

# **PMM® Filter Elements**

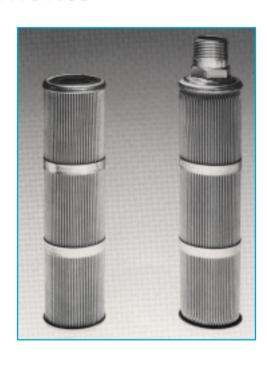
## Description

PMM® medium is a thin, sintered matrix of 316L stainless steel powder within the pore structure of stainless steel wire mesh. It combines the best qualities of Pall PSS® sintered powder medium and Pall Rigimesh® sintered woven wire mesh medium. The **PMM** filter is designed so that the sintered bonds are at the points of contact, producing an extremely strong porous material whose wires do not shift and whose pore size integrity is continuously maintained. Designs are available suitable for temperatures up to 1250°F (677°C).

# **Operating Characteristics**

Standard cartridges are capable of withstanding a minimum collapse differential pressure of 125 psid (8.6 bard) in the forward flow (outside-in) direction at up to 600°F† (315°C) and 10 psid (.7 bard) in the reverse flow direction. Optional design available for 50 psid (3.4 bard) reverse flow.

† Threaded connector series only. Due to seal limitations, 1000 Series suitable for applications up to 450°F (232°C).



# Sizes

The standard **PMM** filters are cylindrical forms,  $2-\frac{1}{2}$ " in diameter in 10" multiple lengths, up to 40". For AB style **PMM** filters consult the factory.

#### **Technical Information**

Table 1. PMM elements and their characteristics

Filter Grade	Remov	Removal Ratings						Clean Pressure Drop			Recommended Flow	
	Liquid Service <sup>(1)</sup>				Gaseous Service(2)		Liquid Service		Gaseous Service		Density	
	Rating 90%	at % Eff 99%	iciency (µr 99.9%	n) 100%	Weight % Removal	100% Removal (µm)	Aqueou psi/gpn mbar/lp	n/ft²	Air <sup>(4)</sup> psi/acfm/ mbar/m <sup>3</sup> /l		Aqueous gpm/ft <sup>2</sup>	Air acfm/ft²
M020	0.1	0.5	1	2	>99.99	0.4	0.87	1.47	0.093	.350	0.1-75	3-10
M050	0.6	2	4	5	99.99	0.6	0.49	.83	0.051	.192	0.1-75	3-10
M100	2	5	8	10	99.97	1.3	0.28	.47	0.030	.113	0.2-1	5-20
M150	5	9	12	15	99.96	2.5	0.17	.29	0.017	.064	0.5-3	7-25
M200	8	13	16	20	99.93	4.0	0.07	.12	0.007	.026	0.7-4	10-30
M250	10	16	21	25	99.90	9.0	0.02	.03	0.002	.008	1-5	15-40

<sup>(1)</sup> Liquid removal efficiency ratings are based on a modified F2 test method and actual particle count data

- (3) Pressure drop obtained by multiplying value shown by actual flow desired, viscosity of liquid in centipoise (if other than 1 cp), all divided by total filtration area selected. See Table II for areas
- Pressure drop in obtained by multiplying value shown by actual gaseous flow rate desired, ratio of viscosities, all divided by total filtration area selected. See Table II for areas

# Part Numbers/Ordering Information

Table II. Standard Configurations of PMM Elements

100% Removal	PMM Series Element Part Numbers				
Rating (µm)	1000 Series	Threaded Element 1000 Series			
2	MBS 100 ■ M020 ▲	P24 ◆ ● M020 ▼			
5	MBS 100 ■ M050 ▲	P24 ◆ ● M050 ▼			
10	MBS 100 ■ M100 ▲	P24 ◆ ● M100 ▼			
15	MBS 100 ■ M150 ▲	P24 ◆ ● M150 ▼			
20	MBS 100 ■ M200 ▲	P24 ◆ ● M200 ▼			
25	MBS 100 ■ M250 ▲	P24 ◆ ● M250 ▼			

Code	Code	Nominal Length (in )	Aroa ft²m²	Code	Gas
	•			<b>A</b>	
25		MBS 100 ■ M250	▲ P24 ◆ ●	M250 ▼	
0.5		NADC 100 - 14050	<u> </u>	140F0 <del>-</del>	
20		MBS 100 ■ M200	▲ P24 ◆ ●	M200 ▼	
15		MBS 100 ■ M150	▲ P24 ◆ ●	M150 ▼	
10		MBS 100 ■ M100	<u>A</u> P24 ◆ ●	M100 ▼	
		100 TOO 1000	<u> </u>	111000 1	

Code	Gasket Option
H13 (Std.)	Buna N (Nitrile)
Н	Viton*
J	Ethylene Propylene
J7	Ethylene Propylene for
	Steam Service
RE	Reinforced for 50 psid
	(3.4 bard) reverse flow

Code Connection 1" NPT 11/2 " NPT

Other Options
Reinforced for 50 psid (3.4 bard) reverse flow
Cleaned for oxygen service

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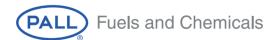
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A full selection of standard Pall industrial housings are available for PMM elements. Threaded connector elements are designed to fit a special line of housings capable of a broader range of temperature (cryogenic to 800°F) (426°C) and chemical service. Custom designed housings for specific applications are also available.

\*Trademark of F.I. du Pont de Nemours & Co.



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Weight percent removal data is based on AC Fine Test Dust in air. Absolute retention ratings based on actual particle count.

Housing Information

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