



## Mist Eliminator

- Remove Oil and Water Aerosols from Compressor Systems
- Protect Downstream Equipment
- Guaranteed Long Element Life
- Low Pressure Drop Saves Energy
- Low-Cost Coalescing Filtration

### Long element life with low pressure drop saves you time and money

Low pressure drop means a pressure differential of 1 psid or less, not just at installation, but throughout the life of the element.

Long element life means you only change the mist eliminator element about once each decade.

How is this possible? With a thick bed of glass fiber, the element facilitates self-cleaning by continuous draining. Contaminants are trapped at various stages within the fiber bed, not only at the surface. This prevents clogging and keeps pressure drop low.

### Example:

VME 1250 DP= 1 psid (constant)  
 Typical Coalescer DP= 4 psid (minimum wet operating)  
 1250 scfm = 250 H.P. = 186 Kw  
 6000 hrs./yr. (3 shifts) x 186kw x  
 \$.07/Kwh = \$78,120 Electric cost per year.

4 psid cost = \$3,125.00

1 psid cost = - 781.00

**\$2,344.00 savings**

Payback on investment for a VME is 18 months or less.

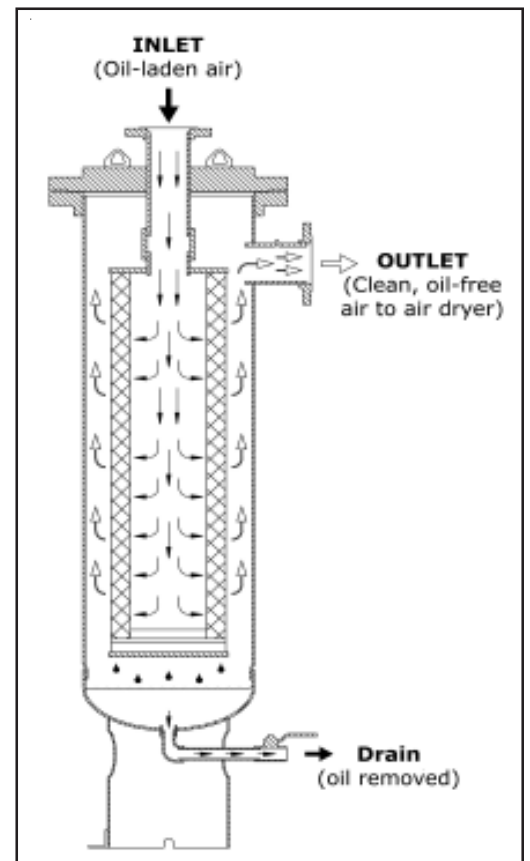
### Applications

The Van Air Mist Eliminator provides effective, continuous removal of heavy oil contamination in high-volume air systems. A few industries served are:

- Chemical processing
- Petrochemical processing
- Refining
- Utilities
- Iron and steel production
- Cement and dry materials processing
- Automotive
- Mining

### Installation

Install upstream of regenerative dryers to protect desiccant beds from oil contamination. Install upstream of refrigerated dryers to protect heat exchangers.



**Standard Equipment**

- Coalescing element for oil removal to 1ppm w/w (assuming inlet loading <200ppm)
- ASME code stamped housing
- Primed white enamel exterior coating
- Manual drain
- Standard vessel design: 1/16" corrosion allowance
- Five-year housing warranty
- Ten-year prorated element warranty

VME-5000 and larger; element ships separately, Accessories shipped separately

**Accessories**

Electric Drain Valves:

Model EDV-2002 (1/2"115V).....	39-10105
Model EDV-2002 (1/2"230V).....	39-10106
Model MDV400I (1" 115V).....	39-2411121
Model MDV400I (1" 230V).....	39-2412121
Model MDV400L (1" 115V).....	39-2411111
Model MDV400L (1" 230V).....	39-2412111

Pneumatic (Zero Loss) Drain Valve:

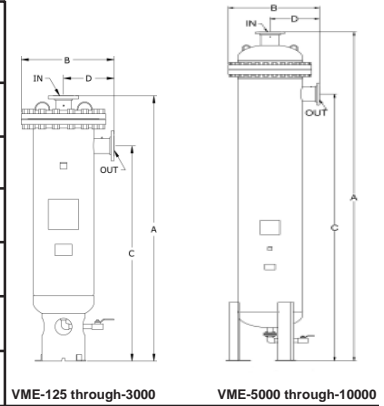
Model PDV500T(3/4").....	39-0284
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Differential Pressure Indicator:

Model PD-7.....	84--0841
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**Dimensions & Specifications- Inches and Pounds**

Model	A Height	B Width	C Ht. to Outlet	D In to Outlet	I/O Conn. <sup>1</sup>	Drain Conn. <sup>2</sup>	Element Model	Total Wt. <sup>3</sup>
VME-125	42 1/8	23 1/2	29	13	2 FLG	1 NPT	EVME-125	420
VME-250	46 1/8	23 1/2	33	13	2 FLG	1 NPT	EVME-250	440
VME-500	58 1/8	23 1/2	45	13	2 1/2 FLG	1 NPT	EVME-500	480
VME-850	72 1/8	23 1/2	59	13	2 1/2 FLG	1 NPT	EVME-850	525
VME-1250	78 3/8	25 3/4	63 1/4	14	4 FLG	1 NPT	EVME-1250	710
VME-1500	79 3/4	27 1/2	64 5/8	15	4 FLG	1 NPT	EVME-1500	820
VME-2000	71 5/8	34	55 1/8	18	4 FLG	1 NPT	EVME-2000	1040
VME-2500	84 5/8	34	68 1/8	18	4 FLG	1 NPT	EVME-2500	1170
VME-3000	97 5/8	34	81 1/8	18	4 FLG	1 NPT	EVME-3000	1300
VME-5000	161 5/8	34	140 1/2	18	6 FLG	2 NPT	EVME-5000	1945
VME-7500	178 1/4	42 3/8	140	23	8 FLG	2 NPT	EVME-7500	2900
VME-10000	202 1/4	42 3/8	164	23	8 FLG	2 NPT	EVME-10000	3180



<sup>1</sup> Flanges are ANSI Class 150 R.F. <sup>2</sup> Electric or pneumatic (zero loss) drain recommended <sup>3</sup> Weight includes element. Dimensions and specifications may change without notice. Please request a certified drawing before pre-piping.

**Maximum Capacities- SCFM**

Model	50 psig	60 psig	70 psig	80 psig	90 psig	100 psig	110 psig	120 psig	130 psig	140 psig	150 psig
VME-125	70	81	93	104	114	125	136	146	158	169	180
VME-250	140	163	185	208	228	250	273	293	315	338	360
VME-500	280	325	370	415	455	500	545	585	630	675	720
VME-850	476	550	630	706	774	850	927	995	1071	1148	1224
VME-1250	700	813	925	1038	1138	1250	1363	1463	1575	1688	1800
VME-1500	840	975	1110	1245	1365	1500	1635	1755	1890	2025	2160
VME-2000	1120	1300	1480	1660	1820	2000	2180	2340	2520	2700	2880
VME-2500	1400	1625	1850	2075	2275	2500	2725	2925	3150	3375	3600
VME-3000	1680	1950	2220	2490	2730	3000	3270	3510	3780	4050	4320
VME-5000	2800	3250	3700	4150	4550	5000	5450	5850	6300	6750	7200
VME-7500	4200	4875	5550	6225	6825	7500	8175	8775	9450	10125	10800
VME-10000	5600	6500	7400	8300	9100	10000	10900	11700	12600	13500	14400

**Installation note:**  
For applications where heavy particulate contamination exists, install 1micron particulate filter upstream of the mist eliminator to prolong element life.

**Maximum capacities:**  
based on 100 psig and 100°F inlet temperature. MWP= 150 psig at 100°F. Maximum inlet temperature is 300°F. Consult factory for higher pressures.

**Sizing:**

On chart above, select the lowest operating pressure at the point of installation and read down that column to the nearest flow that meets or exceeds system requirements. For inlets other than 100°F, multiply required capacity by the applicable correction factor below. Find nearest flow that meets or exceeds this net flow in your operating pressure column. Follow row to the left to determine model number.

**Inlet temperature- correction factors:**

For:	Multiply by:	Example:
50°F	1.10	Assuming 1400 scfm and 75°F inlet temperature @ 100 psig:
75°F	1.05	
125°F	.96	
150°F	.92	1. Multiply flow by temperature correction factor: 1400 scfm x 1.05= 1470 scfm equivalent flow
175°F	.88	2. Select a model that matches or exceeds this capacity at the working pressure of 100 psig
200°F	.85	3. At 100 PSIG, the model selection is VME 1500
250°F	.79	
300°F	.74	

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