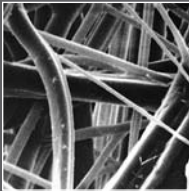


## PREPOR GP (Beverage)



- Microbial reduction in beverage applications
- Ideally suited for yeast removal and bacterial reduction to provide short-term microbiological stability
- Adjustment of filterability of bulk liquids after tank storage transport
- Prefiltration duty to extend the lifetime of downstream microporous membrane filters
- Fine clarification to provide bright finished product

PREPOR GP filter cartridges will significantly reduce numbers of yeast and spoilage organisms in beverage products to provide extremely cost effective microbiological stabilisation. The cartridges will also 'condition' liquids and can be used to improve the filterability of products prior to terminal stabilisation by thermal or filtrative methods.

The filters utilise a unique combination of graded density glass microfibre and polypropylene media. Combined together in a pleated construction, this configuration provides a high surface area and couples the advantages of glass microfibre with the inherent strength and durability of polypropylene.

available formats



## Technical Specifications

### Materials of Construction

Filtration Membrane	:	Glass microfibre Polypropylene
Upstream Support	:	Polypropylene
Downstream Support	:	Polypropylene
Inner Support Core	:	Polypropylene
Outer Protection Cage	:	Polypropylene
End Caps	:	Polypropylene
Endcap Insert (if applicable)	:	316L Stainless Steel
Standard o-rings/gaskets	:	Silicone/EPDM
Capsule Body	:	Polypropylene
Capsule Vent Seals	:	Silicone

### Food and Biological Safety

Materials conform to the relevant requirements of 21CFR Part 177 and current USP Plastics Class VI - 121°C and ISO10993 equivalents. Low concentrations of surfactant may be present.

### Effective Filtration Area

Up to 0.5 m<sup>2</sup> (5.2 ft<sup>2</sup>) per 250 mm (10" module).

### Retention Characteristics

The retention characteristics of PREPOR GP have been determined by a combination of controlled laboratory tests and in-use monitoring for a number of organisms. Bacterial challenge testing is carried out to methods specified in ASTM F838-83 (10<sup>7</sup> organisms/cm<sup>2</sup> minimum

Organism	Approx. cell size (Diameter x length μm)	Typical titre reduction organisms/cm <sup>2</sup>			
		A	B	D	E
<i>Serratia Marcescens</i>	0.5 - 0.8 x 0.9 - 2.0	10 <sup>4</sup>	10 <sup>3</sup>	-	-
<i>Oenococcus oenos</i>	0.5 - 0.7 x 0.7 - 1.2	10 <sup>4</sup>	10 <sup>3</sup>	-	-
<i>Escherichia coli</i>	0.5 - 0.7 x 0.7 - 1.2	10 <sup>4</sup>	10 <sup>3</sup>	-	-
<i>Saccharomyces cerevisiae</i>	1.0 (spherical buds)	10 <sup>7</sup>	10 <sup>6</sup>	10 <sup>4</sup>	10 <sup>3</sup>

### Recommended Operating Conditions

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

Temperature		Maximum Forward dP	
°C	°F	(bar)	(psi)
20	68	5.0	73
40	104	4.0	58
60	140	3.0	44
80	176	2.0	29
90	194	1.0	15
>100 (steam)	>212 (steam)	0.3	4

Capsules may be operated up to a temperature of 40°C (104°F) at line pressures up to 5.0 bar (73 psig) for liquids and 4.0 bar (58 psi) in gas applications.

### Cleaning and Sterilisation

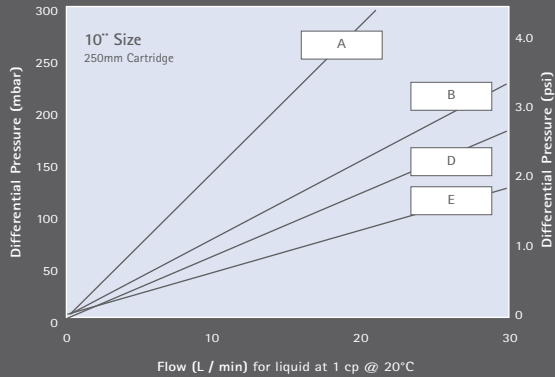
PREPOR GP cartridges can be repeatedly steam sterilised in situ or autoclaved up to 121°C (250°F). They can be sanitised with hot water up to 90°C (194°F) and are compatible with a wide range of chemicals. Capsules can be repeatedly autoclaved up to 121°C (250°F).

For detailed operational procedures and advice on cleaning and sterilisation, please contact the Technical Support Group through your usual **domnick hunter** contact.

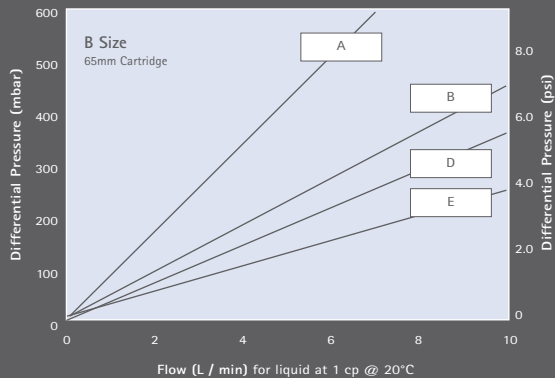
### Recommended Rinse Volume

Prior to use - 20 litres per 10" cartridge.

## Cartridge Flow Rates



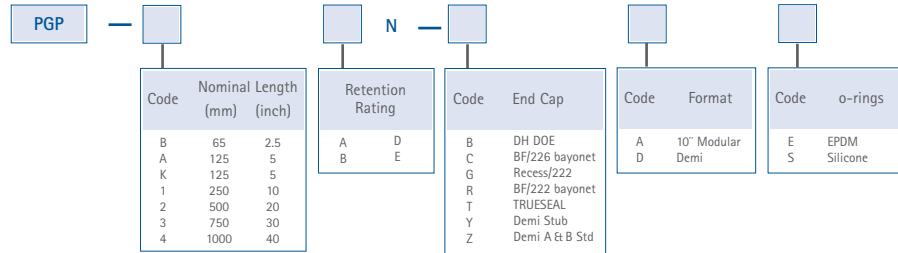
For K size for a given flow rate multiply 10" size differential pressure by 2



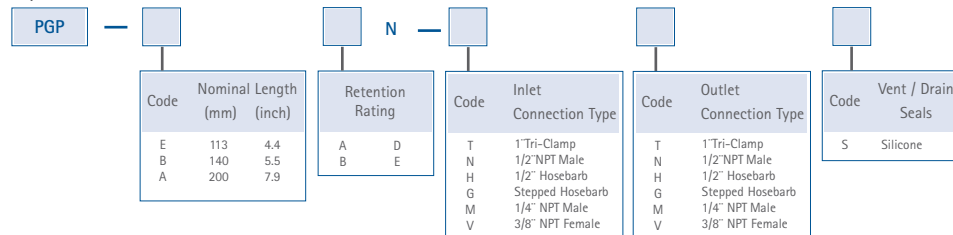
For A size for a given flow rate divide B size differential pressure by 2  
For E size for a given flow rate multiply B size differential pressure by 2

## Beverage

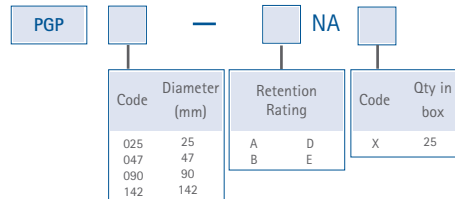
### Cartridges



### Capsules



### Discs



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