Т



# LMHD, LMHDT | Non-Airflow Mixing & Airflow Mixing

# **LMHD, LMHDT Product Description =**

### **CASING**

 All dual duct unit casing panels are constructed of 22 gage galvanized steel with a 20 gage option.

## **INLET COLLARS**

 All round collars accommodate standard spiral or flex duct sizes. Unit sizes 4 - 16 have round inlet collars. The model LMHD, unit size 22, has a nominal inlet size of 16" x 24". (Hand is determined by looking at the unit in the direction of airflow with the unit in the installed position.)

### **OUTLET CONNECTIONS**

 All outlet connections feature a slip and drive discharge duct connection.

#### DAMPER ASSEMBLIES

- Unit sizes 4 16 utilize round volume control dampers. The model LMHD, size 22, has a rectangular opposed blade volume control damper. All damper assemblies utilize a solid 1/2" shaft that rotates in Delrin® bearings.
- Damper blades incorporate a flexible gasket for tight airflow shutoff and operate over a full 90°.
- The damper position is marked by an arrow embossment on the end of the damper shaft.

#### **CASING LINERS**

All liners are attached to the unit casing with both adhesive and weld pins to ensure long term durability (excludes Sterilwall and Perforated Doublewall). The standard liner option is 1/2" thick, 1 1/2 lb. dual density fiberglass insulation that meets UL 181 and NFPA 90A.

- (Optional) 1" Thick Insulation: 1" thick, 1 1/2 lb. dual density fiberglass insulation that meets UL 181 and NFPA 90A.
- (Optional) Cellular Insulation: 1/2" or 1" thick, 1 1/2 lb. density, smooth surface, polyolefin, closed-cell foam insulation for fiber free application. Cellular insulation meets UL 181 and NFPA 90A and does not support mold or bacteria growth.
- (Optional) Steriliner Insulation: 13/16" thick, 4 lb. density, rigid board insulation with nylon reinforced foil covering insulation fibers that meets UL 181 and NFPA 90A. Liner shall be attached to unit casing by insulation adhesive and full-seam-length Z-strips to enclose and seal the insulation cut edges.
- (Optional) Sterilwall Insulation: 1/2" or 1" thick, 1 1/2 lb. dual density fiberglass insulation that meets UL 181 and NFPA 90A, enclosed between the unit casing and a non-perforated internal sheet metal cover extending over the fiberglass insulation, as well as covering the liner cut edges.
- (Optional) Perforated Doublewall Insulation: 1/2" or 1" thick, 1 1/2 lb. dual density fiberglass insulation, (additional options: 1/2" or 1" thick, 1 1/2 lb. density foil reinforced fiberglass insulation or 13/16" thick, 4 lb. density, rigid board insulation with fiber reinforced foil covering) that meets UL 181 and NFPA 90A, enclosed between the unit casing and a perforated internal sheet metal cover extending over the fiberglass insulation, as well as covering the liner cut edges.
- · (Optional) No Liner: No internal insulation liner.

### **AIRFLOW SENSOR**

- All units are equipped with two factory installed airflow sensing devices.
- The standard sensor location for LMHD and LMHDT is in each of the hot and cold inlets.
- LMHDT offers a discharge sensor option to control the total CFM leaving the unit.
- The standard sensor is the K4 LineaCross, four quadrant, multi-point center averaging sensor.
- (Optional) Linear, multi-point, velocity averaging sensor with an amplified signal is also available.
- Balancing taps are provided to allow for easy airflow verification.
- Both the K4 LineaCross and linear sensors use the same flow constant.

## **CONTROLS**

 Pneumatic, analog, or factory mounted direct digital control types are available. A "no control" unit option is also available for field mounting of direct digital controls.

#### **CONTROL TRANSFORMER**

 An optional control transformer is factory mounted and wired inside the control enclosure.

#### **LABELS**

 Label information adhered to each unit includes model name, unit size, configuration code, airflow (CFM), balancing chart and tagging data.

## **PACKAGING**

 Units are palletized. Each pallet of units is banded and stretch wrapped with cellophane.

# LMHD, LMHDT Damper Leakage

# LMHD, LMHDT, DAMPER LEAKAGE DETAIL

	Damper Leakage		
Inlet	1.5" WG	3.0" WG	6.0" WG
Size	CFM	CFM	CFM
4	4	5	7
5	4	5	7
6	4	5	7
7	4	5	7
8	4	5	7
9	4	5	7
10	4	5	7
12	4	5	7
14	4	6	8
16	5	7	9

NOTES: Damper leakage is measured with the damper fully closed using an actuator. A precision low flow orifice is used upstream of the unit to measure the leakage rate as a function of the measured upstream static pressure. Casing leakage is determined with the damper fully open and the discharge of the unit sealed. A precision low flow orifice is used upstream of the unit to measure the leakage rate as a function of the supplied static pressure. Leakage testing conducted in accordance with ASHRAE 130-2008.