# **Mist Eliminators**

## **PME Series**

The auditors choice to reduce energy costs and remove oil and water aerosols from compressed air systems.

- · Protect products and processes from contamination
- Increase the life of pneumatic equipment
- · Help eliminate paint appearance and adhesion problems
- · Keep pneumatic instruments operating

#### Low operating costs

- Low pressure drop: 0.5 to 1 psi (0.04 to 0.07 kgf/cm²)
  - Typical coalescing filters operate at 3 to 6 psi (0.21 to 0.42 kgf/cm²) requiring the air compressor to operate at higher operating pressures, increasing power requirements by 2.5% or more
- Long element life: 8 to 15 years
  With a large in-depth bed, element life is much longer than conventional oil removal filters
- · Virtually maintenance free

#### Extra protection

- Captures and retains large slugs of oil and water, should drain trap fail
- Protects downstream equipment from contamination should oil separator on rotary screw compressor fail

#### **Standard Features**

- 5 year equipment warranty
- 5 year element life guarantee
- · Differential pressure gauge mounted and piped
- Heavy duty ASME stamped pressure vessel
- · Long life mist eliminator element
- · Floor stand
- · Dedicated vent port for demand type drains





#### **Superior Installation Flexibility**

- Twelve (12) inlet positions to better adapt to your piping arrangement
- Inlet piping clears vessel diameter to prevent element removal complications
- · Flanged inlet connection ensures easy access to element
- Dedicated vent connection port for clean, easy demand drain trap installations

#### Removes submicronic particles for ultra clean air

- 100% of particles 3 microns and larger
- 99.98% of particles 0.1 micron and larger
- 0.5 ppm w/w maximum liquid content after filtration
- · 1000 ppm maximum inlet liquid loading

#### **Optional Features**

- Automatic condensate drains:
  - No-Loss drains (NLD-24-T Shown)
  - Timer drains
- · Differential pressure gauge with reed switch



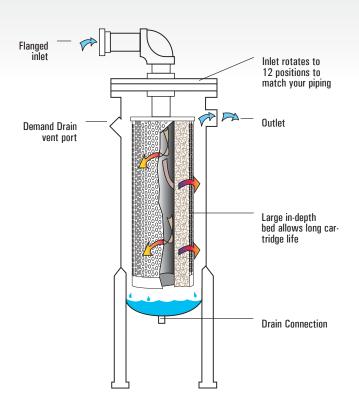
## PME Series - Functions, Features, and Specifications

## Advanced filter bed technology

Compressed air enters the rotatable flanged inlet assembly engineered for easy element access. Designed for optimum velocity, the air is directed through a loosely packed bed of highly engineered, water resistant glass fibers. Water droplets, oil aerosols and solid particles entrained in the air stream are captured by the fibers through the mechanics of direct interception, inertial impaction, and diffusion that result from the forces of Brownian motion. The captured liquids and aerosols move along the fibers and coalesce into larger droplets. Gravity draws the coalesced liguids to the bottom of the filter element where they drop into a quiet zone in the bottom of the vessel for removal.

## **Superior Drainage**

Condensate drainage can be accomplished automatically by installing an optional drain valve. Timer operated drains or energy efficient demand style drain valves (optional) can be adapted to the drain connection. Demand style drain valves benefit from the demand drain vent connection port (see illustration) engineered into these vessels. This exclusive feature equalizes drain-to-vent pressures and simplifies vent piping installations. Equalized pressure ensures consistent drainage and prevents "air-lock" induced drain valve failures common in other designs.



## **Engineering Data**

	Flow @ 100 psig (7 kgf/cm²)		Replacement Cartridge	Dimensions							
Model				Height		Width		Connections <sup>1</sup>		Weight	
	scfm	m³/h		in.	(mm)	in.	(mm)	Inlet	Outlet	lbs	(kg)
PME-125-PDI	125	212	4001416	40	(1016)	17	(431)	2" FLG	2" NPT	194	(88)
PME-250-PDI	250	425	4001417	40	(1016)	17	(431)	2" FLG	2" NPT	200	(91)
PME-500-PDI	500	850	4001418	52	(1320)	18	(457)	21/2" FLG	21/2" NPT	231	(105)
PME-1100-PDI	1,100	1,869	4001419	77	(1955)	26	(660)	4" FLG	4" FLG	368	(167)
PME-1500-PDI	1,500	2,549	4001421	85	(2159)	27	(686)	4" FLG	4" FLG	410	(186)
PME-2100-PDI	2,100	3,568	4001422	94	(2388)	33	(838)	4" FLG	4" FLG	735	(333)
PME-2400-PDI	2,400	4,078	4001423	94	(2388)	33	(838)	4" FLG	4" FLG	751	(341)
PME-3000-PDI	3,000	5,097	4001424	94	(2388)	33	(838)	4" FLG	4" FLG	767	(348)

Maximum working pressure: 150 psig (10.5 kgf/cm²), Maximum operating temperature: 150°F (66°C)

## Sizing

Min. Inlet Pressure - psig	20	30	40	60	80	100	120	150
(kgf/cm²)	(1.4)	(2.1)	(2.8)	(4.2)	(5.6)	(7.0)	(8.4)	(10.5)
Multiplier	0.30	0.39	0.48	0.65	0.82	1.00	1.17	1.43

Maximum air flow at 100 psig (7 kgf/cm²) is indicated in the Specifications table. To determine maximum air flow at pressures other than 100 psig (7 kgf/cm²) multiply flow @ 100 psig (7 kgf/cm²) by multiplier from the sizing table that corresponds to the minimum operating pressure at the inlet of the filter.



Improvements and research are continuous at SPX Pneumatic Products. Specifications may change without notice.

Rulletin PIS-PMF-NA-1

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<sup>1</sup> Consult factory for BSP or DN flanges