

# Marksman™ PFT Series Filter Elements

## High Capacity Pleated Polypropylene Filter Elements

- New, larger cartridge geometry
- · High flow capacity
- Poly-Fine® II proprietary media for highly consistent filtration
- Inside-out flow traps contaminant inside the element
- Available to fit most Size 1 and Size 2 bag housings with no hardware changes
- Available in 101.6 cm (40 in) for use in unique 101.6 cm (40 in) Marksman housings
- 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



## **Performance Specifications**

## Filter grades

1, 3, 5, 10, 20, 40, 70, 90, 150 micron (µm)

## Maximum operating differential pressure

to 5.2 bard @ 20°C (75 psid @ 68°F) to 2.4 bard @ 74°C (35 psid @ 165°F)

NOTE: Stainless steel flange recommended for temperatures in excess of  $43^{\circ}\text{C}$  ( $110^{\circ}\text{F}$ ).

## Recommended change-out differential pressure<sup>1</sup>

2.4 bard @ up to 54°C (35 psid @ up to 130°F)

#### Food and water contact use

Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

### Purity

Cartridges do not use surfactants, binders, and adhesives.

### Sanitization

Contact Pall Corporation for assistance.

# **Product Specifications**

### Materials of construction

Filter media: Polypropylene Hardware: Polypropylene Support material: Polypropylene

Gaskets: EPDM, fluorocarbon elastomer,

nitrile

Sealing: Thermal bond

## **Dimensions** (nominal)

Outside flange

diameter: Three diameters are available.

Contact Pall for information on sizes.

Outside filter

diameter: 15.2 cm (6 in)

Lengths: Size 1 - Standard, Short

Size 2 - Standard, Short, Extra Short

Size 4 - 101.6 cm (40 in)

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

# Particle Removal Ratings<sup>2</sup> (µm)

Cartridge Designation	90% Efficiency	≥99.9% Efficiency
PFTM 1	1	_
PFTM 3	2	_
PFTM 5	_	5
PFTM 10	_	9
PFTM 20	_	15
PFTM 40	20	_
PFTM 70	_	70
PFTM 90	57	_
PFTM 150	_	145

# **Typical Flow**

Filter Grade	mbard/lpm (psid/gpm) Water @ 20°C (68°F)				
riiter Grade	Size 1	Size 2	40 in	Size 1 (short)	Size 2 (short)
1	0.838	0.364	0.273	0.765	0.328
	(0.046)	(0.020)	(0.015)	(0.042)	(0.018)
3	0.346	0.164	0.109	0.310	0.128
	(0.019)	(0.008)	(0.006)	(0.017)	(0.007)
5	0.109	0.054	0.018	0.109	0.054
	(0.006)	(0.003)	(0.001)	(0.006)	(0.003)
10	0.054 (0.003)	0.018 (0.001)	0.018 (0.001)	0.054 (0.003)	0.018 (0.001)
20	0.036 (0.002)	0.018 (0.001)	0.018 (0.001)	0.036 (0.002)	0.018 (0.001)
40	0.018	0.018	0.018	0.036	0.018
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
70	0.018	0.018	0.018	0.018	0.018
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
90	0.018	0.018	0.018	0.018	0.018
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
150	0.018	0.018	0.018	0.018	0.018
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

NOTE: For kPa, multiply mbard/lpm by 0.1.

Marksman PFT series filter cartridge retention ratings are based on Pall's Dynamic Efficiency test protocol. This single pass, destructive challenge test is based on ASTM F-795 test procedures for determining the performance of a filter medium. Fine test dust is used as the test contaminant for filters in the 1 to 20 micron range. Coarse test dust is used for micron ratings above 20 micron. Additional information can be obtained by contacting Pall Corporation. NOTE: PFTM grade designations for 1, 3, 40, and 90 based on Beta 10 values, and all other grade designations are based on Beta 1000 values.



25 Harbor Park Drive
Port Washington, NY 11050
+1 516 484 3600 telephone
+1 800 289 7255 toll free US

Portsmouth - UK +44 (0)23 9230 3303 telephone +44 (0)23 9230 2507 fax processuk@pall.com

## **Ordering Information**

Pall Part Number = PFTM 1 2 - 3 U 4 - 5 6

#### Table 1

Code	Short length option
Blank	Standard
S	Short
XS	Extra short 3, 4

# Table 2

Code	(µm)
1	1
3	3
5	5
10	10
20	20
40	40
70	70
90	90
150	150

#### Table 3

Code	Cartridge lengths nominal
1	Size 1 bag
2	Size 2 bag
4	101.6 cm (40 in)

#### Table 4

Code	Gasket materials
Blank	For NF version
N	Nitrile
E	EPDM (peroxide cured)
V	Fluorocarbon elastomer
0.01.01	

<sup>3</sup> Size 2 (only).

## Table 5

Code	End configurations
PF	Plastic self-adjusting flange
SF	Stainless steel self-adjusting flange (required for temperatures >43°C/110°F)
NF	No flange (for use with reusable SS flange)

#### Table 6

Code	Flange/gasket styles <sup>5</sup>
A <sup>6</sup>	Rosedale <sup>7</sup> , Strainrite, Krystil Klear <sup>8</sup> , Pall
В	GAF <sup>9</sup> , FSI <sup>10</sup> side entry
С	FSI over the top, Hayward <sup>11</sup> over the top

- For housings not listed or other than original equipment baskets, consult your Pall sales representative for proper flange/gasket style.
- <sup>6</sup> Requires "A" flange if using any of the Marksman 101.6 cm (40 in) products in the 101.6 cm (40 in) Pall Marksman housing.
- <sup>7</sup> Rosedale is a registered trademark of Rosedale Products, Inc.
- <sup>8</sup> Krystil Klear is a registered trademark of Pentair Water Filtration.
- <sup>9</sup> GAF is a registered trademark of GAF Corporation.
- <sup>10</sup> FSI is a registered trademark of Filter Specialists, Inc.
- <sup>11</sup> Hayward is a registered trademark of Hayward Industrial Products, Inc.

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Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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<sup>&</sup>lt;sup>4</sup> Select "XS" for Extra Short, "2" for Size 2 bag, and add "68" to the end of the part number (e.g., PFTMXS1-2UN-PFC 68).