

# Fiberbed Mist Eliminators



## Pneumatech Pride

Pneumatech's PMR Mist Eliminators combine superior performance in particle elimination with an unmatched service life. Typically used as the pre-filter to a dryer, mist eliminators capture lubricant and condensed moisture carryover, even in the event of a catastrophic compressor separator collapse. Pneumatech PMR Series also has the lowest operating costs of any available technology.

*With only 1/10th the pressure drop of a regular coalescing filter and an expected service life 20-30 times longer than conventional filters, or competitive mist eliminators, the PMR Series is the ONLY choice for efficient removal of mist sized particles.*

## PMR-85 to PMR-17500

Pneumatech's PMR Mist Eliminators do not rely on differential pressure as the mechanism of particle removal. Instead they take advantage of the properties of gas diffusion in order to trap the contaminants between layers of homogeneous fibers. Using these principles PMR guarantees 100% removal of all aerosol-mist sized particles and above for up to 10 years!

*10 Year Warranty\**



Features	
Vessel Design – optimally sized vessel needed to capture condensate effectively with filter located below outlet to protect from any carryover and large clearance for proper bed velocity.	Fiber Bed – homogeneous-sized fibers, hand packed to a specific density
Rating – PMR mist eliminator is rated for use in a wet air stream, so will withstand liquid slugging and catastrophic failure of a compressor separator element.	Removes 100% of all aerosol mist particles 1 micron & larger & Removes 99.5% of all aerosol sub-micron mist particles.
The best protection available from air/oil separator collapse or condensate trap failure.	No need to replace elements within 10 years - LOW MAINTENANCE!
Low operating and energy cost, with payback often within one year.	Low pressure differential over element life, equals a lifetime of energy savings.
Extends the life of desiccant dryer bed, if installed upstream, thereby reducing maintenance cost.	Consistent and reliable performance.

\* Under normal use; warranty covers elements only.



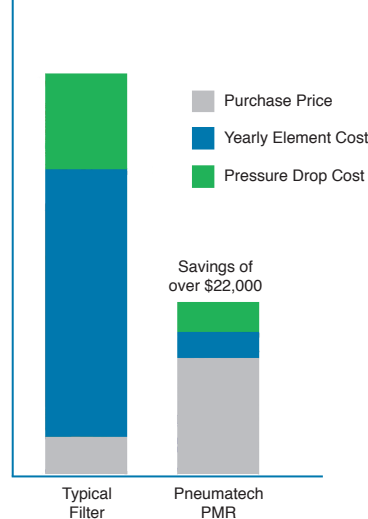
# Technical data

Model Number	Inlet Flow Upstream*	Inlet Flow Downstream*	Inlet/Outlet Conn. Size [FLG]	Height (in)	Vessel Diameter	Approx. Ship Weight (lb)
PMR-85	85	140	2.00"	41	14.00"	385
PMR-180	180	252	2.00"	45	14.00"	390
PMR-435	435	587	2.50"	58	14.00"	440
PMR-785	785	1,004	4.00"	77	16.00"	580
PMR-1015	1,015	1,333	4.00"	77	16.00"	600
PMR-1300	1,300	1,651	4.00"	77	18.00"	845
PMR-1450	1,450	1,928	4.00"	71	24.00"	1235
PMR-2175	2,175	2,790	4.00"	84	24.00"	1280
PMR-2900	2,900	3,853	4.00"	97	24.00"	1360
PMR-4350	4,350	5,527	6.00"	159	24.00"	1840
PMR-6150	6,150	7,752	8.00"	160	30.00"	3055
PMR-7250	7,250	9,752	8.00"	181	30.00"	C/F
PMR-8700	8,700	11,717	10.00"	208	30.00"	C/F
PMR-15000	15,000	16,242	10.00"	208	36.00"	C/F
PMR-17500	17,500	18,267	12.00"	232	36.00"	C/F

\* Capacity is in scfm at 100 psig and 70 °F ambient temperature.  
Upstream and Downstream refers to a refrigerated dryer.  
C/F - Consult Factory at 800-336-2285.

Inlet Pressure (psig)	Filter Inlet Capacity Correction Factor
70	0.74
80	0.83
90	0.91
100	1.0
110	1.09
120	1.17
130	1.26
140	1.35
150	1.44

### 10 Year Life Cycle Cost Comparison - 1000 scfm



	Regular Filter	Mist Eliminator
<b>Initial Cost</b>	\$1,200	\$6,000
<b>Average Pressure Drop</b>	4 PSI	0.5 PSI
<b>Average Cost of Pressure Drop</b>	\$2,432	\$304
<b>Yearly Element Replacement Cost</b>	\$900	\$160
<b>Total Cost Over 10 Years</b>	\$34,520	\$10,640
<b>PMR Investment Payback</b>	-	20 Months

Note: These figures are for guidance only and do not constitute a quote.

Over a 10-year period, this 1000 cfm system with a standard filter will cost the operator approximately \$21,280 more in energy and \$7,400 more in element replacements. This means that the extra investment for the Mist Eliminator will be returned in about 20 months. Larger systems will save significantly more energy and as a result will have an even faster payback. This example was used because 1000 cfm is a very popular system size.

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