Absolute Rated, Extended Life Depth Filters
• Proprietary Gel Guard Filter Media
• Innovative Merger of Depth and Pleated Technologies
• High Surface Area for Long Service Life
• Micro Denier Melt Blown Fibers for High Efficiency Filtration
• High Flow Rates with Low Pressure Drops
• All Polypropylene Construction
• Absolute Rated at >99.9% Efficiency With Retention Ratings from 1.5 to 90 µm
• Highly Consistent, Reproducible Performance

Performance Specifications
Filter Grades (>99.9% Retention Rating by ASTM F-795 Test):
1.5, 3, 4.5, 10, 20, 30, 40, 70, 90 µm

Maximum Differential Pressure:
70 psid (4.8 bard) @ 120°F (49°C)
40 psid (2.8 bard) @ 150°F (65°C)

Recommended Change Out Differential Pressure¹:
35 psid (2.4 bard)

FDA Listed Materials:
Manufactured from materials, which are FDA listed for food contact applications in Title 21 of the U.S. Code of Federal Regulations.

Toxicity:
All components meet the specifications for biological safety as per the USP for Class VI-121°C plastics (gaskets/O-rings excluded).

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

Purity:
Cartridges are free of surfactants, resins, binders, and adhesives.

Sterilization:
Multiple autoclaving for 30 minutes at 250°F (121°C) under no end load conditions. In-line steam sterilization is not recommended. May be in-line sanitized with hot water at 180°F (82°C) for 1 hour.

Product Specifications
Materials of Construction:
Filter Media: Polypropylene
Hardware: Polypropylene
Cage/Netting: Polypropylene
Support Material: Polypropylene
Sealing: Thermal Bond

Gaskets/O-rings: Silicone Elastomer, Buna N, EPDM, Viton¹ A, Expanded PTFE, FEP Encapsulated Viton A, FEP Encapsulated Silicone

Dimensions (nominal):
Outside Diameter: 2 ¾” (6.6 cm)
Lengths:
4” (10.2 cm), 9 ⅜” (24.8 cm),
10” (25.4 cm), 19 ⅝” (49.5 cm),
20” (50.8 cm), 29 ⅜” (74.3 cm),
30” (76.2 cm), 39” (99.1 cm),
40” (102 cm)

Surface Area: Up to 2.5 ft² (0.23 m²) of effective filtration area per 10” (25.4 cm) equivalent

¹ - Provided that the maximum differential pressure is not exceeded based on temperature limits defined above.
² - Registered trademarks of DuPont Dow.
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**Liquid Retention Ratings (µm) (by ASTM F-795 Test)**

<table>
<thead>
<tr>
<th>Cartridge Designation</th>
<th>90% Efficiency</th>
<th>&gt;99.9% Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLD 1.5</td>
<td>0.7</td>
<td>1.5</td>
</tr>
<tr>
<td>XLD 3</td>
<td>1.0</td>
<td>3.0</td>
</tr>
<tr>
<td>XLD 4.5</td>
<td>3.5</td>
<td>4.5</td>
</tr>
<tr>
<td>XLD 10</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>XLD 20</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>XLD 30</td>
<td>18</td>
<td>30</td>
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<tr>
<td>XLD 40</td>
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<td>40</td>
</tr>
<tr>
<td>XLD 70</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>XLD 90</td>
<td>45</td>
<td>90</td>
</tr>
</tbody>
</table>

**Typical Flow vs. Differential Pressure for Application Sizing**

Flow rate is per 10” (25.4 cm) cartridge. For liquids other than water, multiply differential pressure by fluid viscosity (cP).

**Part Numbers/Ordering Information**

XLD [G] [U] [M] (e.g., XLD 4.5–20UN–M8–NET)

**Code** | **Filter Grades** | **Cartridge Lengths (nominal)**
---|---|---
1.5 | 1.5 µm | 4”
3 | 3 µm | 4”
4.5 | 4.5 µm | 9.75”
10 | 10 µm | 10”
20 | 20 µm | 19.5”
40 | 40 µm | 20”
70 | 70 µm | 29.25”
90 | 90 µm | 30”

**Code** | **Gasket/O-ring Materials**
---|---
S | Silicone (Std. O-rings)
N | Buna N (Std. gaskets)
V | Viton A
E | EPDM
T | Expanded PTFE (gaskets)
F | FEP Encapsulated Viton A (O-rings)
T | FEP Encapsulated Silicone (O-rings)
X | No O-ring/gaskets required (M2 style only)

**Code** | **End Configurations**
---|---
Blank | DOE industrial
1X | DOE industrial, 1” (2.54 cm) extended core
M2 | SOE flat closed end, fits housings with 020 O-ring post
M3 | SOE flat closed end, external 222 O-rings (retrofits other manufacturers’ Code 0)³
M3H | SOE large diameter closed end, external 222 O-rings
M5 | DOE, internal 120 O-rings (retrofits 213 O-ring style)³
M6 | SOE flat closed end, external 226 O-rings (retrofits other manufacturers’ Code 6)³
M7 | SOE fin end, external 226 O-rings (retrofits other manufacturers’ Code 7)³
M8 | SOE fin end, external 222 O-rings (retrofits other manufacturers’ Code 5)³
M10 | DOE, internal O-rings (fits other manufacturers’ housings)³
M11 | SOE flat closed end, internal 120 O-ring (retrofits other manufacturers’ X style)³
M18 | SOE flat closed end, external 222 O-ring
M20 | SOE, internal O-ring (same as M10), closed end with deep recess

**Code** | **Outer Cage/Netting (polypropylene)**
---|---
Blank | Cage
NET | Netting

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Argentina, Australia, Austria, Belgium, Brazil, Canada, China, France, Germany, India, Indonesia, Ireland, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Poland, Puerto Rico, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, United Kingdom, United States, and Venezuela. Distributors are located in all major industrial areas of the world.

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Bulletin #1689-5C
9/08