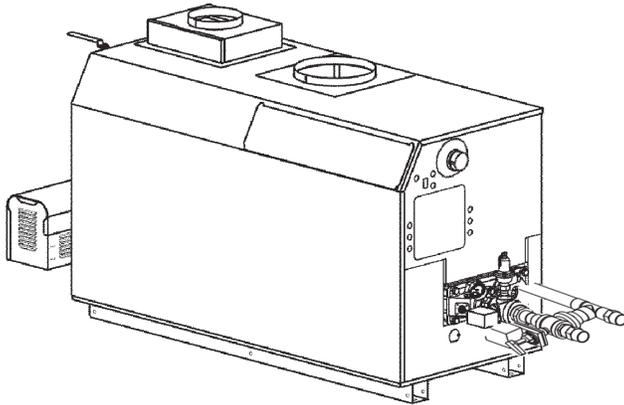


# MIGHTY THERM2®

# Pump-Mounted Pool Heater

MT2P | Pump Mounted Pool Heater

Indoor/Outdoor Sizes 500-2000



Date:

Project #:

Engineer:

Prepared By:

Bid Date:

Project Name:

Location:

Contractor:

Submittal Data **LAARS**  
Heating Systems Company

## Standard Equipment

- ASME 160 psi working pressure heat exchanger
- ASME "H" stamp
- Flanged water connections
- Glass-lined cast iron headers
- External header gaskets
- 75 psi (517 kPa) ASME rated pressure relief valve
- Flow switch
- Temperature and pressure gauge
- Pump mounted and wired
- Mixing system for low temperature protection
- Multiple operating gas valve/pressure regulators
- Manual "A" gas valve
- Intake air filter
- Multiple, removable burner trays
- Stainless steel burners
- Built-in draft fan(s) for Category I or III venting
- Air pressure switch
- Burner site glass
- 24V control system
- 115/24VAC transformer
- Manual reset high limit
- Hot surface ignition
- On/Off toggle switch
- Pump time delay
- Diagnostic lights
- Less than 10ppm NOx
- External controller connections with selector switch

## Boiler Data

Number of Units:

Fuel

- Natural
- Propane

Heat Exchanger

- Copper
- Cupro-Nickel
- Copper, Reversed
- Cupro-Nickel, Reversed

Options

- CSD-1 (LWCO not incl.)
- Low water cutoff
- Ignition failure alarm with bell and dry contacts, red trouble lights and green main gas lights



## Sizing Data

Size	Input <sup>1</sup> BTU/H	Input <sup>1</sup> kW	Output <sup>1</sup> BTU/H	Output <sup>1</sup> kW	Gas Conn. Size inches <sup>2</sup>	Heater Water Conn. Size inches <sup>2</sup>	Mixing System Water Conn. Size inches <sup>2</sup>	Shipping Weight	
								lbs	kg
500	<b>500,000</b>	147	<b>425,000</b>	125	1¼	2	2	<b>760</b>	<b>345</b>
750	<b>750,000</b>	220	<b>638,500</b>	187	1¼	2	2	<b>855</b>	<b>388</b>
1000	<b>999,000</b>	293	<b>849,000</b>	249	1½	2½	2	<b>1020</b>	<b>463</b>
1250	<b>1,250,000</b>	366	<b>1,062,500</b>	311	2	2½	2	<b>1115</b>	<b>506</b>
1500	<b>1,500,000</b>	440	<b>1,275,000</b>	374	2	2½	2	<b>1260</b>	<b>572</b>
1750	<b>1,750,000</b>	513	<b>1,487,500</b>	436	2	2½	2	<b>1365</b>	<b>619</b>
2000	<b>1,999,000</b>	586	<b>1,699,000</b>	498	2	2½	2	<b>1495</b>	<b>678</b>

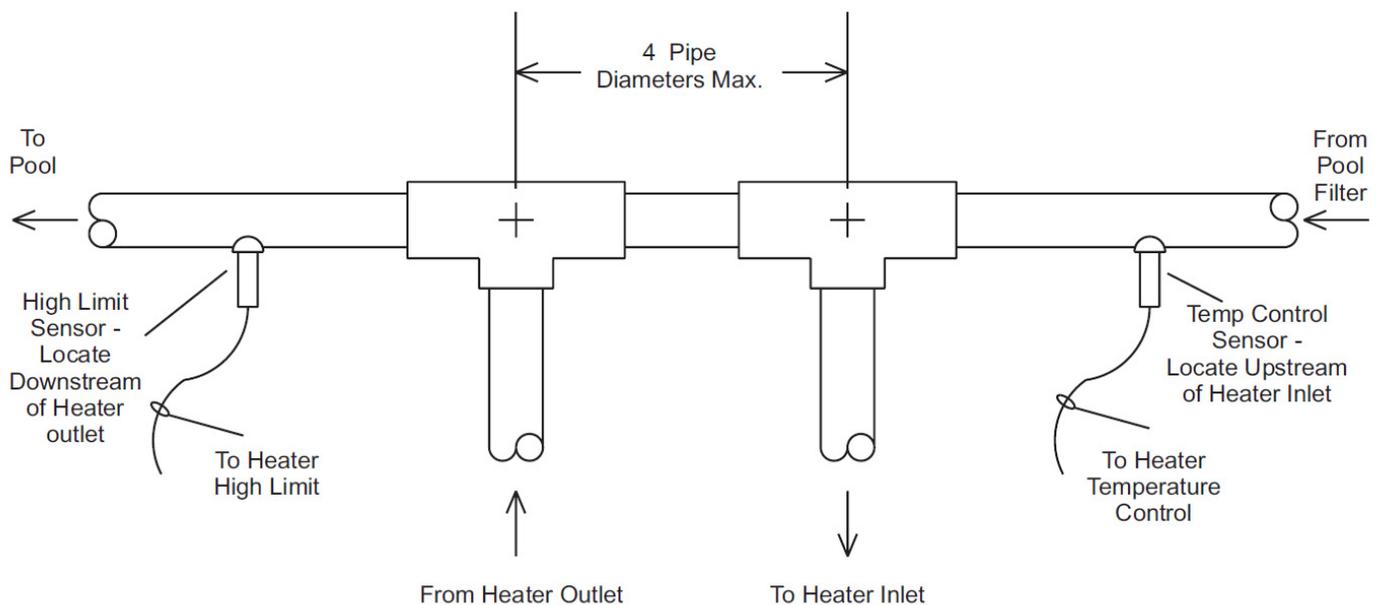
- NOTES:**
1. Input and output must be derated 4% per 1000 feet above sea level when installed above 2000 feet altitude.
  2. Dimensions are nominal.
  3. Shipping weight is approximate, based on previous units shipped and can be affected by several variables including the various weights for optional pumps and even the green or dry wood used in the crate.

## Accessories

- ☐ Side-wall vent terminal for indoor unit (required for side-wall venting)
- ☐ Side-wall combustion air terminal for indoor unit (required only for ducted combustion air)
- ☐ Exhaust vent terminal for outdoor unit
- ☐ Combustion air intake for outdoor unit

## Piping and Sensor Location

The Mighty Therm2 Pool Heater is shipped with a field-installed mixing system, and must be piped in primary-secondary style, as shown. A remote pool temperature sensor and remote pool temperature high limit are wired to the Mighty Therm2, to be mounted in the pool water loop, as shown.



## Clearances

Appliance Surface	Required Clearance From Combustible Material		Suggested Service Access Clearances	
Left Side	1	2.5	24	61
Right Side	1	2.5	24	61
Top	1	2.5	12	30
Back*	1	2.5	12	30
Front	1	2.5	36	91
Vent	Per venting system supplier's instructions			

\*When vent and/or air is connected to the back, 36" (91cm) is suggested.  
Dimensions in **inches cm**

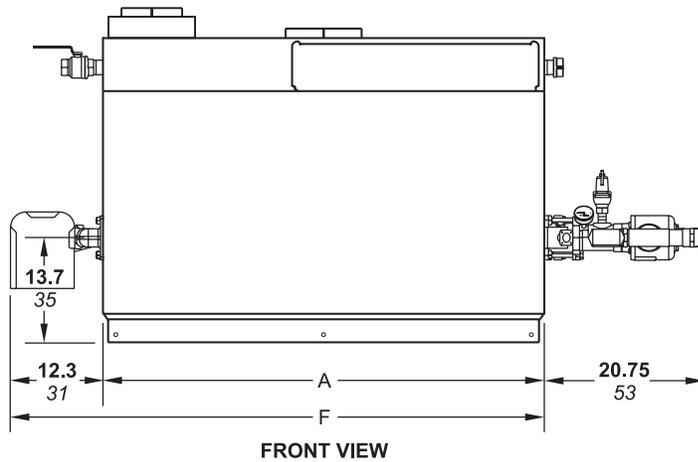
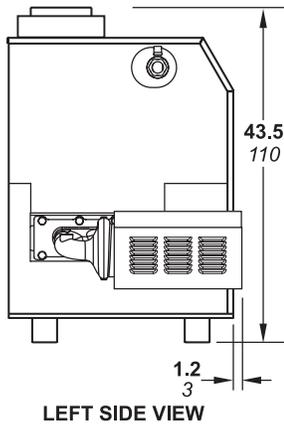
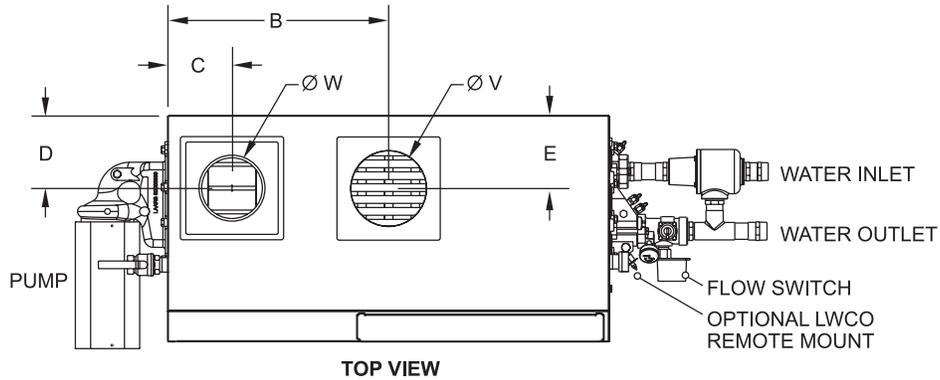
## Electrical Data

Model	Volts	Phase	Single Circuit Size	Two Circuit Size	
			(Heater & Pump)	Heater	Pump
MT2P 500 - 750	120	Single	20 Amps	15 Amps	15 Amps
MT2P 1000			25 Amps	20 Amps	15 Amps
MT2P 1250 - 1500			30 Amps	25 Amps	15 Amps
MT2P 1750 - 2000			N/A	25 Amps	20 Amps

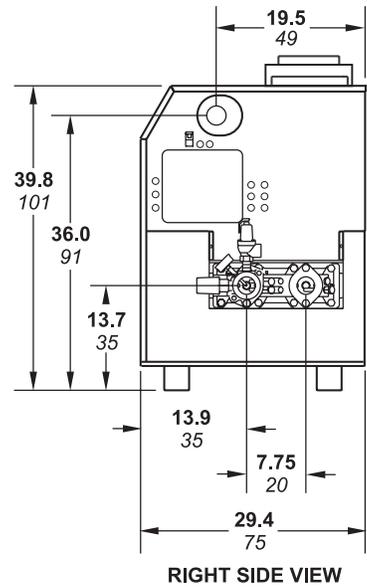
## Pump Data

Sizes	Power (HP)	Current (Amps)
500	1/3	2.8
750	1/3	2.8
1000	1/2	5.2
1250	1/2	5.2
1500	3/4	7.2
1750	1	9.8
2000	1	9.8

# Dimensional Data



Dimensions shown are in inches cm.



UNIT SIZE	A	B	C	D	E	F	AIR CONN. W	VENT CONN. V
500	33 <sup>3</sup> / <sub>4</sub> 85	16 <sup>3</sup> / <sub>4</sub> 43	6 <sup>1</sup> / <sub>2</sub> 17	10 25	8 20	46 <sup>1</sup> / <sub>4</sub> 117	6 15	8 20
750	45 <sup>3</sup> / <sub>4</sub> 116	22 <sup>3</sup> / <sub>4</sub> 53	6 <sup>1</sup> / <sub>2</sub> 17	10 25	9 <sup>1</sup> / <sub>2</sub> 24	58 <sup>1</sup> / <sub>4</sub> 148	8 20	10 25
1000	57 <sup>3</sup> / <sub>4</sub> 147	28 <sup>3</sup> / <sub>4</sub> 73	6 <sup>1</sup> / <sub>2</sub> 17	10 25	9 <sup>1</sup> / <sub>2</sub> 24	70 <sup>1</sup> / <sub>4</sub> 178	8 20	10 25
1250	68 <sup>1</sup> / <sub>4</sub> 173	34 87	10 <sup>1</sup> / <sub>4</sub> 26	10 25	9 23	80 <sup>3</sup> / <sub>4</sub> 205	12 30	12 30
1500	78 <sup>3</sup> / <sub>4</sub> 200	39 <sup>1</sup> / <sub>2</sub> 100	10 <sup>1</sup> / <sub>4</sub> 26	10 25	9 23	91 <sup>1</sup> / <sub>4</sub> 232	12 30	12 30
1750	89 <sup>1</sup> / <sub>4</sub> 227	44 <sup>3</sup> / <sub>4</sub> 113	10 <sup>1</sup> / <sub>4</sub> 26	10 25	9 23	101 <sup>3</sup> / <sub>4</sub> 258	12 30	14 36
2000	99 <sup>3</sup> / <sub>4</sub> 253	49 <sup>3</sup> / <sub>4</sub> 127	10 <sup>1</sup> / <sub>4</sub> 26	10 25	9 23	112 <sup>1</sup> / <sub>4</sub> 285	12 30	14 36

Dimensions in inches cm.