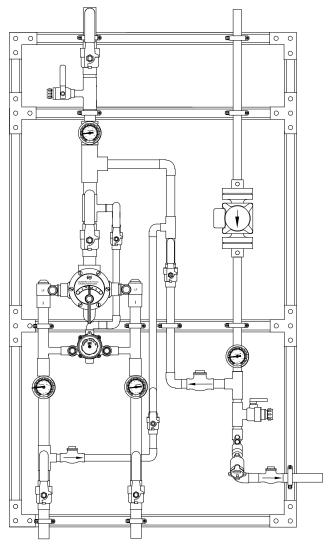
# COMPLETE WATER TEMPERATURE CONTROL STATION



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.

# ECO-MIX TM

# MEGATRON® LEAD FREE MODEL 5NB-LF

- 1 1/4" HOT & COLD INLETS
- 1 ½" MIXED OUTLET
- 1" RETURN PIPING
- 1.0 to 165 GPM (3.7 to 625 l/min)

Valve assembly is ASSE 1017 Certified Valve assembly is CSA Certified





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, contain less than one quarter of one percent of lead by weight.

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 to <a href="https://www.P65Warnings.Ca.gov">www.P65Warnings.Ca.gov</a>

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



1360 Elmwood Avenue, Cranston, RI 02910 USA Phone: 401.461.1200 Fax: 401.941.5310

Email: <a href="mailto:info@leonardvalve.com">info@leonardvalve.com</a>
Web Site: <a href="http://www.leonardvalve.com">http://www.leonardvalve.com</a>

## **MEGATRON® MODEL 5NB-LF**

LEONARD MEGATRON® MODEL 5NB-LF Complete Water Temperature Control Station (1.0 - 165 GPM, 3.7 to 625 l/min) to include:

- Wetted surface area of this product contains less than one quarter of one percent (0.25%) of lead by weight
- Lead Free construction, to comply with LEAD FREE requirements
- 1 1/4" bottom inlet connections (copper tube)
- 1 ½" top outlet connection (copper tube)
- 1" return line size with piping method #5
- Large thermostatic water mixing valve with DURA-trol® solid bimetal thermostat (with Extended 7 Year Limited Warranty) directly linked to hot and cold valve porting, adjustable high temperature limit stop set for 120°F (49°C)\*, color-coded dial: C-H, locking temperature regulator, inlet union angle strainer checkstops
- Full port ball valve on mixed water outlet piping of large mixing valve
- Small thermostatic water mixing valve with DURA-trol® solid bimetal thermostat (with Extended 7 Year Limited Warranty) directly linked to hot and cold valve porting, adjustable high temperature limit stop set for 120°F (49°C)\*, color-coded dial: Cold-Hot, integral checkstops on inlets
- Full port ball valve on outlet of small mixing valve
- Dial thermometer (range:0 to 140°F, -10 to 60°C) 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", Tac0 0034E PLUS 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", with check valve and isolation ball 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 0034E PLUS standard pump included and installed

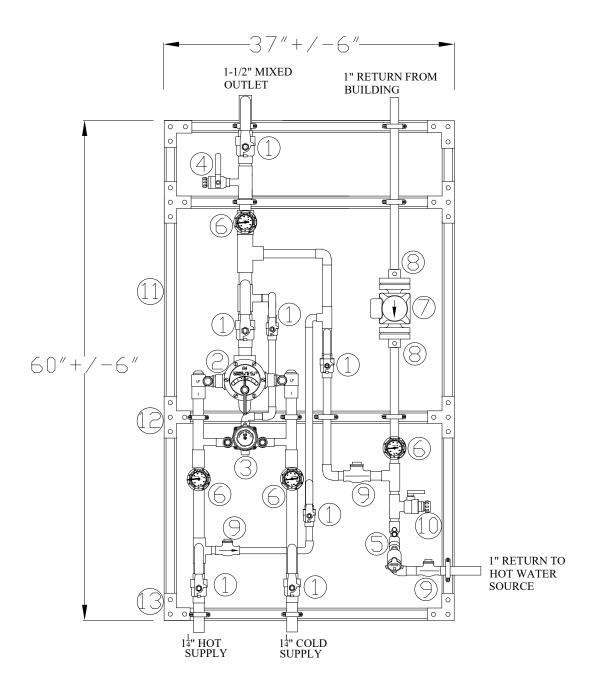
High-performance, variable speed, wet-rotor circulator with high-efficiency ECM permanent magnet technology, Simple 3-button control

An intuitive digital user interface lets you choose between a variety of operating modes; activeADAPT<sup>TM</sup>, five Constant Pressure curves, five Proportional Pressure curves, Min/Max fixed speed or speed control through 0-10V DC or PWM external input

Digital LED screen displays; Watts, GPM, Head, RPM and diagnostic error codes Maximums of 34 feet of head and 50 GPM



# **MEGATRON® MODEL 5NB-LF**



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

#### **LEGEND**

1. Full port ball valve
2. Large TM mixing valve
3. Small TM mixing valve
4. Test connection
5. Balancing Valve

6. Dial thermometer
7. Circulator-As specified by Engineer
8. Pump shut offs
9. Flapper check

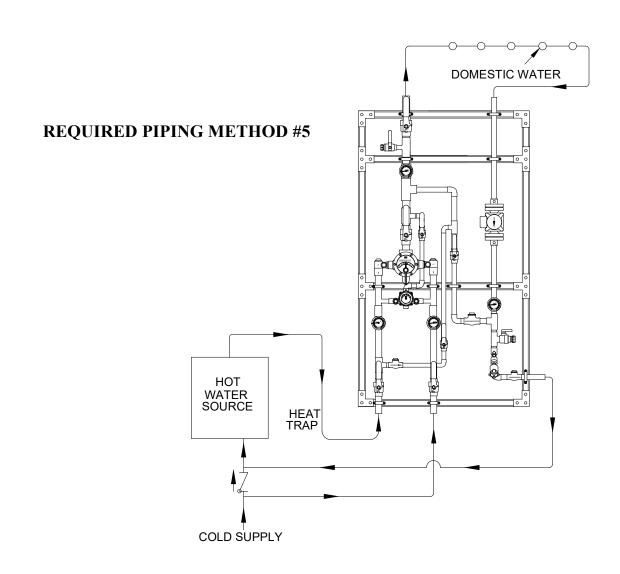
10. Tee drain
11. Galvanized Strut
12. Tee bracket
13. Corner Bracket

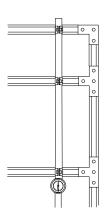
# **MEGATRON® MODEL 5NB-LF (1.0 TO 165 GPM)**

# **Flow Capacity**

MINIMUM	SYSTEM PRESSURE DROP (PSIG)										
FLOW (GPM)	5	10	15)	20	25	30	35	40	45	50	PSI
(l/min)	,3	.7	.97	1.4	1.7	2.1	2.4	2.8	3.1	3.4	BAR
1.0	48	65	80	95	112	120	130	140	158	165	GPM
(3.7)	182	246	303	360	424	454	492	530	598	625	l/min

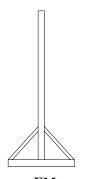
NOTE: Flowrates will vary depending on existing field conditions. Leonard Valve Company always recommends using CASPAK® sizing software for proper valve sizing and model number applications.



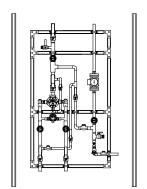


LC Megatron® furnished without a circulator.

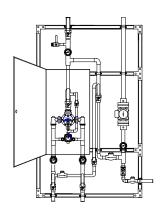
# **OPTIONS**



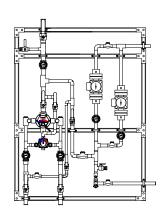
**FM** Megatron® with 3 legs, 3 ½" feet and 45 degree braces front and back for mounting to floor in center of room.



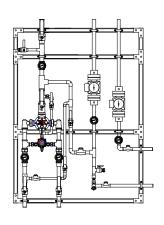
FS Megatron® with legs to floor to support the unit without hangers.



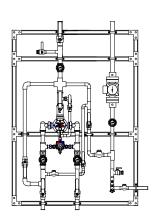
**CAB** Megatron® with SS cabinet around mixing valve



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** \*

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

1	1/4"	1	1/4"	Return	line	siz

LC Less circulator
FM Floor mount
FS Free standing
CAB Cabinet around mixing valve
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

- AL Audio Visual Alarm
- **RDU** Remote Display Unit
- LMS-188-4P Monitoring System RP 2 2" Return line size
- **DA** Digital Aquastat
- **DG** Digital Gauges User chosen pump
  - (specify on next page)

- **PIPING OPTIONS \***
- RP **RP 1 ½"** 1 ½" Return line size



<sup>\*</sup> 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 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 0034E PLUS, 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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