PREPOR PP Food and Beverage

Filter Cartridges





PREPOR PP filter cartridges will significantly reduce the number of yeast and spoilage organisms from beverage products, providing extremely cost-effective pre-stabilization of process liquids.

PREPOR PP filters will also "condition" liquids and can be used to improve the visual clarity and filterability of products, to benefit the performance and efficiency of terminal stabilization operations such as final membrane stabilization and pasteurization.

The filters have been designed to withstand harsh operating conditions. Their mechanical strength and wide chemical resistance make them suitable for aggressive clean-in-place operations using chemicals and steam.

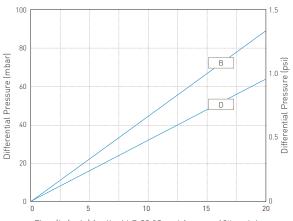
Features

- I Validated retention to yeast and spoilage bacteria
- I High filtration area pleated media
- I Thermally bonded, all polypropylene construction

Benefits

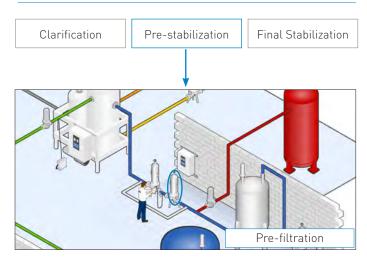
- I Short-term microbial stability of process liquids
- I High flow and service life to blockage
- Compatible with aggressive process conditions including chemical cleaning and steam sterilization

Performance Characteristics



Flow (L / min) for liquid $@20\ ^{\circ}\text{C}$ and $1\ \text{cp per }10^{\circ}\text{module}$

Filtration Stage



■ Filtration Media: Polypropylene Upstream Support: Polypropylene Downstream Support: Polypropylene Inner Support Core: Polypropylene I Outer Protection Cage: Polypropylene I End Caps: Polypropylene ■ End Cap Insert: 316L Stainless Steel Silicone / EPDM O-rings/gaskets:

Food Contact Compliance

Materials conform to the relevant requirements of FDA 21 CFR Part 177, current EC1935 / 2004 and current USP Plastics Class VI - 121 °C.

Recommended Operating Conditions

Up to 70 °C (158 °F) continuous operating temperature and higher short-term temperatures during CIP to the following limits:

Temperature		Max Forward dP	
°F	(bar)	(psi)	
68	5.0	72.5	
104	4.0	58.0	
140	3.0	43.5	
176	2.0	29.0	
194	1.0	14.5	
>212 (steam)	0.3	4.0	
	°F 68 104 140 176	°F (bar) 68 5.0 104 4.0 140 3.0 176 2.0 194 1.0	

Effective Filtration Area (EFA)

10" (250 mm) Up to 0.5 m² (5.38 ft²)

Cleaning and Sterilization

PREPOR PP cartridges can be repeatedly steam sterilized in-situ or autoclaved at up to 135 °C (275 °F). They can be sanitized with hot water at up to 90 °C (194 °F) and are compatible with a wide range of chemicals.

Retention Characteristics

The retention characteristics of PREPOR PP filters have been determined by a combination of controlled laboratory tests and in-use monitoring for a number of organisms.

Organism	LRV wh minimu	LRV when challenged with a minimum of 10 ⁷ cfu per cm ²		
		В	D	
Saccharomyces	cerevisiae	4	2	
Escherichia coli Oenococcus oen	05	2	-	
Serratia marceso	cens	2	-	

Manufacturing Traceability

Each filter cartridge displays the product name, product code and lot number. Additionally, each module displays a unique serial number providing full manufacturing traceability.

