The LifeASSURE ER Series filter cartridges, formerly known as Electropor ER, deliver high purity deionised (DI) water required by the semiconductor and electronics industries. LifeASSURE ER filters with charge-modified Nylon 6,6 membrane provide enhanced particle removal capability and superior downstream cleanliness.

Upon installation, LifeASSURE ER filter cartridges quickly rinse to resistivity and Total Organic Carbon (TOC) specifications, minimising flush time and permitting rapid system start-up.

**Enhanced Particle Removal Capability**
Electropositive charge modification of the Nylon 6,6 membrane enables LifeASSURE ER cartridges to remove particles much smaller than the rated pore sizes. The combination of electrokinetic adsorption (positive charge) and mechanical sieving (pore size) removes common sub-micron contaminants such as colloidal silica and bacteria fragments.

3M Purification LifeASSURE ER filters are available in single and multiple length cartridges with 0.45, 0.2, 0.1 and 0.04 micron ratings.

**LifeASSURE ER Flow Rates vs. Differential Pressures**
The LifeASSURE ER filter cartridges provide consistent deionised water purity throughout the flow ranges shown in Graphs 1 and 2, when operated within the recommended parameters.

<table>
<thead>
<tr>
<th>Recommended Operating Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Operating Temperature</td>
</tr>
<tr>
<td>Maximum Forward Differential Pressure</td>
</tr>
<tr>
<td>Maximum Reverse Differential Pressure</td>
</tr>
</tbody>
</table>

**Features and Benefits**

**Charge-modified Nylon 6,6 membrane**
- Enhanced particle removal for improved water purity

**Pleated, high surface area filter membrane**
- High flow capacity with extended life

**Factory pre-rinsed with high purity 18 meg-Ω DI water**
- Rapid resistivity, TOC and particle rinse-up for reduced system start-up time

**Thermally bonded Polypropylene, Polyester and Nylon 6,6 components**
- No contaminant contribution during filter service life

**Naturally hydrophilic Nylon 6,6 membrane**
- No IPA pre-wetting and system flushing required – eliminates a potential source of contamination and chemical interaction, while reducing hazardous waste disposal

**100% integrity tested during manufacture**
- Assured filtration performance

**Applications**
- DI Water
- Critical Parts Cleaning
- Ultra Pure Water
- Wafer Cleaning

**Standard Cartridge Construction**
LifeASSURE™ ER Series
Nylon Membrane Cartridge Filters

Graph 1: Typical Flow vs. Differential Pressure for 004 ER & 010 ER (per 10" element)

Graph 2: Typical Flow vs. Differential Pressure for 020 ER & 045 ER (per 10" element)

LifeASSURE ER Filter Cartridge Ordering Guide

<table>
<thead>
<tr>
<th>Catalogue Number</th>
<th>Cartridge Length</th>
<th>Gasket or O-Ring</th>
<th>Removal Rating</th>
<th>Formulation</th>
<th>Control Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>70002</td>
<td>01 - 10&quot; (254 mm)</td>
<td>A - Silicone</td>
<td>045 - 0.45 μm</td>
<td>E - Electronics</td>
<td>R - Rinsed</td>
</tr>
<tr>
<td>70003</td>
<td>02 - 20&quot; (508 mm)</td>
<td>B - Fluorocarbon</td>
<td>020 - 0.20 μm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70005</td>
<td>03 - 30&quot; (762 mm)</td>
<td>C - EPR</td>
<td>010 - 0.10 μm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70006</td>
<td>04 - 40&quot; (1016 mm)</td>
<td>D - Nitrile</td>
<td>004 - 0.04 μm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70012</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>70025</td>
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</tr>
</tbody>
</table>

Cartridge Length Code mm
- 70002: 01 259
- 70003: 02 506
- 70005 & 70006: 03 754
- 70008: 02 507

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