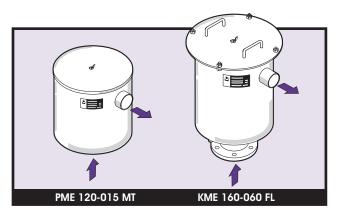


## INDUSTRIAL FILTRATION PRODUCTS

## **CONSLER PME/KME SERIES EXHAUST SEPARATORS**



#### **Features**

- Multi-stage design coalescing element
- Low pressure drop & long element life
- Economical, replaceable elements
- Direct mounting to machinery
- Oil return drain minimizes oil loss and allows recycling of filtered oil
- Custom modified element and housing designs available

### **Applications**

- High efficiency separation of oil, aerosols and smoke from an air or gas exhaust stream.
- Removal of liquids and solids down to  $0.3 \,\mu\mathrm{m}$  in size. Efficiencies to 99.95%.
- Effective elimination of visible oil, smoke and mist from rotary and reciprocating vacuum pump discharge air.
- Use as a fine filter/breather on compressor or turbine oil sumps, or liquid tank reservoir vents.
- Ideal for satisfying O.E.M. requirements and specifications.

### **Element Performance**

The PME Series "oil mist and smoke eliminators" feature a highly efficient coalescing design element. The filter's cylindrical, multi-stage element effectively removes the heavy concentrations of oil mist and oil smoke from the exhaust stream of oil-sealed, oil-lubricated, mechanical vacuum pumps. The filter can also be used in special applications as a mist eliminator/breather when it is installed on the vent connection of compressor or turbine oil sumps, or liquid tank reservoirs.

Generally speaking, coalescing is simply a "gathering" of minute liquid droplets to form larger droplets. The small droplets that enter the inside of the multi-stage element are intercepted or impinged by the filter medium and

Once formed, the larger droplets drain off the outside of the element and fall by gravity to the bottom of the filter housing where a drain connection is provided for removing and/or recycling the coalesced oil. The element actually becomes more efficient as it is wetted or saturated with liquid, and will provide long service life before replacement is required.

At rated flow, the initial pressure loss is 2.5 psi. Filter oversizing or the use of special, custom element materials is recommended for applications where lower differential pressure is required.

#### **Element Design and Construction**

The multi-stage design element is constructed with two concentric tubes of ultra-fine fiberglass along with metallic sleeves for structural support and drainage assistance. The fiberglass material portion consists of an inner, ultra-high efficiency stage to coalesce fine droplets, and an outer, coarser stage for promoting liquid drainage and preventing re-entrainment. The element end seals are composed of a molded, flexible, oil-resistant plastisol material which provides for a positive leak-tight seal.

The elements may be custom modified to satisfy each original equipment manufacturer's requirements for specific separation efficiencies, flow rates, and differential pressure levels.

#### **Housing Design and Construction**

The PME Series offers lightweight, compact filter housings. The units may be mounted directly to the exhaust port of a vacuum pump and are easily disassembled when servicing.

KME models may be used in applications with inlet pressures up to 10 psi. A minimum inlet pressure of  $\frac{1}{2}$  to 1 psi is required for proper functioning of the filter.

Our standard filter housings may also be custom modified to meet application needs. Typical design modifications include special end connection types and sizes, and special controls and accessories. One modified version of a standard housing uses a flanged cover to provide a leaktight seal in applications where the outlet exhaust line is piped away from the pump/process access area.

#### **Housing Materials**

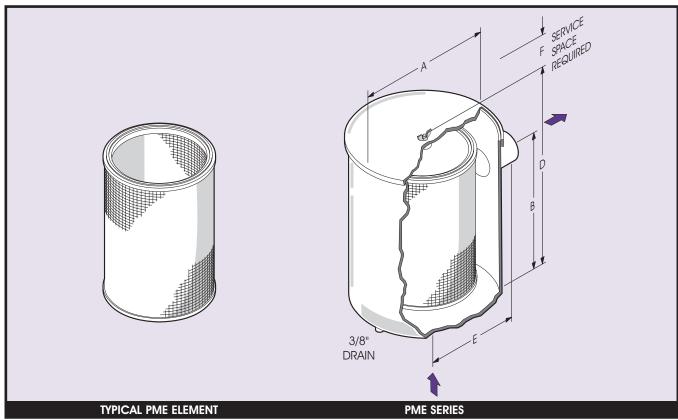
The PME Series housings are fabricated from heavy-gauge carbon steel. A rust preventative primer coating is provided beneath a durable all-weather paint. Alternate materials including stainless steel are available.

# **PME Series Specifications**

	Connection		Dimensions - Inches*					Housing	Rated	Element			Approx.
Model No.	Size	Style	Α	В	D	E	F	Gasket Part No.	CFM @∆ P 2.5 psi	Part No.	No Req'd.	Total filter Area Sq. Ft.	Weight Lbs.
PME 110-012 MT	1 1/4	MPT	6 1/2	5 5/8	8 1/8	3 3/4	5 1/2	40318	30	11235	1	.5	12
PME 120-015 MT	1 1/2	MPT	8 1/2	5 3/4	9 3/8	49/16	6 1/2	40318	50	11236	1	.8	16
PME 130-015 MT	1 1/2	MPT	10 1/8	8 3/4	12 3/8	5 9/16	9 1/2	40318	100	11237	1	1.3	22
PME 140-020 MT	2	MPT	15 1/4	11	15 1/4	8 1/8	12	40319	200	11238	1	2.9	55
PME 140-030 MT	3	MPT	15 1/4	11 1/2	15 3/4	8 1/8	12	40319	200	11238	1	2.9	60
PME 150-030 MT	3	MPT	25 1/4	14	20 5/8	15	17	40320	400	11239	1	5.6	105
PME 150-040 MT	4	MPT	25 1/4	14	20 5/8	15	17	40320	400	11239	1	5.6	110
PME 160-040 MT	4	MPT	25 1/4	14	20 5/8	15	17	40320	575	15501	1	6.6	115
PME 160-060 FL	6	FLG	25 1/4	14 3/8	21	15	17	40320	575	15501	1	6.6	115
PME 170-050 FL	5	FLG	25 1/4	23 5/8	30 1/4	15	23 1/2	40320	750	11240	1	9.9	180
PME 170-060 FL	6	FLG	25 1/4	23 5/8	30 1/4	15	23 1/2	40320	750	11240	1	9.9	190
PME 170-080 FL	8	FLG	25 1/4	23 5/8	30 1/4	16	23 1/2	40320	750	11240	1	9.9	200
PME 180-080 FL	8	FLG	25 1/4	34	40 5/8	16	17	40320	1000	15501	2	13.2	240
PME 190-080 FL	8	FLG	25 1/4	47	53 5/8	16	23 1/2	40320	1500	11240	2	19.7	275

\*All dimensions are approximate.

- Standard filters are supplied with high efficiency fiberglass elements with PVC ends (200° F max.), and a neoprene gasket. Contact your Consler representative for other available materials.
- Models PME 110 thru 160 have a male NPT inlet conn. and female NPT outlet.
- Models PME 160 thru 190 have a flanged inlet conn. and female NPT outlet.
- Models PME 140 thru 190 have two (2) handles for cover removal, and use four (4) sets of hold-down rods and nuts to secure the element and cover.
- Models PME 180 and 190 have two (2) elements stacked in one column.

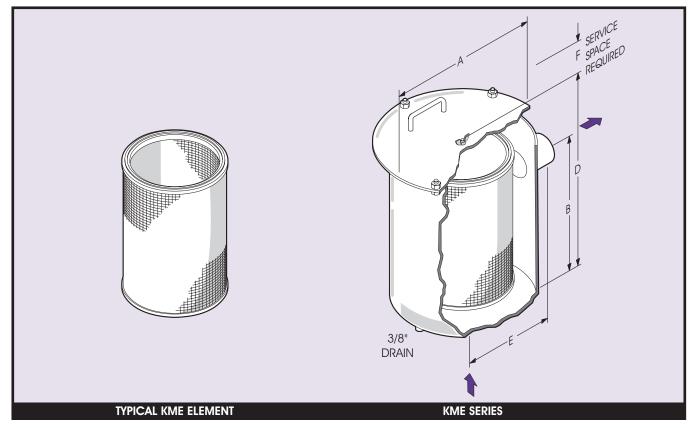


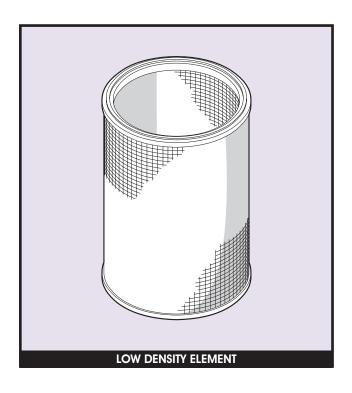
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KME 120-015 MT	1 1/2	MPT	9 5/8	5 3/4	9 3/8	49/16	6 1/2	40347	50	11236	1	.8	16
KME 130-015 MT	1 1/2	MPT	11 5/8	8 3/4	12 3/8	5 9/16	9 1/2	40348	100	11237	1	1.3	22
KME 140-020 MT	2	MPT	16 3/4	11	15 1/4	8 1/8	12	40349	200	11238	1	2.9	55
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#### **Optional Low Density Elements**

These elements are constructed of a lower density coalescing fiberglass material and are recommended for applications where a lower pressure loss is required. They are well suited for the removal of oil and other liquid mist but are less effective than the standard elements for removal of oil smoke. At the rated PME flow, pressure loss with a low density element will be 1 PSI. Elements remove solids and liquids to 4 microns in size at 99% efficiency.

MODEL	<b>ELEMENT</b>	MODEL	<b>ELEMENT</b>
PME 110	13931	PME 150	13935
PME 120	13932	PME 160	17362
PME 130	13933	PME 170	13936
PME 140	1393/		

#### Graver Technologies also makes:

- Air Intake Filters
- Air Intake Filter/Silencers
- Air/Gas Pressure Filters
- Vacuum Filters
- Liquid Filters/Strainers
- Smoke/Oil Mist Eliminators
- Filter Separators
- Special and Custom-Designed Filters and Filter Elements
- Lube Oil Filters and Filter Elements

Graver Technologies has representatives in major cities of the United States, Mexico and Canada. Representatives are also located in many other countries around the world.

Consler brand filters are manufactured in Honeoye Falls, NY. For more details about Consler brand filters contact your representative or Graver Technologies. Graver has a policy of continued product improvement and reserves the right to change specifications without notice.

Visit our web site at www.gravertech.com.



