FBDSZMCOALESENa

ZM Coalescer

For High Efficiency Aerosol from Your Process Gaseous Streams

Why Use Pall ZM Coalescers:

- To remove aerosols such as hydrocarbon liquids and water which would harm the desired process gas.
- To prevent violation of strict air pollution regulations during venting.
- To prevent damage to equipment such as gas flow meters and compressors.
- To prevent fouling of catalysts.

ZM "Zero Mist" For Critical Applications

ZM coalescing filters are specifically designed for critical applications where high efficiency of aerosol removal is required. Typical applications are: compressed gas systems such as carbon dioxide, compressed air, and used upstream of gas turbines and sterile membrane filters. It effectively remove aerosols, preventing blind spots on final filters and avoiding the wetting out of final filters which can lead to liquid passing downstream.

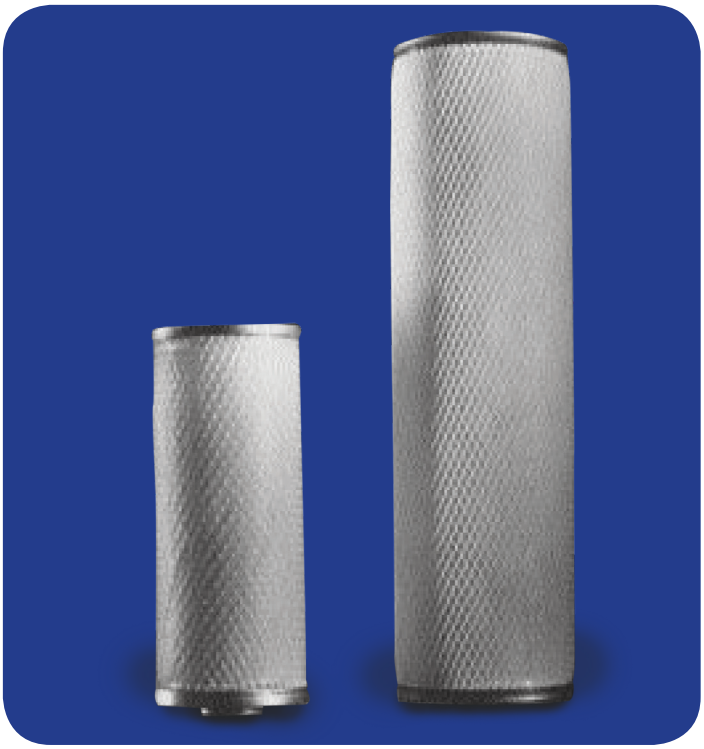
ZM coalescers collect liquid aerosols and coalesce them in to larger droplets which drain by gravity into the sump of the filter housing.

ZM Performance

Coalescer performance must be measured in terms of effluent concentration and saturated pressure drop. Pall has designed the ZM Coalescer with optimized pore size and medium thickness to ensure minimum liquid penetration and high energy efficiency (low saturated pressure drop). Typical downstream aerosol concentrations, less than 0.003 ppmw, are achieved with the Pall ZM coalescer at a saturated pressure drop less than 1.6 psid per cartridge. The ZM Coalescer also has an absolute particle removal rating of 0.3 microns.

Economy of Use

The superior removal efficiencies of the ZM Coalescer extend the useful life of downstream equipment, thereby reducing operating downtime and labor costs. The high area, pleated design provides single stage coalescing without the need for a separate prefiltration stage to prolong coalescer life. Finally, lower saturated pressure drop combined with single stage coalescence provides lower annual operating costs.



ZM Series Coalescers

Features Of The Pall High Efficiency ZM Coalescing Filter

Pall coalescing filter cartridges operate economically with high separation efficiency and long life.

Positive Seal: Standard seal material is Buna-N. Viton (H) and Ethylene Propylene (J) are also available for optimum fluid compatibility.

Outer Drainage Layer: Drainage of coalesced liquid and protection from re-entrainment is provided by a polymeric outer drainage layer. This guarantees consistent, high-efficiency performance.

Metal Support Core: Axial strength and protection against liquid slugs are provided by a perforated inner support core constructed of 304 stainless steel.

Outer Cage: Media support during operation is provided by a 304 stainless steel outer support cage.

Primary Coalescer (pleated filter): The primary coalescer is a high area, pleated, epoxy coated fiberglass medium which is specially treated. It is surrounded by non-woven polymeric support and drainage layers. This provides unsurpassed separation efficiency over a wide range of flow conditions with minimum pressure drop.

304 Stainless Steel End Caps: Cartridge strength and prevention of contaminant bypass is provided by the 304 stainless steel end caps.

ZM Filter Specifications

Model Number:	PFS1201ZM	PFS1001ZM	PFS4463ZM
Coalescing Efficiency @ .3µm	99.99%	99.99%	99.99%
Rated Flow (air @ 100psig and 100 ˚ F)	680 Nm^3/h (400 SCFM)	340 Nm^3/h (200 SCFM)	102 Nm^3/h (60 SCFM)
Effective Filter Area	0.39 m^2 (4.2 sq. ft)	0.2 m^2 (2.2 sq. ft.)	0.08 m^2 (0.84 sq. ft)
Clean Pressure Drop (saturated)	110 mbar (1.6 psi)	103 mbar (1.5 psi)	37 mbar (0.53 psi)
Temperature (max.)	60˚C (140 ˚ F)	60˚C (140 ˚F)	60˚C (140 ˚F)
Pressure Differential (max.)[1]	3.4 bar (50 psi)	3.4 bar (50 psi)	3.4 bar (50 psi)
Dimensions	3 3/4" O.D. X 13 1/8	2 3/4" O.D. X 9 13/16"	2 1/4" O.D. X 5 1/4"
Sealing Mechanism	Double open-ended with gasket seals	Double open-ended with gasket seals	Single open-ended with internal o-ring seal
Housing Data Sheet Reference	N/A	H1-H10	N/A

[1] To maintain reasonable oil removal efficiencies, cartridge changeout is recommended at 8-12 psid.

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