

## Nexis® T Series Filter Cartridges

### Description

- Proprietary CoLD Melt™ fiber technology
- Continuous gradient pore structure media provides both prefiltration and final filtration
- Proprietary center core for greater mechanical strength and chemical resistance (0.5 - 10 µm)
- Resists contaminant unloading even at high differential pressures
- Computer controlled CoLD Melt manufacturing process increases product consistency
- Polypropylene media construction
- Thermally bonded structure - not employing adhesives
- Plastic and metal spring assembly end configurations are available

### Performance Specifications

#### Filter grades<sup>1</sup>

0.5, 1, 3, 5, 7, 10, 15, 20, 25, 30, 40, 50, 75, 100, 120, 150, 200 µm

#### Maximum differential pressure

0.5-10 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)

15-120 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.

#### Rinse-up

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



#### Autoclaving

Single-open-end Nexis T 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.

<sup>1</sup> >90% retention rating by ASTM F-795 test. Nexis T 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 0.5 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>2</sup> Provided that the maximum differential pressure is not exceeded based on temperature limits defined above.

## Product Specifications

### Materials of construction

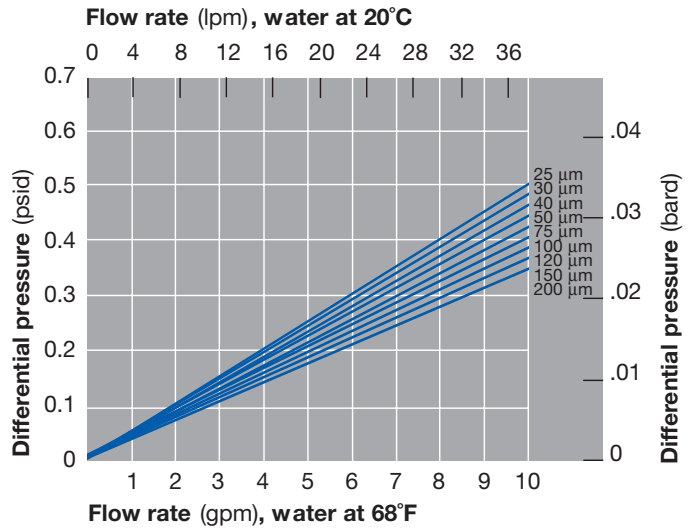
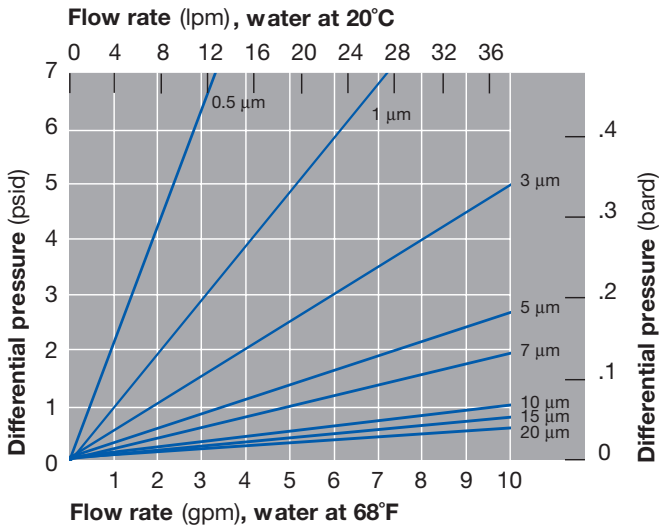
Filter media: Polypropylene  
 Hardware: Polypropylene  
 Gaskets/O-rings: Silicone elastomer, EPDM, nitrile, fluorocarbon elastomer, FEP, thermoplastic elastomer (DOE only), FEP encapsulated silicone elastomer, FEP encapsulated fluorocarbon elastomer

### 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)

Pall's proprietary CoLD Melt fiber media technology is designed to assure efficient use of the entire gradient depth of the filter. The CoLD Melt process produces a mixture of micro-thin fibers intermingled and thermally bonded with large diameter CoLD Melt fibers to provide an integral support and fluid transport network. The large internal void area created by the CoLD Melt process enables Nexis T filter cartridges to capture more contaminant than conventional cartridges while the rigid support fibers hold the filtration fibers firmly in place. The result is less potential random unloading of contaminant and more efficient filtration under a variety of operating conditions.

## Typical Flow vs. Differential Pressure for Application Sizing<sup>3</sup>



Unit conversion: 1 bar = 100 kPa

<sup>3</sup> Due to the very low flow resistance of the media in the more open grades, pressure drop is primarily related to turbulent loss through the center core. 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 = NXT 1 - 2 U - 3 4

**Table 1**

Code	Filter grades (µm)
0.5	0.5
1	1
3	3
5	5
7	7
10	10
15	15
20	20
25	25
30	30
40	40
50	50
75	75
100	100
120	120
150	150
200	200

**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>4</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>4</sup>
M6	SOE flat closed end, external 226 O-rings (retrofits other manufacturers' Code 6) <sup>4</sup>
M7	SOE fin end, external 226 O-rings (retrofits other manufacturers' Code 7) <sup>4</sup>
M8	SOE fin end, external 222 O-rings (retrofits other manufacturers' Code 5) <sup>4</sup>
M10	DOE, internal O-rings (fits other manufacturers' housings) <sup>4</sup>
M11	SOE flat closed end, internal 120 O-ring (retrofits other manufacturers' X style) <sup>4</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) - DOE option FEP encapsulated silicone (O-rings) - SOE option
F	FEP encapsulated fluorocarbon elastomer (O-rings)
Y	Santoprene

<sup>4</sup> For details, contact Pall Corporation.



**Pall Corporation**

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

### Visit us on the Web at [www.pall.com](http://www.pall.com)

Pall Corporation has offices and plants throughout the world. For Pall representatives in your area, please go to [www.pall.com/contact](http://www.pall.com/contact).

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.

Because of technological developments related to the products, systems, and/or services described herein, the data and procedures are subject to change without notice. Please consult your Pall representative or visit [www.pall.com](http://www.pall.com) to verify that this information remains valid. Products in this document may be covered by one or more of the following patent numbers: EP 0 830 191; US 5,591,335; US 5,653,833; US 5,681,469; US 5,690,782; US 5,730,820; US 5,733,581; US 5,741,395; US 5,783,011.

© Copyright 2005, 2010, Pall Corporation. Pall, CoLD Melt, and Nexis are trademarks of Pall Corporation. ® indicates a trademark registered in the USA. **Filtration. Separation. Solution.<sup>SM</sup>** is a service mark of Pall Corporation.