

## Nexis® T Filter Cartridges

### For Clarification and Particle Reduction

Nexis T filter cartridges are extremely robust melt blown depth filters that are ideal for use in rigorous clarification and particle reduction applications.

### Description

Nexis T filter cartridges feature continuous graded, fixed pores which provide pre- and fine filtration within the same cartridge.

Their unique feature is Pall's proprietary CoLD<sub>SM</sub> (Co-Located Large Diameter) fiber media technology, which ensures efficient use of the entire gradient depth of the filter, resulting in high fluid transport and high dirt holding capacity.

The CoLD Melt™ process produces a mixture of micro-thin fibers intermingled and thermally bonded with large diameter CoLD fibers to provide an integral support and fluid transport network. The large internal void volume created by the CoLD process enables the capture of more contaminant than conventional cartridges, while the rigid support fibers hold the filtration fibers firmly in place.

The result is less potential for contaminant unloading and more efficient filtration under a variety of operating conditions.



Nexis T Filter Cartridges

| Features  | Benefits   |
|---|--|
| High structural integrity with fixed fiber matrix   | <ul style="list-style-type: none"> <li>• Consistent filtrate quality</li> <li>• Highly stable structure, resistance to contaminant unloading even at high differential pressures</li> <li>• High performance filtration under a variety of operating conditions</li> </ul> |
| Micro-thin fibers with continuous graded fixed pore structure provide pre- and fine filtration in the same cartridge      | <ul style="list-style-type: none"> <li>• High void volume for high dirt holding capacity and long service life</li> <li>• Economical cost per filtered volume</li> <li>• Lower disposal costs</li> </ul>   |
| Proprietary high strength center core for 3-10 micron grades, economical high strength extruded core for more open grades | <ul style="list-style-type: none"> <li>• Reliable even under high differential pressure conditions</li> </ul>  |
| All polypropylene construction without adhesives, binders, resins or silicone   | <ul style="list-style-type: none"> <li>• Broad chemical compatibility, suitable for use in a variety of fluids</li> </ul>  |

### Materials of Construction

| Component                        | Description                                     |
|----------------------------------|---|
| Filter Medium                    | Polypropylene                                   |
| Hardware                         | Polypropylene                                   |
| <b>SOE Style Cartridges only</b> |   |
| Adaptor                          | Polypropylene                                   |
| O-Ring Seal                      | Silicone Elastomer<br>Ethylene Propylene Rubber |

### Quality

- Cartridges produced in a controlled environment
- Manufactured within a Quality Management System certified to ISO 9001:2008

### Food Contact Compliance

Please refer to the Pall website [www.pall.com/foodandbev](http://www.pall.com/foodandbev) for a Declaration of Compliance to specific National Legislation and/or Regional Regulatory requirements for food contact use.

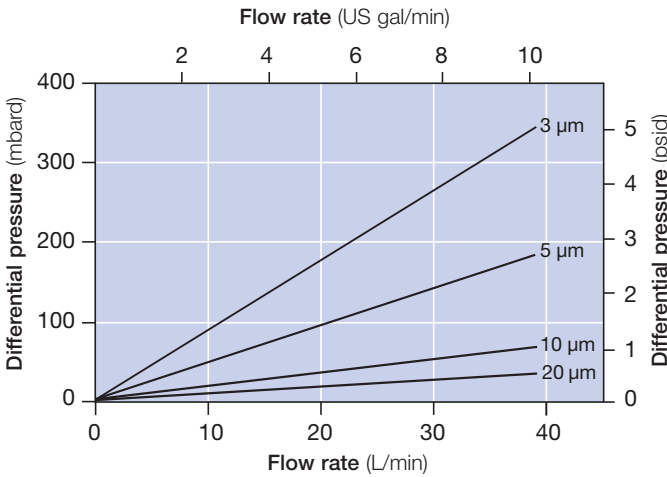
# Technical Information

## Operating Characteristics in Compatible Fluids<sup>1</sup>

| Micron Rating | Maximum Differential Pressure <sup>2</sup> | Operating Temperature |
|---------------|--|-----------------------|
| 3-10 micron   | 1.03 bard (15 psid)                        | 82 °C (180 °F)        |
|               | 1.72 bard (25 psid)                        | 66 °C (150 °F)        |
|               | 4.14 bard (60 psid)                        | 30 °C (86 °F)         |
| 20-200 micron | 1.72 bard (25 psid)                        | 60 °C (140 °F)        |
|               | 3.45 bard (50 psid)                        | Ambient               |

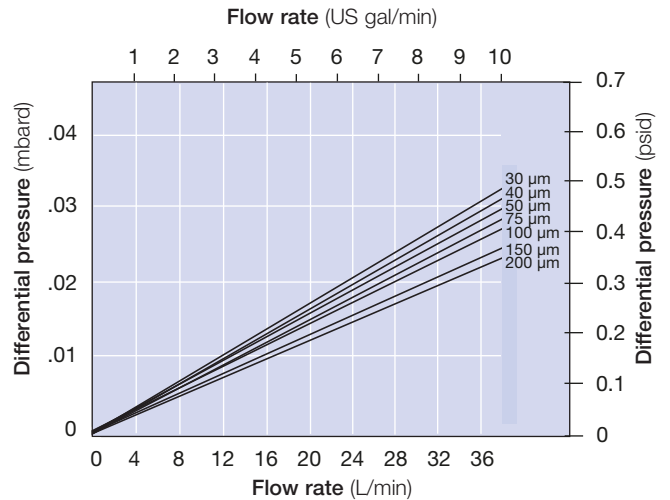
<sup>1</sup> Fluids which do not swell, soften or adversely affect any of the filter components  
<sup>2</sup> Recommended change-out differential pressure is 2.4 bard (35 psid), provided the maximum differential pressure (based on temperature) is not exceeded.

## Flow Rates<sup>3</sup>



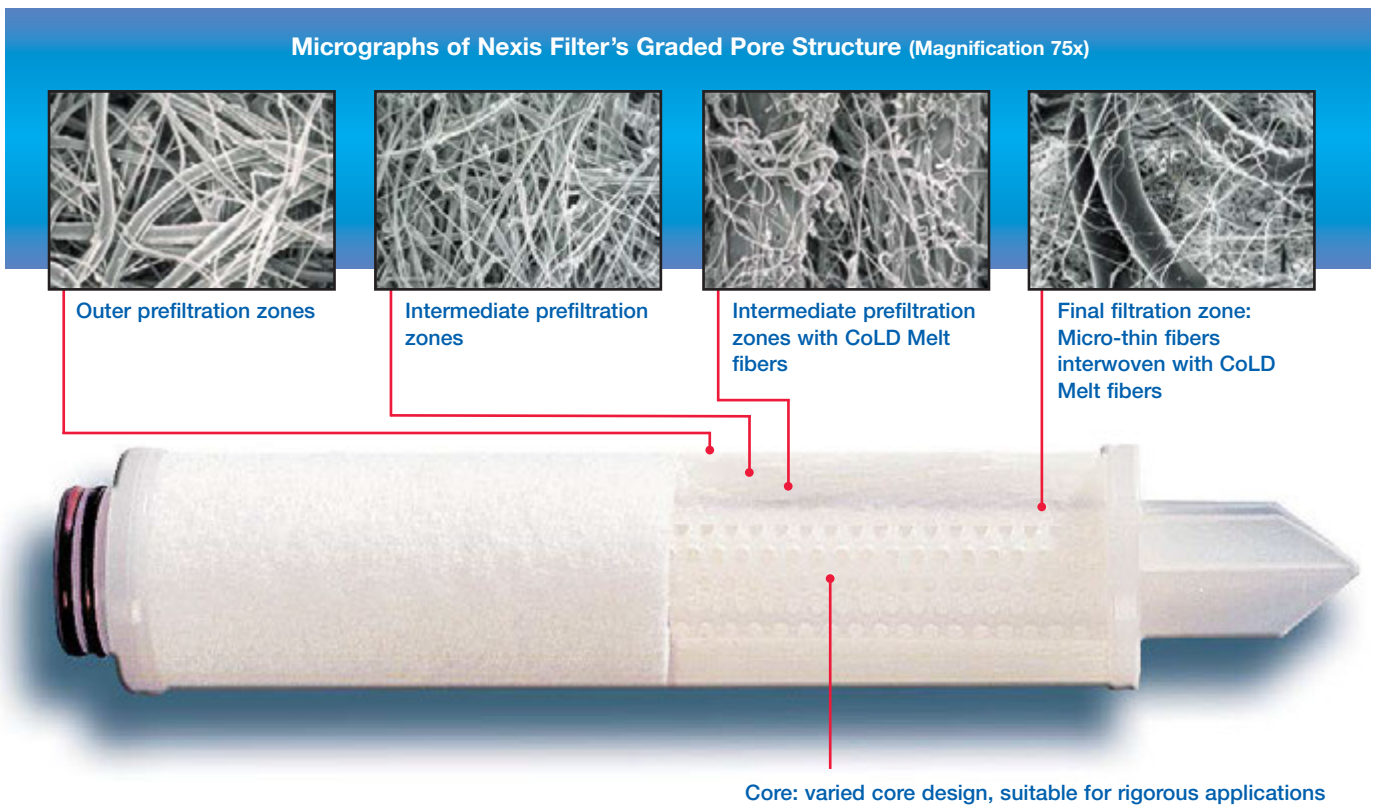
## Sterilization and Sanitization

- Single open end (SOE) cartridges may be autoclaved for 30 minutes at 121 °C (250 °F) under no end load conditions. Cartridges should be cooled to system operating temperatures prior to use.
- *In situ* steam sterilization is not recommended.



<sup>3</sup> Typical initial clean delta p per 254 mm (10 inch) cartridge, water at 20 °C (68 °F). For liquids with viscosity greater than 1 cP, multiply the delta p by the viscosity.

Figure 1: Cutaway view of a Nexis filter, illustrating unique, proprietary CoLD Melt fiber technology for highly efficient contaminant removal, longer service life, and improved strength



## Ordering Information

This information is a guide to the part numbering structure and possible options. For availability of specific options please contact Pall. Refer to Pall for housing details.

Part Number: **NXT**   **U**  **W**  **480**

Example Part Number: **NXT320UM7WS480**

See bold reference codes in tables.

**Table 1: Removal Rating<sup>4</sup>**

| Code     | Description |
|----------|-------------|
| <b>3</b> | 3 µm        |
| 5        | 5 µm        |
| 10       | 10 µm       |
| 20       | 20 µm       |
| 30       | 30 µm       |
| 40       | 40 µm       |
| 50       | 50 µm       |
| 75       | 75 µm       |
| 100      | 100 µm      |
| 150      | 150 µm      |
| 200      | 200 µm      |

<sup>4</sup> Nexis T filters provide a removal efficiency of 90% at the stated rating in compatible fluids. Particulate removal rating is determined by a single pass test based on ASTM F-795.

**Table 2: Length**

| Code                   | Description     |
|------------------------|-----------------|
| <b>DOE Style only:</b> |                 |
| 4                      | 102 mm (4")     |
| 5                      | 127 mm (5")     |
| 975                    | 248 mm (9.75")  |
| 9875                   | 251 mm (9.875") |
| 10                     | 254 mm (10")    |
| 195                    | 495 mm (19.5")  |
| <b>20</b>              | 508 mm (20")    |
| 2925                   | 743 mm (29.25") |
| 295                    | 749 mm (29.5")  |
| 30                     | 762 mm (30")    |
| 39                     | 991 mm (39")    |
| 395                    | 1003 mm (39.5") |
| 40                     | 1016 mm (40")   |
| <b>SOE Style only:</b> |                 |
| 10                     | 254 mm (10")    |
| 20                     | 508 mm (20")    |
| 30                     | 762 mm (30")    |
| 40                     | 1016 mm (40")   |

**Table 3: Adaptor**

| Code      | Description   |
|-----------|---|
| blank     | DOE with no endcaps   |
| M3        | SOE - single open end with flat closed end and external 222 O-rings         |
| <b>M7</b> | SOE - single open end with fin end, 2 locking tabs and external 226 O-rings |
| M8        | SOE - single open end with fin end and external 222 O-rings                 |

**Table 4: O-ring Seal Material<sup>5</sup>**

| Code     | Description               |
|----------|---------------------------|
| <b>S</b> | Silicone Elastomer        |
| E        | Ethylene Propylene Rubber |

<sup>5</sup> For M3, M7 and M8 styles only



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