

## 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°C (110°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<br>Size 2 - Standard, Short, Extra Short<br>Size 4 - 101.6 cm (40 in) |

<sup>1</sup> 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)<br>Water @ 20°C (68°F) |                  |                  |                  |                  |
|--------------|---|------------------|------------------|------------------|------------------|
|              | Size 1                                      | Size 2           | 40 in            | Size 1 (short)   | Size 2 (short)   |
| 1            | 0.838<br>(0.046)                            | 0.364<br>(0.020) | 0.273<br>(0.015) | 0.765<br>(0.042) | 0.328<br>(0.018) |
| 3            | 0.346<br>(0.019)                            | 0.164<br>(0.008) | 0.109<br>(0.006) | 0.310<br>(0.017) | 0.128<br>(0.007) |
| 5            | 0.109<br>(0.006)                            | 0.054<br>(0.003) | 0.018<br>(0.001) | 0.109<br>(0.006) | 0.054<br>(0.003) |
| 10           | 0.054<br>(0.003)                            | 0.018<br>(0.001) | 0.018<br>(0.001) | 0.054<br>(0.003) | 0.018<br>(0.001) |
| 20           | 0.036<br>(0.002)                            | 0.018<br>(0.001) | 0.018<br>(0.001) | 0.036<br>(0.002) | 0.018<br>(0.001) |
| 40           | 0.018<br>(0.001)                            | 0.018<br>(0.001) | 0.018<br>(0.001) | 0.036<br>(0.002) | 0.018<br>(0.001) |
| 70           | 0.018<br>(0.001)                            | 0.018<br>(0.001) | 0.018<br>(0.001) | 0.018<br>(0.001) | 0.018<br>(0.001) |
| 90           | 0.018<br>(0.001)                            | 0.018<br>(0.001) | 0.018<br>(0.001) | 0.018<br>(0.001) | 0.018<br>(0.001) |
| 150          | 0.018<br>(0.001)                            | 0.018<br>(0.001) | 0.018<br>(0.001) | 0.018<br>(0.001) | 0.018<br>(0.001) |

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

<sup>2</sup> 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.



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## 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 <sup>3, 4</sup> |

Table 2

| Code | Filter grades (µm) |
|------|--------------------|
| 1    | 1                  |
| 3    | 3                  |
| 5    | 5                  |
| 10   | 10                 |
| 20   | 20                 |
| 40   | 40                 |
| 70   | 70                 |
| 90   | 90                 |
| 150  | 150                |

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 |
| B              | GAF <sup>9</sup> , FSI <sup>10</sup> side entry                       |
| C              | FSI over the top, Hayward <sup>11</sup> over the top                  |

- <sup>5</sup> 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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