

MARKSMAN POLY-FINE™ II Series Filter Elements



Description

High Capacity Pleated Polypropylene Filter Elements

- New, Larger Cartridge Geometry
- High Flow Capacity
- Proprietary Media For Highly Consistent Filtration
- Inside-Out Flow Traps Contaminant Inside The Element
- Sizes Available To Fit Bag Housings With No Hardware Changes
- Unique Sealing Device Adjusts To Fit In Most Bag Filter Housings
- High Surface Area For Long Service Life
- All Polypropylene Construction
- Wide Chemical Compatibility
- Short Length Option To Accommodate Shorter Baskets

Specifications

Performance Specifications

Filter Grades (>99.9% Retention Rating by ASTM F-795 Test):

1, 3, 5, 10, 20, 40, 70, 90, 150 µm

Maximum Forward Differential Pressure:

to 75 psid (5.1 bard) @ 68°F (20°C)
to 35 psid (2.4 bard) @ 130°F (54°C)

NOTE: Stainless steel flange required for temperatures in excess of 110°F (43°C)

Recommended Changeout Differential Pressure¹:

35 psid (2.4 bard)

FDA Listed Materials:

All materials are FDA listed for food contact applications² in Title 21 of the U.S. Code of Federal Regulations (Viton² A gaskets excluded).

Toxicity:

All components meet the specifications for biological safety as per the USP for Class VI-121°C plastics (gaskets excluded).

Purity:

Cartridges are free of surfactants, resins, binders, and adhesives.

Rinse-Up:

Rinse-up to 18 Megohm-cm with a minimum of throughput.

Sanitization:

Cartridges may be sanitized in hot water (170–180°F/77–82°C) for 20 minutes minimum.

Product Specifications**Materials of Construction:**

Filter Media:	Polypropylene
Hardware:	Polypropylene
Support Material:	Polypropylene
Gaskets:	EPDM, Viton A, Buna N
Sealing:	Thermal Bond

Dimensions (nominal):

Outside Flange Diameter:	7 1/4" (18.4 cm) (equal to Size 1/Size 2 Bags)
Outside Filter Diameter:	6" (15.2 cm)
Lengths:	Size 1 Bag, Size 2 Bag
Surface Area:	Up to 25 ft ² (2.32 m ²)– Size 1 Up to 60 ft ² (5.57 m ²)– Size 2

Flow Capacity (GPM)

Size	Max.	Recommended ³
1	60 (227 lpm)	50 (189 lpm)
2	120 (454 lpm)	100 (379 lpm)

¹ Provided that the maximum differential pressure is not exceeded based on temperature limits defined above.

² Registered trademark of DuPont Dow (non FDA material).

³ For maximum filter life.

Performance**Liquid Retention Ratings (µm) (by ASTM F-795 Test)**

Cartridge Designation	90% Efficiency	>99.9 % Efficiency
PFTM 1	0.5	1.2

PFTM 3	1.0	2.5
PFTM 5	2.0	5.0
PFTM 10	5.0	10.0
PFTM 20	10.0	20.0
PFTM 40	20.0	40.0
PFTM 70	30.0	70.0
PFTM 90	60.0	90.0
PFTM 150	102.0	150.0

Liquid Flow Specifications


Filter Grade	PSID per 1 GPM (3.8 lpm) – Water @ 68°F (20°C)		PSID per 1 GPM (3.8 lpm) – Fluid with 40 cps viscosity	
	Size 1	Size 2	Size 1	Size 2
1	.0470 (0.86)	.0240 (0.44)	.790 (14.40)	.400 (7.29)
3	.0130 (0.24)	.0070 (0.13)	.660 (12.03)	.330 (6.01)
5	.0070 (0.13)	.0040 (0.07)	.430 (7.84)	.220 (4.01)
10	.0040 (0.07)	.0020 (0.04)	.260 (4.74)	.130 (2.37)
20	.0020 (0.04)	.0010 (0.02)	.230 (4.19)	.120 (2.19)
40	.0010 (0.02)	.0005 (0.009)	.070 (1.28)	.035 (0.64)


70	.0008 (0.015)	.0004 (0.007)	.030 (0.55)	.015 (0.27)
90	.0008 (0.015)	.0004 (0.007)	.015 (0.27)	.008 (0.15)
150	.0006 (0.011)	.0003 (0.006)	.010 (0.18)	.005 (0.09)

NOTES:
 - For BAR, divide PSID by 14.5.
 - For kPa, multiply BAR by 100.

Ordering Information

PFTM  -  U  -   (eg., PFTMS 1-2UN-PFC)

Code	Short Length Option
	Blank
	Standard Length
S	Short Length

Code	Filter Grades
	
1	1 µm
3	3 µm
5	5 µm
10	10 µm
20	20 µm
40	40 µm
70	70 µm

90	90 µm
150	150 µm

Code	Cartridge Lengths (nominal)
1	Size 1 Bag
2	Size 2 Bag

Code	End Configurations
PF	Plastic Self-Adjusting Flange
SF	Stainless Steel Self-Adjusting Flange (required for temperatures > 110°F/43°C)
NF	No Flange (for use with reusable SS Flange)

Code	Flange/Gasket Styles ⁴
A	Rosedale, Strainrite, Krystal, Pall
B	GAF, FSI side entry
C	FSI over the top, Hayward over the top

⁴ Based on typical application usage.