

## Nexis® A Series Filter Cartridges

### Description

- Rated at >99.9% efficiency<sup>1</sup> with retention ratings from 0.5 to 120 µm
- Proprietary CoLD Melt™ fiber technology
- Resists contaminant unloading even at high differential pressures
- Micro-denier melt blown filtration fibers
- Media manufactured with a continuous gradient pore structure
- All-polypropylene construction
- Free of adhesives, binders, resins, and silicone
- Proprietary center core for added strength (0.5 - 20 µm)
- Fast rinse-up to 18 Megohm-cm
- Certification of conformance including lot identification

### Performance Specifications

#### Filter grades

0.5, 1, 3, 5, 10, 20, 30, 40, 50, 70, 90, 120 µm

#### Maximum differential pressure

0.5-20 µm: 1.03 bard @ 82°C (15 psid @ 180°F)  
1.72 bard @ 66°C (25 psid @ 150°F)  
4.14 bard @ 30°C (60 psid @ 86°F)

30-120 µm: 1.72 bard @ 60°C (25 psid @ 140°F)  
3.45 bard @ ambient (50 psid @ ambient)

#### Recommended change-out differential pressure<sup>2</sup>

2.4 bard (35 psid)

#### 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

Nexis A series filter cartridges are free of adhesives, binders, resins, and silicone.

<sup>1</sup> >99.9% retention rating by ASTM F-795 test.

<sup>2</sup> Provided that the maximum differential pressure is not exceeded based on temperature limits defined above.



#### Rinse-up

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

#### Autoclaving

Single-open-end Nexis A series filter cartridges can be autoclaved for 30 minutes at 121°C (250°F) under no end load conditions. However, filter cartridges should be allowed to cool to normal system operating temperatures prior to use.

#### Steam sterilization

Not recommended.

## Product Specifications

### Materials of construction

Filter media: Polypropylene  
 Hardware: Polypropylene  
 Gaskets/O-rings: Silicone elastomer, EPDM, nitrile, fluorocarbon elastomer, Santoprene<sup>3</sup> (DOE only), FEP, FEP encapsulated silicone, FEP encapsulated fluorocarbon elastomer

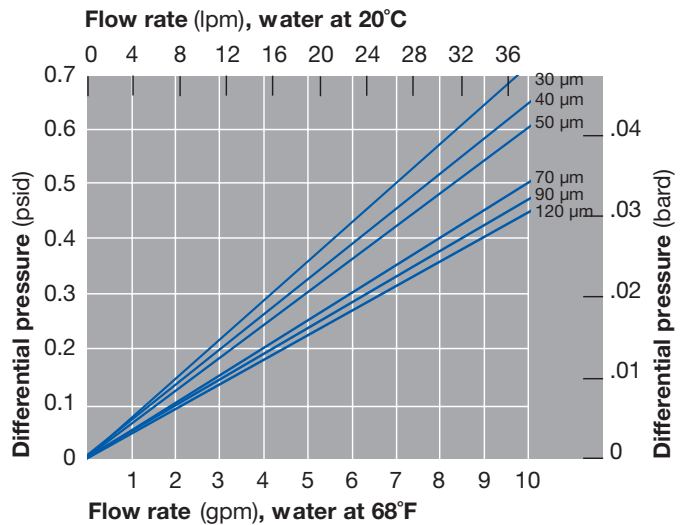
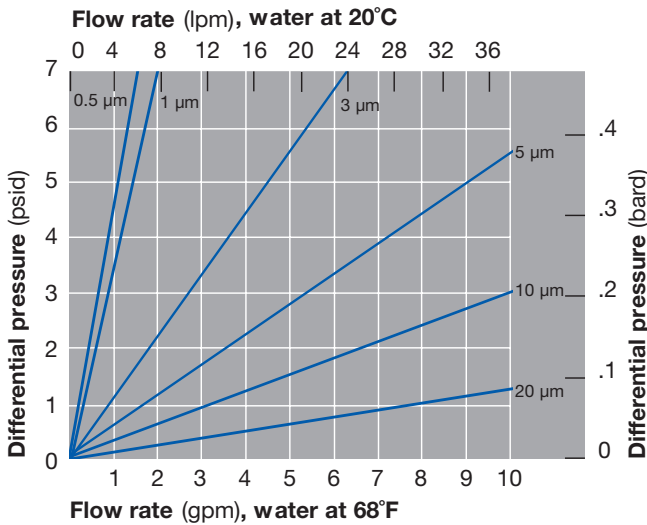
### Dimensions (nominal)

Outside diameter: 6.4 cm (2.5 in)  
 Lengths: 10.2 cm (4 in), 12.7 cm (5 in), 24.8 cm (9.75 in), 25.1 cm (9.875 in), 25.4 cm (10 in), 49.5 cm (19.5 in), 50.8 cm (20 in), 74.3 cm (29.25 in), 76.2 cm (30 in), 99.1 cm (39 in), 100.3 cm (39.5 in), 102 cm (40 in)

## Particle Removal Ratings<sup>4</sup> (µm)

Cartridge Designation	99.9% Efficiency	90% Efficiency
NXA 0.5	0.5	<0.5
NXA 1	0.95	0.65
NXA 3	2.8	1.5
NXA 5	4.1	3.4
NXA 10	9.5	4.7
NXA 20	18.5	13
NXA 30	27	18
NXA 40	36	20
NXA 50	46	27
NXA 70	65	42
NXA 90	85	55
NXA 120	105	65

## Typical Flow vs. Differential Pressure for Application Sizing<sup>5</sup>



Unit conversion: 1 bar = 100 kPa

<sup>3</sup> Registered trademark of Advanced Elastomer Systems.

<sup>4</sup> >90% and 99.9% retention ratings by ASTM F-795 test.

<sup>5</sup> Flow rate is for a 25.4 cm (10 in) cartridge. For liquids other than water, multiply differential pressure by fluid viscosity (cP).

## Ordering Information

Pall Part Number = NXA 1 - 2 U - 3 4

**Table 1**

Code	Filter grades (µm)
0.5	0.5
1	1
3	3
5	5
10	10
20	20
30	30
40	40
50	50
70	70
90	90
120	120

**Table 2**

Code	Cartridge lengths (cm/in) nominal
4	10.2 / 4
5	12.7 / 5
9.75	24.8 / 9.75
9.875	25.1 / 9.875
10	25.4 / 10
19.5	49.5 / 19.5
20	50.8 / 20
29.25	74.3 / 29.25
30	76.2 / 30
39	99.1 / 39
39.5	100.3 / 39.5
40	102 / 40

**Table 3**

Code	End configurations
Blank	DOE industrial (no end caps)
1X	DOE, 2.54 cm (1 in) extended core
M3	SOE flat closed end, external 222 O-rings (retrofits other manufacturers' Code 0) <sup>6</sup>
M3H	SOE large diameter closed end, external 222 O-rings
M4	SOE fin end, external 222 O-rings with locking tabs (silicone and EPDM O-rings only)
M5	DOE, internal 120 O-rings (retrofits 213 O-ring style) <sup>6</sup>
M6	SOE flat closed end, external 226 O-rings (retrofits other manufacturers' Code 6) <sup>6</sup>
M7	SOE fin end, external 226 O-rings (retrofits other manufacturers' Code 7) <sup>6</sup>
M8	SOE fin end, external 222 O-rings (retrofits other manufacturers' Code 5) <sup>6</sup>
M10	DOE, internal O-rings (fits other manufacturers' housings) <sup>6</sup>
M11	SOE flat closed end, internal 120 O-ring (retrofits other manufacturers' X style) <sup>6</sup>
M18	SOE flat closed end, external 222 O-ring
M20	SOE with internal O-rings (same as M10), closed end with deep recess
DOE	DOE with elastomer gasket seals and end caps
H21	DOE, Santoprene gasket seal
XK	SOE plastic spring assembly, saw cut end
SI	SOE metal spring/polypropylene cap, saw cut end

**Table 4**

Code	Gasket/O-ring materials
S	Silicone
N	Nitrile
E	EPDM
V	Fluorocarbon elastomer
T	Expanded PTFE (gaskets) FEP encapsulated silicone (O-rings)
F	FEP encapsulated fluorocarbon elastomer (O-rings)
Y	Santoprene

<sup>6</sup> For details, contact Pall Corporation.



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