# HM SERIES MIST ELIMINATOR FILTER



# 99% EFFICIENT ON AIRBORNE WATER DROPLETS 3 MICRONS AND LARGER

**Application:** The HM Series Moisture Separator is an impingement type panel filter that serves two important functions: its primary purpose is to collect large water droplets and oil mist from the airstream and divert the liquid to an appropriate drain; its secondary function is as a heavy duty washable particulate filter. The HM Series is built for use in outside air ducts, side access housings and built-up filter banks. Other applications include chilled water coils and mist-type humidifiers. The HM Series is designed for higher airflow velocities. It performs best in a system running at no more than 10% above or below its rated velocity of 500 fpm. It has been independently tested to by over 99% efficient on water droplets measuring 3 microns and larger.

**Construction:** The HM Series uses a 24-gauge metal frame to enclose the media pack consisting of multiple layers of corrugated and flat screen wire positioned for efficient drainage. The pack is then placed between two layers of expanded metal, and is made to fit firmly inside the frame giving the HM Series filter exceptional strength and durability. The bottom of the filter as 3/8" diameter drain holes and the top is identified with proper positioning for drainage and airflow. The frame is made with mitered corners and is secured with pop-rivet(s).

### **Filter Cleaning and Coating**

**1.** To clean a dirty filter, rinse it with a moderate-to-heavy stream of warm water. High-powered steam cleaning or chemical dips are unnecessary and not recommended.

**2.** The HM Series filter is not supplied from the factory with filter adhesive coating. If desired, it may be sprayed before installation with Filter Coat, a water soluble adhesive and detergent.

Due to continuing research and development, we reserve the right to make modifications to any product.

AVAILABLE IN THREE ALLOYS

HMA Aluminium

HMG Galvanized Steel

**HMS** Stainless Steel

# **PRODUCT HIGHLIGHTS**

- 99% Efficient on 3 Micron Water Droplets
- Heavy Duty Construction
- Washable and Reusable
- Drain Holes Along Bottom of Frame

# FAST FACTS

Minimum Order: No Minimum Order

### **Sizing Options:**

Standard and Special Sizes Available (See reverse side for details.)

### **Classification**:

UL Classified 900

MAX TEMP:

HMA – 275 Degrees F HMG – 325 Degrees F HMS – 900 Degrees F

# HM SERIES



MODEL									
CONSTRUCTION	НМА			HMG			HMS		
Frame Alloy	.030" thick aluminum			24 gauge galvanized steel			24 gauge stainless steel		
Frame Thickness	Nominal* 1" and 2"			Nominal* 1" and 2"			Nominal* 1" and 2"		
Face Grids	24 gauge aluminum			30 gauge galvanized steel			30 gauge stainless steel		
Media	Aluminum screen wire			Aluminum screen wire			Stainless steel screen wire		
APPLICATION									
Application	Airborne particulate and coolant mist			Airborne particulate and coolant mist			Airborne particulate and coolant mist		
Max Operating Temperature	275°			325°			900°		
Washability	Frequent and moderate			Frequent and rigorous			Frequent and rigorous		
STANDARD SIZES									
Nominal** Dimensions (H x W x T)	Part Number	Carton Quantity	Carton Weight	Part Number	Carton Quantity	Carton Weight	Part Number	Carton Quantity	Carton Weight
12 x 24 x 1	HMA101224	12	20.0	HMG101224	12	27.0	HMS101224	12	37.0
16 x 20 x 1	HMA101620	12	24.0	HMG101620	12	29.0	HMS101620	12	39.0
16 x 25 x 1	HMA101625	12	37.0	HMG101625	12	42.0	HMS101625	12	46.0
20 x 20 x 1	HMA102020	12	38.0	HMG102020	12	44.0	HMS102020	12	46.0
20 x 25 x 1	HMA102025	12	42.0	HMG102025	12	48.0	HMS102025	12	55.0
24 x 24 x 1	HMA102424	12	48.0	HMG102424	12	55.0	HMS102424	12	61.0
12 x 24 x 2	HMA201224	12	32.0	HMG201224	12	38.0	HMS201224	12	44.0
16 x 20 x 2	HMA201620	6	27.0	HMG201620	6	33.0	HMS201620	6	39.0
16 x 25 x 2	HMA201625	6	40.0	HMG201625	6	46.0	HMS201625	6	52.0
20 x 20 x 2	HMA202020	6	41.0	HMG202020	6	47.0	HMS202020	6	53.0
20 x 25 x 2	HMA202025	6	45.0	HMG202025	6	51.0	HMS202025	6	57.0
24 x 24 x 2	HMA202424	6	51.0	HMG202424	6	58.0	HMS202424	6	64.0

### SIZING INFORMATION

- 1. **Standard** nominal filters are 5/8" undercut on the height and width dimensions.
- 2. Special size filters are made to the exact height and width dimensions stated on the purchase order.
- 3. Tolerance height and width: ± 1/8"
- 4. Filter Thickness: Nominal 1" (actual 7/8"), nominal 2" (actual 1-3/4") and nominal 4" (actual 3-3/4")
- 5. Tolerance thickness: +/- 1/16"

#### **CLASSIFICATION & TEST NOTES**

- 1. UL Classified 900
- 2. Rated Airflow: 500 fpm / Recommended Airflow Range: 450 550 fpm.
- 3. 99%+ Efficient on water droplet size of 3 microns and larger
- 4. Dust Holding Capacity:
- a. 2" thick: 51 grams per square foot
- 5. Average Arrestance:
  - a. 2" thick: 64% at rated airflow
- 6. Recommended final resistance is .50" W.G.
- 7. Independent test report available for performance details

### **OPTIONS**

1. The HM Series may be supplied with polyurethane gaskets on the vertical sides of the frame for use inside sideaccess housings. Specify "with gaskets" and specify along which dimenensions on the purchase order.

### INSTALLATION CONSIDERATIONS

1. The HM Series filter, when used to separate moisture, must be installed in HVAC systems with the TOP label facing upward to allow for proper drainage.

2. When purchasing special size HM Series filters, specify if the drain holes should be on the short or long dimension of the frame.

### **ADDITIONAL INFORMATION**

- 1. The nominal 1" (actual 7/8") frame is 9-ply.
- 2. The nominal 2" (actual 1-3/4") filter is 13-ply.
- 3. The nominal 4" (actual 3-3/4") filter is 15-ply.

Water Droplet Efficiency						
Water Droplet Size (Micron)	Average Fractional Efficiency					
2.5 - 3	94.9%					
3 - 4	99.1%					
4 - 5	99.9%					