

LENNTECH

info@lennotech.com Tel. +31-152-610-900
www.lennotech.com Fax. +31-152-616-289

LifeASSURE™ ER Series Nylon Membrane Cartridge Filters

The LifeASSURE ER Series filter cartridges, formerly known as Electropor ER, deliver high purity deionised (DI) water required by the semi conductor and electronics industries. LifeASSURE ER filters with charge-modified Nylon 6,6 membrane provides 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.

Recommended Operating Parameters	
Maximum Operating Temperature	80 °C
Maximum Forward Differential Pressure	4.5 bar at 25 °C
Maximum Reverse Differential Pressure	4.5 bar at 25 °C

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

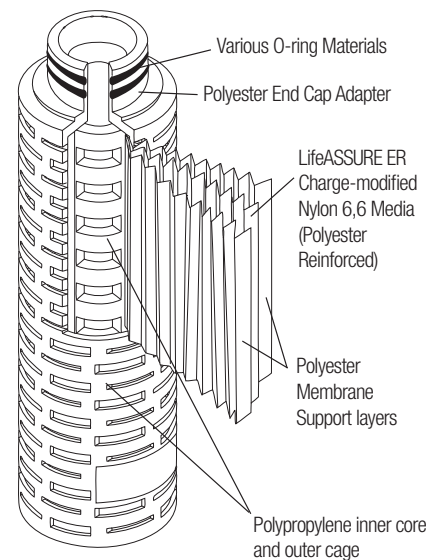
- Assured filtration performance



Applications

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

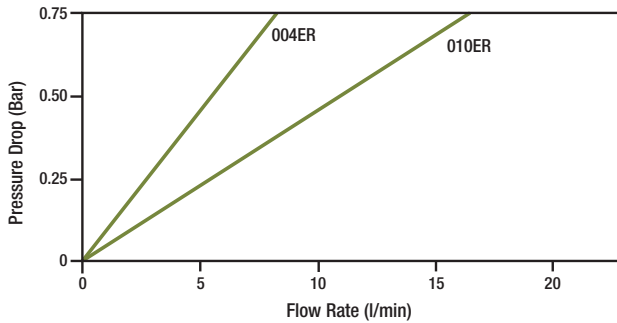
Standard Cartridge Construction



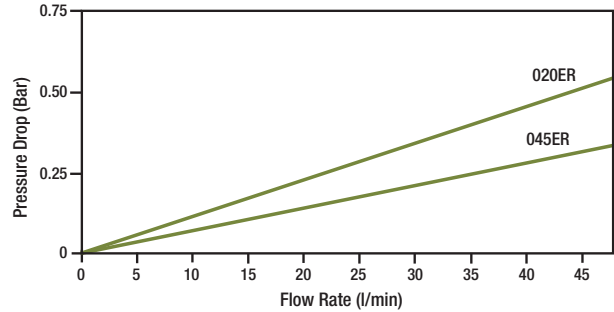
LifeASSURE™ ER Series

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

Catalogue Number	Cartridge Length	Gasket or O-Ring	Removal Rating	Formulation	Control Grade
70002 70003 70005 70006 70012 70025	01 - 10" (254 mm) 02 - 20" (508 mm) 03 - 30" (762 mm) 04 - 40" (1016 mm)	A - Silicone B - Fluorocarbon C - EPR D - Nitrile H - Clear Silicone	045 - 0.45 µm 020 - 0.20 µm 010 - 0.10 µm 004 - 0.04 µm	E - Electronics	R - Rinsed

Note: LifeASSURE ER is new name for Electropor ER.

Cartridge Length	Cartridge Length	Cartridge Length	Cartridge Length	Cartridge Length																																																																
70002 Single Open End Code 7 (226) O-Ring Bayonet Lock <table border="1"> <thead> <tr> <th colspan="2">Cartridge Length</th> </tr> <tr> <th>Code</th> <th>mm</th> </tr> </thead> <tbody> <tr><td>01</td><td>259</td></tr> <tr><td>02</td><td>506</td></tr> <tr><td>03</td><td>754</td></tr> <tr><td>04</td><td>1002</td></tr> </tbody> </table>	Cartridge Length		Code	mm	01	259	02	506	03	754	04	1002	70003 Single Open End Code 8 (222) O-Ring Bayonet Lock <table border="1"> <thead> <tr> <th colspan="2">Cartridge Length</th> </tr> <tr> <th>Code</th> <th>mm</th> </tr> </thead> <tbody> <tr><td>01</td><td>260</td></tr> <tr><td>02</td><td>507</td></tr> <tr><td>03</td><td>755</td></tr> <tr><td>04</td><td>1003</td></tr> </tbody> </table>	Cartridge Length		Code	mm	01	260	02	507	03	755	04	1003	70005 & 70006 Double Open End Flat Gasket <table border="1"> <thead> <tr> <th colspan="3">Cartridge Length</th> </tr> <tr> <th>Code</th> <th>70005 mm</th> <th>70006 mm</th> </tr> </thead> <tbody> <tr><td>01</td><td>254</td><td>248</td></tr> <tr><td>02</td><td>508</td><td>495</td></tr> <tr><td>03</td><td>762</td><td>743</td></tr> <tr><td>04</td><td>1016</td><td>991</td></tr> </tbody> </table>	Cartridge Length			Code	70005 mm	70006 mm	01	254	248	02	508	495	03	762	743	04	1016	991	70012 Single Open End (222) O-Ring <table border="1"> <thead> <tr> <th colspan="2">Cartridge Length</th> </tr> <tr> <th>Code</th> <th>mm</th> </tr> </thead> <tbody> <tr><td>01</td><td>260</td></tr> <tr><td>02</td><td>559</td></tr> <tr><td>03</td><td>787</td></tr> </tbody> </table>	Cartridge Length		Code	mm	01	260	02	559	03	787	70025 Single Open End Code 3 (222) O-Ring <table border="1"> <thead> <tr> <th colspan="2">Cartridge Length</th> </tr> <tr> <th>Code</th> <th>mm</th> </tr> </thead> <tbody> <tr><td>01</td><td>260</td></tr> <tr><td>02</td><td>507</td></tr> <tr><td>03</td><td>755</td></tr> <tr><td>04</td><td>1003</td></tr> </tbody> </table>	Cartridge Length		Code	mm	01	260	02	507	03	755	04	1003
Cartridge Length																																																																				
Code	mm																																																																			
01	259																																																																			
02	506																																																																			
03	754																																																																			
04	1002																																																																			
Cartridge Length																																																																				
Code	mm																																																																			
01	260																																																																			
02	507																																																																			
03	755																																																																			
04	1003																																																																			
Cartridge Length																																																																				
Code	70005 mm	70006 mm																																																																		
01	254	248																																																																		
02	508	495																																																																		
03	762	743																																																																		
04	1016	991																																																																		
Cartridge Length																																																																				
Code	mm																																																																			
01	260																																																																			
02	559																																																																			
03	787																																																																			
Cartridge Length																																																																				
Code	mm																																																																			
01	260																																																																			
02	507																																																																			
03	755																																																																			
04	1003																																																																			

Important Notice

3M Purification MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Since a variety of factors can affect the use and performance of a 3M Purification product in a particular application, some of which are uniquely within the user's knowledge and control, user is responsible for determining whether or not the 3M Purification product is fit for a particular purpose and suitable for user's method of application.

Limited Warranty

3M Purification warrants it this product to be free from defects in material and workmanship during normal use for a period of one (1) year from the date of shipment from the factory. If the Product(s) is (are) defective within this warranty period, your exclusive remedy and 3M Purification's sole obligations shall be, at 3M Purification's option, to replace or repair the Product(s) or refund the original purchase price of the Product(s). This warranty does not apply to failures that result from abuse, misuse, alteration or damage not caused by 3M Purification or failure to properly follow installation and use instructions.

Limitation of Liability: 3M Purification will not be liable for any loss or damage arising from the use of the Product(s), whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This warranty gives you specific legal rights and you may have other rights which vary from state to state, or country to country.

3M and LifeASSURE are trademarks of 3M used under licence.



LENNTECH

info@lenntech.com Tel. +31-152-610-900
www.lenntech.com Fax. +31-152-616-289

Data may be subject to change without further notice.

© 3M 2010. All rights reserved.

v.2 - DOC10089
LITCTLAER1.EU - 1110

70002 01 A 045 E R	70002 03 A 045 E R
70002 01 A 020 E R	70002 03 A 020 E R
70002 01 A 010 E R	70002 03 A 010 E R
70002 01 A 004 E R	70002 03 A 004 E R
70002 01 B 045 E R	70002 03 B 045 E R
70002 01 B 020 E R	70002 03 B 020 E R
70002 01 B 010 E R	70002 03 B 010 E R
70002 01 B 004 E R	70002 03 B 004 E R
70002 01 C 045 E R	70002 03 C 045 E R
70002 01 C 020 E R	70002 03 C 020 E R
70002 01 C 010 E R	70002 03 C 010 E R
70002 01 C 004 E R	70002 03 C 004 E R
70002 01 D 045 E R	70002 03 D 045 E R
70002 01 D 020 E R	70002 03 D 020 E R
70002 01 D 010 E R	70002 03 D 010 E R
70002 01 D 004 E R	70002 03 D 004 E R
70002 01 H 045 E R	70002 03 H 045 E R
70002 01 H 020 E R	70002 03 H 020 E R
70002 01 H 010 E R	70002 03 H 010 E R
70002 01 H 004 E R	70002 03 H 004 E R
70002 02 A 045 E R	70002 04 A 045 E R
70002 02 A 020 E R	70002 04 A 020 E R
70002 02 A 010 E R	70002 04 A 010 E R
70002 02 A 004 E R	70002 04 A 004 E R
70002 02 B 045 E R	70002 04 B 045 E R
70002 02 B 020 E R	70002 04 B 020 E R
70002 02 B 010 E R	70002 04 B 010 E R
70002 02 B 004 E R	70002 04 B 004 E R
70002 02 C 045 E R	70002 04 C 045 E R
70002 02 C 020 E R	70002 04 C 020 E R
70002 02 C 010 E R	70002 04 C 010 E R
70002 02 C 004 E R	70002 04 C 004 E R
70002 02 D 045 E R	70002 04 D 045 E R
70002 02 D 020 E R	70002 04 D 020 E R
70002 02 D 010 E R	70002 04 D 010 E R
70002 02 D 004 E R	70002 04 D 004 E R
70002 02 H 045 E R	70002 04 H 045 E R
70002 02 H 020 E R	70002 04 H 020 E R
70002 02 H 010 E R	70002 04 H 010 E R
70002 02 H 004 E R	70002 04 H 004 E R