *

RP 2 2" Return line size

* Any option chosen will alter pricing



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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 2400-50-S, if another manufacturer is preferred please specify, but note that ANY change from standard pump will result in a **PRICE INCREASE**



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