

# Marksman<sup>™</sup> NXA Series **Filter Elements**

## High Capacity Melt Blown Depth Filter **Elements**

- New, larger cartridge geometry
- Same proprietary CoLD Melt<sup>™</sup> fiber technology used in Pall's Nexis® series filters
- Gradient pore structure
- Absolute rated at 99.9% efficiency with retention ratings from 4.3 to 72 micron (µm)
- Available to fit most Size 1 and Size 2 bag vessels with no hardware changes
- Available in 101.6 cm (40 in) for use in unique 101.6 cm (40 in) Pall vessels
- Inside-out flow traps contaminant inside the element
- Unique sealing device adjusts to fit in most conventional bag filter vessels
- · Quick, easy change-outs

## **Performance Specifications**

#### Filter grades

5, 10, 20, 40, 70 micron (µm)

## Maximum operating differential pressure

to 2.9 bard @ 20°C (42 psid @ 68°F) to 1.0 bard @ 79°C (15 psid @ 175°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 adhesives and silicones<sup>2</sup> (fluorocarbon elastomer and nitrile gaskets excluded).

## Sanitization

Contact Pall Corporation for assistance.

- <sup>1</sup> Provided that the maximum differential pressure is not exceeded based on temperature limits defined above.
- <sup>2</sup> Elements do not come into contact with silicone, silicone containing items, or adhesives during manufacturing.



## **Product Specifications**

#### Materials

| Filter media: | Polypropylene/polyethylene    |
|---------------|-------------------------------|
| Hardware:     | 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                          |
|                | Size 2                          |
|                | Size 4 - 101.6 cm (40 in)       |

## Particle Removal Ratings<sup>3</sup> (µm)

| Cartridge<br>Designation | 90%<br>Efficiency | ≥99.9%<br>Efficiency |
|--------------------------|-------------------|----------------------|
| NXAM 5                   | 2.5               | 4.3                  |
| NXAM 10                  | 5.5               | 9.2                  |
| NXAM 20                  | 13                | 17                   |
| NXAM 40                  | 20                | 35                   |
| NXAM 70                  | 51                | 72                   |

## **Typical Flow**

| Filter | mbard/lpm (psid/gpm)<br>Water @ 20°C (68°F) |                  |                  | mbard/lpm (psid/gpm)<br>Fluid with 40 cps viscosity |                   |                   |
|--------|---|------------------|------------------|---|-------------------|-------------------|
| Grade  | Size 1                                      | Size 2           | 40 in            | Size 1  | Size 2            | 40 in             |
| 5      | 2.058<br>(0.113)                            | 0.892<br>(0.049) | 0.565<br>(0.031) | 34.242<br>(1.880)                                   | 16.593<br>(0.911) | 10.655<br>(0.585) |
| 10     | 0.856<br>(0.047)                            | 0.382 (0.021)    | 0.237 (0.013)    | 21.310<br>(1.170)                                   | 6.375<br>(0.350)  | 4.098<br>(0.225)  |
| 20     | 0.291<br>(0.016)                            | 0.127<br>(0.007) | 0.073<br>(0.004) | 8.925<br>(0.490)                                    | 3.096<br>(0.170)  | 1.985<br>(0.109)  |
| 40     | 0.127<br>(0.007)                            | 0.055 (0.003)    | 0.036 (0.002)    | 3.279<br>(0.180)                                    | 1.038<br>(0.057)  | 0.674 (0.037)     |
| 70     | 0.073<br>(0.004)                            | 0.018<br>(0.001) | 0.018<br>(0.001) | 1.821<br>(0.100)                                    | 0.729<br>(0.040)  | 0.474<br>(0.026)  |

NOTE: For kPa, multiply mbard/lpm by 0.1000.

- <sup>3</sup> Marksman NXA 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.
- <sup>4</sup> Pall Marksman "Fit-up" kits are available to help select the best sealing flange/gasket style. Contact your Pall representative for more information.
- <sup>5</sup> Rosedale is a registered trademark of Rosedale Products, Inc.
- <sup>6</sup> Krystil Klear is a registered trademark of Pentair Water Filtration.
- <sup>7</sup> GAF is a registered trademark of GAF Corporation.
- <sup>8</sup> Hayward is a registered trademark of Hayward Industrial Products, Inc.
- <sup>9</sup> Installation of Marksman cartridge with CB flange requires an additional housing hold down plate as follows: Description Part Number

| Fait Number | Description   |
|-------------|---|
| ERA286666C  | CBFP 11/12 Hold-Down Plate, Stainless Steel, 2" Inlet |
| ERA286667C  | CBFP 11/12 Hold-Down Plate, Stainless Steel, 3" Inlet |

## **Ordering Information**

## Pall Part Number = NXAM

Table 1

Code

| Code    | Length option |
|---------|---------------|
| Blank   | Standard      |
|         |               |
| Table 2 |               |

Filter grades

| Code | (µm) |
|------|------|
| 5    | 5    |
| 10   | 10   |
| 20   | 20   |
| 40   | 40   |
| 70   | 70   |
|      |      |
|      |      |
|      |      |

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

1 2 – 3 U 4

Table 3

1

2

4

#### Table 4

| Code  | Gasket<br>materials       |
|-------|---------------------------|
| Blank | For NF version            |
| Ν     | Nitrile                   |
| E     | EPDM<br>(peroxide cured)  |
| V     | Fluorocarbon<br>elastomer |

## Table 5

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

## Table 6

| Code | Flange/gasket styles <sup>4</sup>   |  |
|------|---|--|
| А    | Pall Marksman Series vessels, Rosedale <sup>5</sup> ,<br>Strainrite, Krystil Klear <sup>6</sup> |  |
| В    | FSI BFNP Series vessels (side entry), GAF <sup>7</sup>  |  |
| С    | FSI FSPN Series vessels (prior to June 2012),<br>Hayward <sup>8</sup> over the top              |  |
| F    | FSI FSPN Series vessels (from June 2012)  |  |
| СВ   | FSI CBFP Series vessels9  |  |



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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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