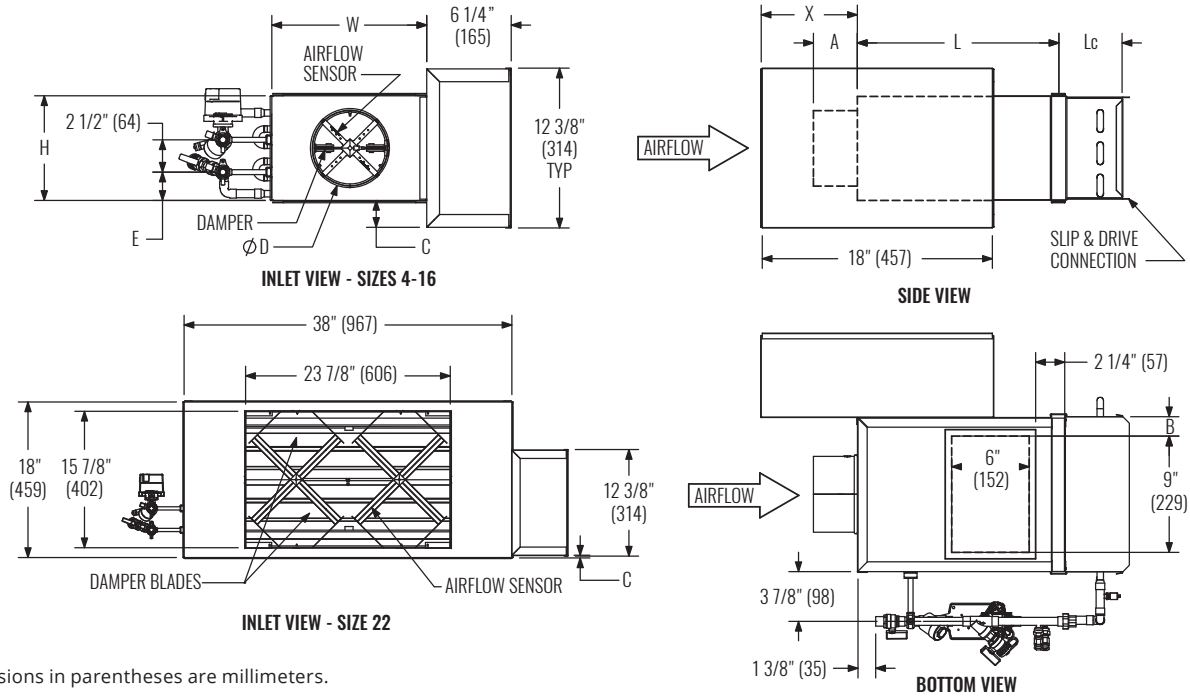


## DIMENSIONAL DATA | BASE UNIT WITH HOT WATER HEAT AND VALVE PACKAGE



Dimensions in parentheses are millimeters.

INLET SIZE	MAX CFM [L/s]	L	W	H	A	B	C	D	E	X	Lc
04	230 [109]	15 1/2"	12"	8"	5 3/8"	1 1/2"	2 1/8"	3 7/8"	2 3/16"	7 1/4"	SEE PAGE A2-54
05	360 [170]	15 1/2"	12"	8"	5 3/8"	1 1/2"	2 1/8"	4 7/8"	2 3/16"	7 1/4"	
06	515 [243]	15 1/2"	12"	8"	3 3/8"	1 1/2"	2 1/8"	5 7/8"	2 3/16"	7 1/4"	
07	700 [330]	15 1/2"	12"	10"	3 3/8"	1 1/2"	1 1/8"	6 7/8"	3 3/16"	7 1/4"	
08	920 [434]	15 1/2"	12"	10"	3 3/8"	1 1/2"	1 1/8"	7 7/8"	3 3/16"	7 1/4"	
09	1160 [547]	15 1/2"	14"	12 1/2"	3 3/8"	2 1/2"	-	8 7/8"	3 3/16"	5 1/4"	
10	1430 [675]	15 1/2"	14"	12 1/2"	3 3/8"	2 1/2"	-	9 7/8"	3 3/16"	5 1/4"	
12	2060 [972]	15 1/2"	16"	15"	3 3/8"	3 1/2"	-	11 7/8"	3 3/16"	5 1/4"	
14	2800 [1321]	15 1/2"	20"	17 1/2"	3 3/8"	5 1/2"	-	13 7/8"	3 3/16"	3 1/4"	
16	3660 [1727]	15 1/2"	24"	18"	3 3/8"	7 1/2"	-	15 7/8"	3 3/16"	3 1/4"	
22	7000 [3304]	15"	38"	18"	4 1/4"	N/A	1 1/8"	N/A	3 3/16"	5 1/4"	

NOTES: \*Right-hand base unit with electronic control enclosure shown; left-hand is available. Water coil handing is always opposite of control handing.

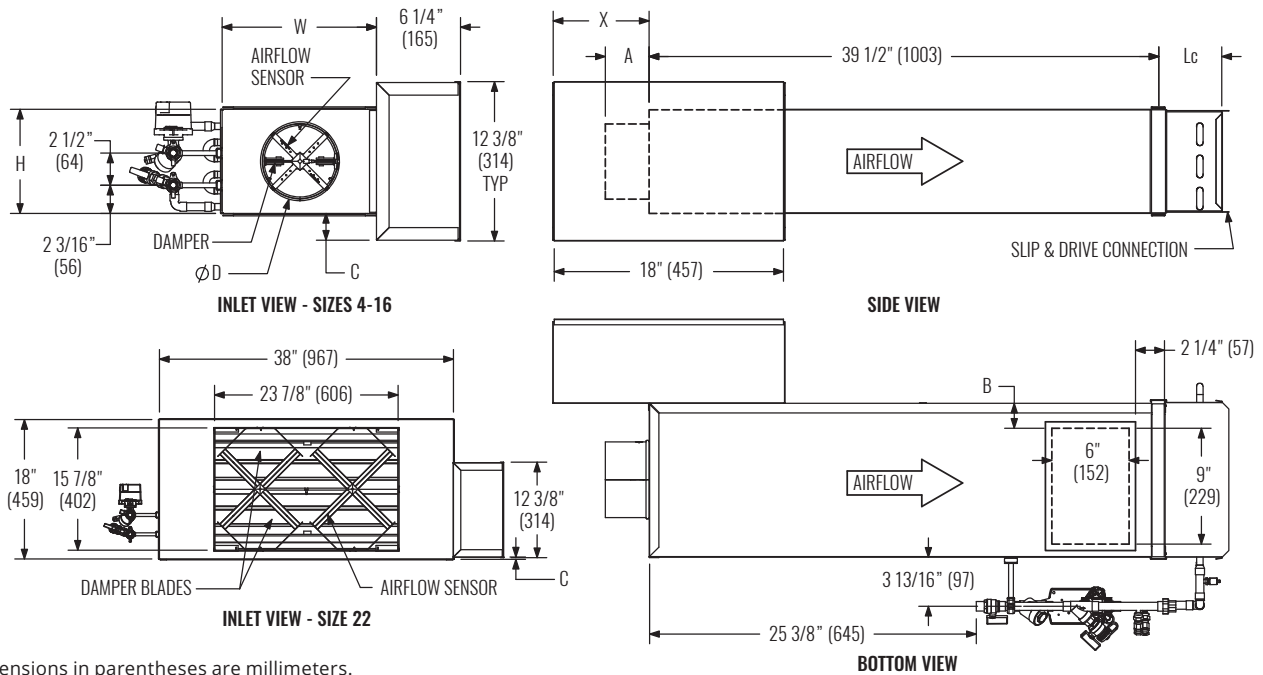
### STANDARD FEATURES

- 22 gauge galvanized steel casing construction
- 1/2" dia shaft extending from the unit casing
- NEMA 1 steel control enclosure for electric or electronic components
- 1/2" thick dual density fiberglass insulation that meets NFPA 90A and UL 181 safety requirements
- Four quadrant center averaging airflow sensor
- Hot water coils
- 2 or 3-way valve packages
- Variety of pneumatic, analog, and factory mounted direct digital control packages for pressure dependent and pressure independent systems
- Field installation of controls
- AHRI 880 certified sound ratings

### OPTIONAL FEATURES\*

- 20 gauge galvanized steel casing construction
- Liners: 1/2" or 1" cellular insulation, 1" dual density fiberglass, Sterilwall with 1" fiberglass, Steriliner, perforated doublewall with 1" fiberglass, or no liner
- Linear averaging airflow sensor
- 24-volt transformer
- Disconnect switch for electronic controls
- Dust tight control enclosure
- Left or right-hand control enclosure
- Bottom access panel (not available on size 22)
- Cam locks (bottom access panel)
- Hanger brackets

**DIMENSIONAL DATA | BASE UNIT WITH HOT WATER HEAT, VALVE PACKAGE, AND ATTENUATOR**



Dimensions in parentheses are millimeters.

INLET SIZE	MAX CFM [L/s]	W	H	A	B	C	D	E	X	Lc
04	230 [109]	12"	8"	5 3/8"	1 1/2"	2 1/8"	3 7/8"	2 3/16"	7 1/4"	SEE PAGE A2-54
05	360 [170]	12"	8"	5 3/8"	1 1/2"	2 1/8"	4 7/8"	2 3/16"	7 1/4"	
06	515 [243]	12"	8"	3 3/8"	1 1/2"	2 1/8"	5 7/8"	2 3/16"	7 1/4"	
07	700 [330]	12"	10"	3 3/8"	1 1/2"	1 1/8"	6 7/8"	3 3/16"	7 1/4"	
08	920 [434]	12"	10"	3 3/8"	1 1/2"	1 1/8"	7 7/8"	3 3/16"	7 1/4"	
09	1160 [547]	14"	12 1/2"	3 3/8"	2 1/2"	-	8 7/8"	3 3/16"	5 1/4"	
10	1430 [675]	14"	12 1/2"	3 3/8"	2 1/2"	-	9 7/8"	3 3/16"	5 1/4"	
12	2060 [972]	16"	15"	3 3/8"	3 1/2"	-	11 7/8"	3 3/16"	5 1/4"	
14	2800 [1321]	20"	17 1/2"	3 3/8"	5 1/2"	-	13 7/8"	3 3/16"	3 1/4"	
16	3660 [1727]	24"	18"	3 3/8"	7 1/2"	-	15 7/8"	3 3/16"	3 1/4"	
22	7000 [3304]	38"	18"	4 1/4"	N/A	1 1/8"	N/A	3 3/16"	5 1/4"	

NOTES: \*Right-hand base unit with electronic control enclosure shown; left-hand is available. Water coil handing is always opposite of control handing.

**STANDARD FEATURES**

- 22 gauge galvanized steel casing construction
- 1/2" dia shaft extending from the unit casing
- NEMA 1 steel control enclosure for electric or electronic components
- 1/2" thick dual density fiberglass insulation that meets NFPA 90A and UL 181 safety requirements
- Four quadrant center averaging airflow sensor
- Hot water coils
- 2 or 3-way valve packages
- Variety of pneumatic, analog, and factory mounted direct digital control packages for pressure dependent and pressure independent systems
- AHRI 880 certified sound ratings

**OPTIONAL FEATURES\***

- 20 gauge galvanized steel casing construction
- Liners: 1/2" or 1" cellular, 1" dual density fiberglass, Sterilwall with 1" fiberglass, Steriliner, perforated doublewall with 1" fiberglass, or no liner
- Linear averaging airflow sensor
- 24-volt transformer
- Disconnect switch for electronic controls
- Dust tight control enclosure
- Left or right-hand control enclosure
- Left or right-hand water coil connection
- Bottom access panel
- Cam locks (bottom access panel)
- Hanger brackets

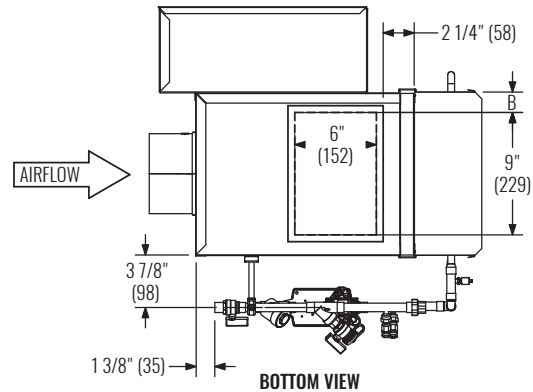
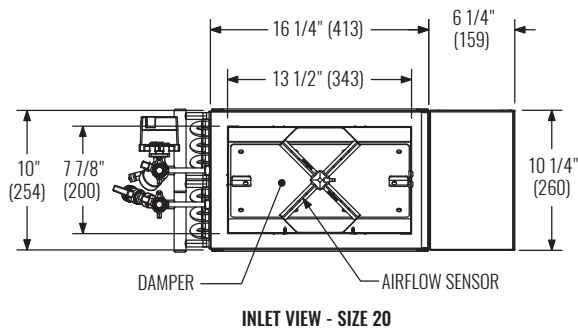
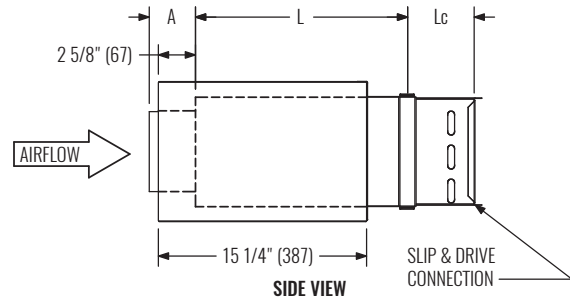
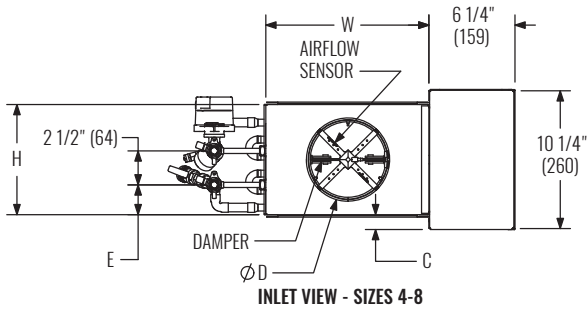
# LMHS-VP

Single Duct Terminal Unit | Valve Package



TERMINAL UNITS | SINGLE DUCT

## DIMENSIONAL DATA | LOW PROFILE UNIT WITH HOT WATER HEAT AND VALVE PACKAGE



Dimensions in parentheses are millimeters.

INLET SIZE	MAX CFM [L/s]	L	W	H	A	B	C	D	E	Lc
04	230 [109]	15 1/2"	12"	8"	5 3/8"	1 1/2"	1 1/8"	3 7/8"	2 3/16"	SEE PAGE A2-54
05	360 [170]	15 1/2"	12"	8"	5 3/8"	1 1/2"	1 1/8"	4 7/8"	2 3/16"	
06	515 [243]	15 1/2"	12"	8"	3 3/8"	1 1/2"	1 1/8"	5 7/8"	2 3/16"	
07	700 [330]	15 1/2"	12"	10"	3 3/8"	1 1/2"	1/8"	6 7/8"	3 3/16"	
08	920 [434]	15 1/2"	12"	10"	3 3/8"	1 1/2"	1/8"	7 7/8"	3 3/16"	
20	2100 [991]	15 1/2"	16 1/4"	10"	2 7/8"	3 5/8"	1/8"	N/A	3 3/16"	

NOTES: \*Right-hand base unit with electronic control enclosure shown; left-hand is available. Water coil handing is always opposite of control handing.

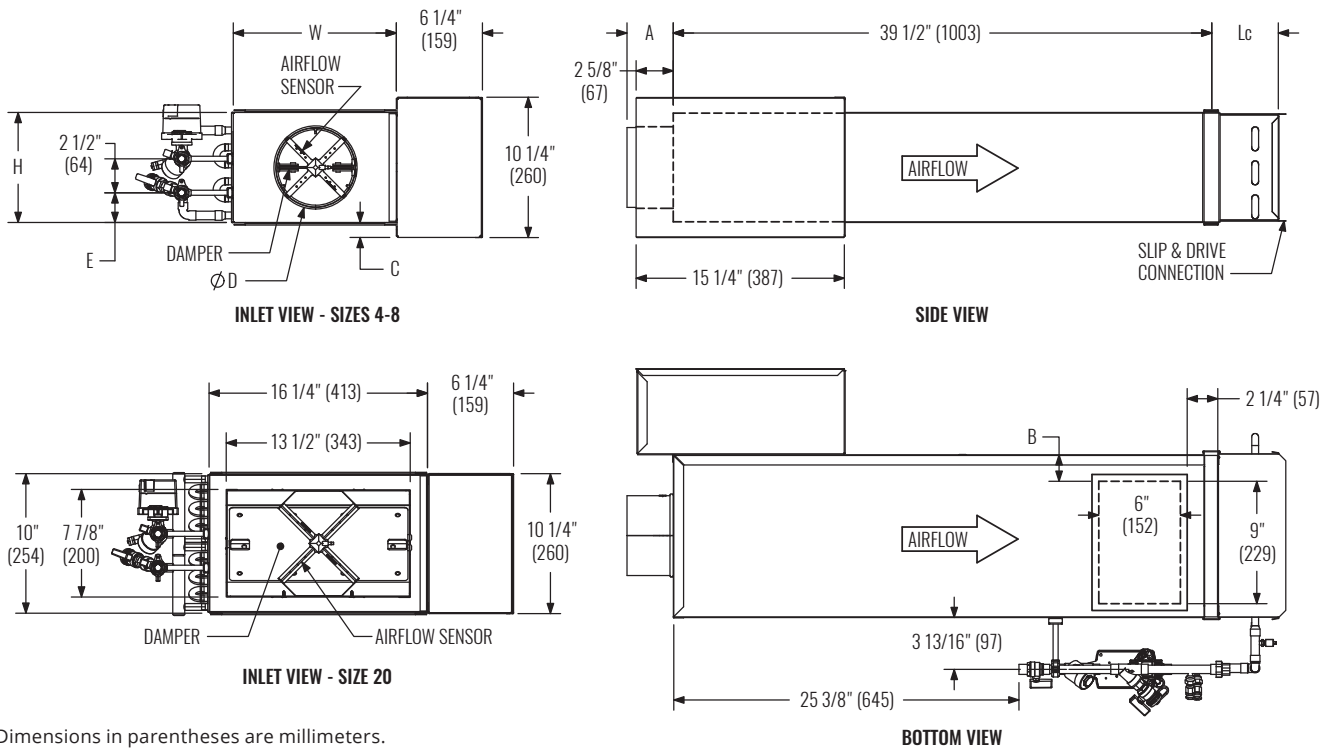
### STANDARD FEATURES

- 22 gauge galvanized steel casing construction
- 1/2" diameter shaft extending from the unit casing
- NEMA 1 steel control enclosure for electric or electronic components
- 1/2" thick dual density fiberglass insulation that meets NFPA 90A and UL 181 safety requirements
- Four quadrant center averaging airflow sensor
- Hot water coils
- 2 or 3-way valve packages
- Variety of pneumatic, analog, and factory mounted direct digital control packages for pressure dependent and pressure independent systems
- AHRI 880 certified sound ratings

### OPTIONAL FEATURES\*

- 20 gauge galvanized steel casing construction
- Liners: 1/2" or 1" cellular, 1" dual density fiberglass, Sterilwall with 1" fiberglass, Steriliner, perforated doublewall with 1" fiberglass, or no liner
- Linear averaging airflow sensor
- 24-volt transformer
- Disconnect switch for electronic controls
- Dust tight control enclosure
- Left or right-hand control enclosure
- Bottom access panel
- Cam locks (bottom access panel)
- Hanger brackets

**DIMENSIONAL DATA | LOW PROFILE UNIT WITH HOT WATER HEAT, VALVE PACKAGE, AND ATTENUATOR**



Dimensions in parentheses are millimeters.

INLET SIZE	MAX CFM [L/s]	W	H	A	B	C	D	E	Lc
04	230 [109]	12"	8"	5 3/8"	1 1/2"	1 1/8"	3 7/8"	2 3/16"	SEE PAGE A2-54
05	360 [170]	12"	8"	5 3/8"	1 1/2"	1 1/8"	4 7/8"	2 3/16"	
06	515 [243]	12"	8"	3 3/8"	1 1/2"	1 1/8"	5 7/8"	2 3/16"	
07	700 [330]	12"	10"	3 3/8"	1 1/2"	1/8"	6 7/8"	3 3/16"	
08	920 [434]	12"	10"	3 3/8"	1 1/2"	1/8"	7 7/8"	3 3/16"	
20	2100 [991]	16 1/4"	10"	2 7/8"	3 5/8"	1/8"	N/A	3 3/16"	

NOTES: \*Right-hand base unit with electronic control enclosure shown; left-hand is available. Water coil handing is always opposite of control handing.

**STANDARD FEATURES**

- 22 gauge galvanized steel casing construction
- 1/2" diameter shaft extending from the unit casing
- NEMA 1 steel control enclosure for electric or electronic components
- 1/2" thick dual density fiberglass insulation that meets NFPA 90A and UL 181 safety requirements
- Four quadrant center averaging airflow sensor
- Hot water coils
- 2 or 3-way valve packages
- Variety of pneumatic, analog, and factory mounted direct digital control packages for pressure dependent and pressure independent systems
- AHRI 880 certified sound ratings

**OPTIONAL FEATURES\***

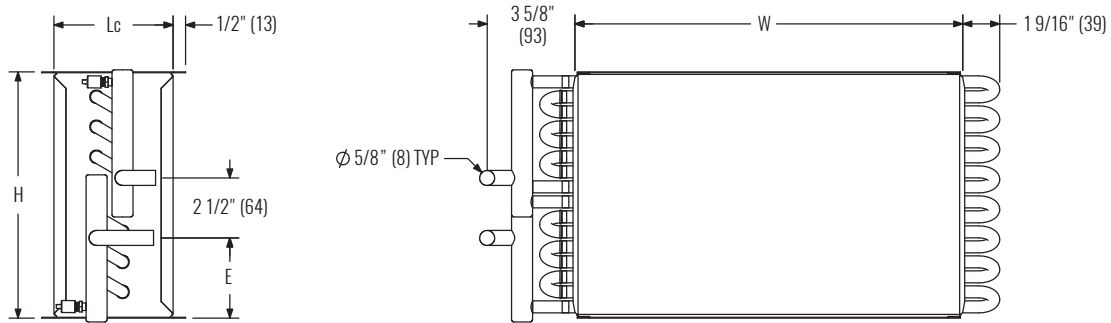
- 20 gauge galvanized steel casing construction
- Liners: 1/2" or 1" cellular insulation, 1" dual density fiberglass, Sterilwall with 1" fiberglass, Steriliner, perforated doublewall with 1" fiberglass, or no liner
- Linear averaging airflow sensor
- 24-volt transformer
- Disconnect switch for electronic controls
- Dust tight control enclosure
- Left or right-hand control enclosure
- Left or right-hand water coil connection
- Bottom access panel
- Cam locks (bottom access panel)
- Hanger brackets

# LMHS-VP

Single Duct Terminal Unit | Valve Package



## DIMENSIONAL DATA | HOT WATER COIL



NOTES: Dimensions in parentheses are millimeters

UNIT SIZE	COIL ROWS	H	W	Lc	E
04, 05, 06	1	7 7/8"	12"	5"	2 3/16"
	2	7 7/8"	12"	5"	2 3/16"
	3	7 7/8"	12"	7 1/4"	2 3/16"
	4	7 7/8"	12"	7 1/4"	2 3/16"
07, 08	1	10 1/4"	12"	5"	3 3/16"
	2	10 1/4"	12"	5"	3 3/16"
	3	10 1/4"	12"	7 1/4"	3 3/16"
	4	10 1/4"	12"	7 1/4"	3 3/16"
9, 10	1	12 3/4"	14"	5"	3 3/16"
	2	12 3/4"	14"	5"	3 3/16"
	3	12 3/4"	14"	7 1/4"	3 3/16"
	4	12 3/4"	14"	7 1/4"	3 3/16"
12	1	15 1/4"	16"	5"	3 3/16"
	2	15 1/4"	16"	5"	3 3/16"
	3	15 1/4"	16"	7 1/4"	3 3/16"
	4	15 1/4"	16"	7 1/4"	3 3/16"
14	1	17 3/4"	20"	7 1/2"	3 3/16"
	2	17 3/4"	20"	6 1/2"	3 3/16"
	3	17 3/4"	20"	9 3/4"	3 3/16"
	4	17 3/4"	20"	9 3/4"	3 3/16"
16	1	17 3/4"	24"	7 1/2"	3 3/16"
	2	17 3/4"	24"	6 1/2"	3 3/16"
	3	17 3/4"	24"	9 3/4"	3 3/16"
	4	17 3/4"	24"	9 3/4"	3 3/16"
20	1	10 1/4"	16"	5"	3 3/16"
	2	10 1/4"	16"	5"	3 3/16"
	3	10 1/4"	16"	7 1/4"	3 3/16"
	4	10 1/4"	16"	7 1/4"	3 3/16"
22	1	17 3/4"	38"	5"	3 3/16"
	2	17 3/4"	38"	5"	3 3/16"
	3	17 3/4"	38"	7 1/4"	3 3/16"
	4	17 3/4"	38"	7 1/4"	3 3/16"

NOTES: Water connection dimension is O.D.

### STANDARD FEATURES

- LMHS-VP coils are shipped from the factory attached to the unit discharge
- Coil discharge is configured for slip and drive field duct work installation
- Coil section is uninsulated
- Coils are not for steam applications
- Coil Casing – 20 gauge galvanized steel
- Coil Tubing – 1/2" O. D. x 0.016" thick copper
- Coil Fins – 0.0045" Thick aluminum, 10 per inch, mechanically bonded to tubing
- Air vent and drain

### OPTIONAL FEATURES

- Coil Fins – 0.0045" Thick aluminum, 12 per inch, mechanically bonded to tubing

**NOTE:**

For hot water performance data tables, visit the Krueger website at [www.krueger-hvac.com](http://www.krueger-hvac.com) or download the Krueger selection software to run customized selections. The selection program can provide performance data with different entering air and water conditions as well as show effects of altitude and glycol on the heating performance of the water coil. The selection software also allows selections to be saved in a schedule format that can be imported onto a set of project drawings.

**GLOSSARY OF ABBREVIATIONS**

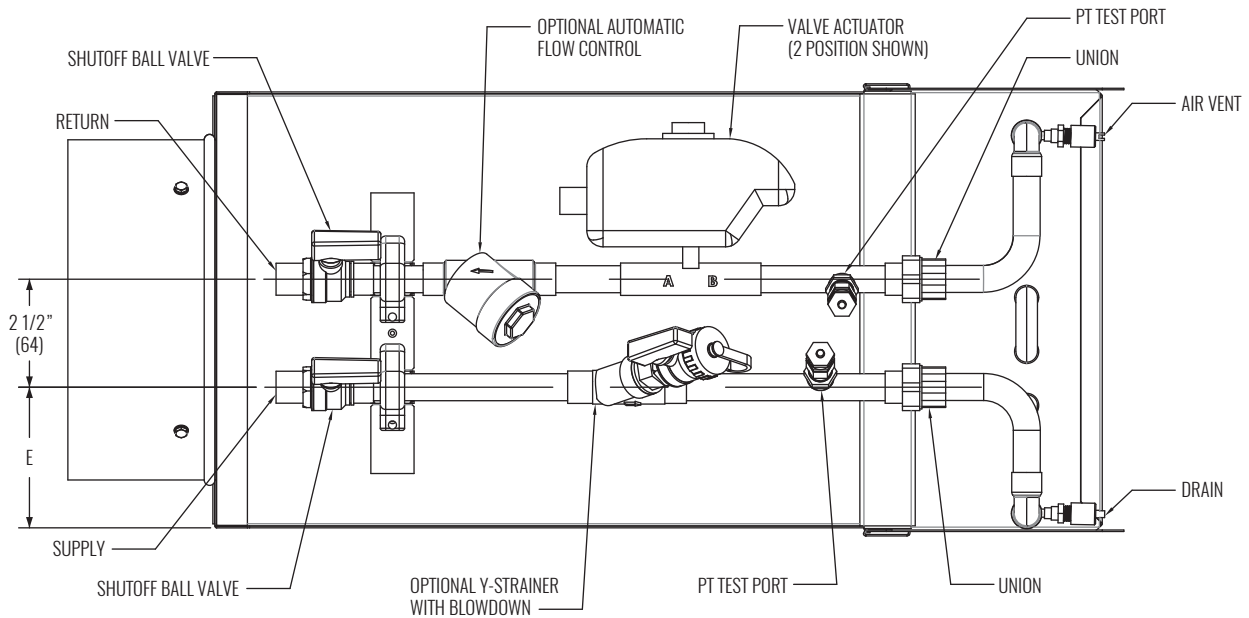
- EAT - Entering Air Temperature (°F)
- EWT - Entering Water Temperature (°F)
- CFM - Cubic Feet/Minute (Air Volume)
- Btuh - Heating Capacity (British Thermal Units/hr)
- MBH - 1,000 Btuh
- WTD - Water Temperature Drop (°F)
- ATR - Air Temperature Rise (°F)
- LAT - Leaving Air Temperature (°F)
- kW - Heating Capacity (kilowatts)
- Ps - Static Pressure Drop ("WG)
- GPM - Gallon Per Minute
- WPD - Water Pressure Drop or Head Loss (ft WG)

# LMHS-VP

Single Duct Terminal Unit | Valve Package



## DIMENSIONAL DATA | 2-WAY VALVE PACKAGE



NOTES: \*Right hand valve package configuration shown, left hand available. Water coil handing is always opposite of control handing.

### STANDARD FEATURES

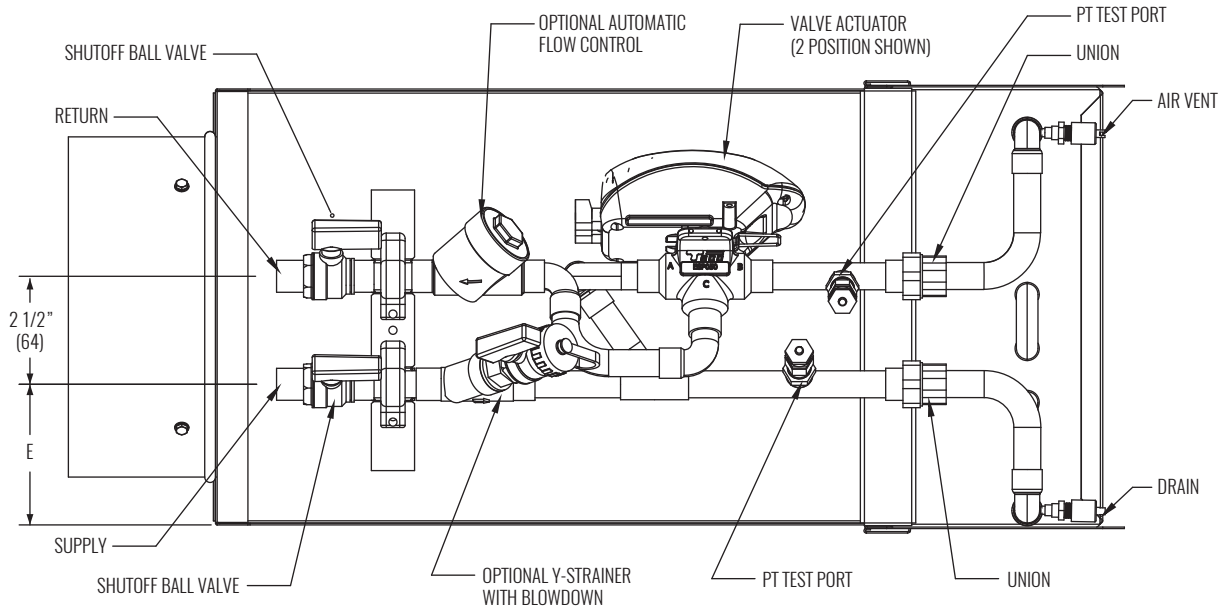
- Air vent and drain
- Union connections to water coil
- PT test ports
- 1/2" OD copper tube
- Factory pressure tested to 100psi
- Shipped at 20-30 psi for defect detection
- Supply and return connections to receive 1/2" OD tube
- Coil connections and valve package opposite controls, except attenuated units

### OPTIONAL FEATURES\*

- Actuator
  - On/Off, normally closed
  - 3-Point floating, fail in place
- Flow Control
  - 0.5 - 7.0 GPM (0.5 increments)
  - 8.0 - 9.0 GPM (1.0 increments)
- Y-strainer with blowdown
- Left or right-hand valve packages

INLET SIZE	E
4-6	2 3/16"
8-22	3 3/16"

**DIMENSIONAL DATA | 3-WAY VALVE PACKAGE**



NOTES: \*Right hand valve package configuration shown, left hand available. Water coil handing is always opposite of control handing.

**STANDARD FEATURES**

- Air vent and drain
- Union connections to water coil
- PT test ports
- 1/2" OD copper tube
- Factory pressure tested to 100psi
- Shipped at 20-30 psi for defect detection
- Supply and return connections to receive 1/2" OD tube
- Coil connections and valve package opposite controls, except attenuated units

**OPTIONAL FEATURES\***

- Actuator
  - On/Off, normally closed
  - 3-Point floating, fail in place
- Flow Control
  - 0.5 - 7.0 GPM (0.5 increments)
  - 8.0 - 9.0 GPM (1.0 increments)
- Y-strainer with blowdown
- Left or right-hand valve packages

INLET SIZE	E
4-6	2 3/16"
8-22	3 3/16"