# LENNTECH

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LifeASSURE 020SA log reduction grade cartridges - formerly known as Zetapor SA 020 - provide safer, more reliable, and efficient prefilter operation. The function of the LifeASSURE 020SA cartridge is to increase the effective service life of downstream final filters. The LifeASSURE 020SA cartridge accomplishes this objective by providing a large and highly effective surface area (0.83 m<sup>2</sup>). The electropositive charge of the LifeASSURE 020SA membrane combined with the rated pore size offers highly efficient filtration for bacteria retention and pyrogen reduction.

The charge-modified, double-layer composite Nylon 6,6 membrane provides enhanced particle retention and endotoxin reduction. With a log reduction value of 6, the cartridge can reduce bioburden to the final sterilising grade filter.

### Performance

The LifeASSURE 020SA cartridge typically shows log reduction values of 6 per 10" element for all cartridges tested using *Pseudomonas dimunuta* and ASTM/HIMA procedures.

### Construction

LifeASSURE 020SA log reduction cartridges are produced from a reinforced pleated membrane. The composite membrane is composed of two layers of charge-modified Nylon 6,6, with upstream and downstream polyester supports. Multiple lengths of various end cap styles are produced by thermoplastic welding to eliminate the need for adapters. No adhesives or surfactants are used in the cartridge assembly.

While the LifeASSURE 020SA cartridge is not integrity tested before shipment, it is biologically safe in accordance with USP testing, providing a cost of reduction for non-sterile applications. Do not use the LifeASSURE 020SA cartridge in applications requiring integrity testing.

## Features and Benefits

#### Proprietary charge-modified Nylon 6,6 filter medium

- Retention of negatively-charged biological and particulate contaminants including endotoxins
- · Inherently hydrophilic membrane for easy wet-out

#### Large Surface Area

• High flow rates and longer cartridge life

#### Robust cartridge construction

· Cartridges withstand mechanical and thermal stress including SIP operations

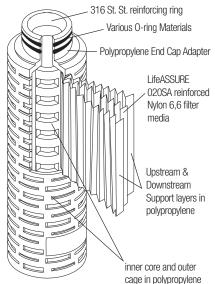
#### ISO 9001:2000 - Registered Quality System

• Quality Management System approved by an accrediting body to an ISO 9001 Quality System Standard





#### Standard Cartridge Construction



## **Applications**

#### Prefilter to final membrane

Final filter for diagnostics and reagents





Cartridge Specifications						
Dimensions, Nominal	Outside Diameter: 7.11 cm / 2.8" Length: 10", 20" 30" and 40" (See ordering guide for more info)					
Surface Area	0.83 m <sup>2</sup> per 10" element					
Bacteria Removal Rating (nominal)	0.20 µm					
Log Reduction Value (LRV)	>6					
Extractables in Water	< 30 mg at 20 °C					

Operating Conditions					
Maximum Operating Temperature	0° 08				
Max. Forward Differential Pressure	4.49 bar at 25 °C				
Max. Reverse Differential Pressure	4.49 bar at 25 °C				
Typical Water Flow Rate	31 l/min per 300 mbar at 25 °C				
Sterilisation Procedure	In-situ steam or autoclave up to 145 °C				
Rinse Volume	1000 ml minimum per 10" element				

## LifeASSURE 020SA Filter Cartridge Ordering Guide

Basic Cartridge — Design	Nominale Cartridge Length	Gasket or O-ring Material		Micron Rating		Formulation		Control Grade
70002 70003 70025	<b>01</b> - 10" <b>02</b> - 20" <b>03</b> - 30" <b>04</b> - 40"	A – 60D (Classical) Silicone (MVQ)* B – Fluorocarbon (FPM)* C – Ethylene Propylene (EPDM)* D – Nitrile (NBR)*		• <b>020</b> – 0.20 μm	]	S	]	A – General Purpose

\* ISO Designation

Note: LifeASSURE 020SA is new name for Zetapor SA 020.

	Single open end Code 7 (226) O-ring Bayonet Lock			
	Nominal Cartridge Length	70002 L (mm)		
70002 L	01	259		
	02	506		
	03	754		
	04	1002		

	Single open end Code 8 (222) O-ring		
	Nominal Cartridge Length	70003 L (mm)	
70003	01	260	
	02	507	
	03	755	
	04	1003	

		Single open end Code 3 (222) 0-ring			
		Nominal Cartridge Length	70025 L (mm)		
70025	Ļ	01	260		
		02	507		
		03	755		
		04	1003		

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