PREPOR PP Filter Cartridges

- liquid filters
- polypropylene

PREPOR PP filter cartridges will significantly reduce numbers of yeast and spoilage organisms from beverage products, to provide extremely cost effective microbial 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.

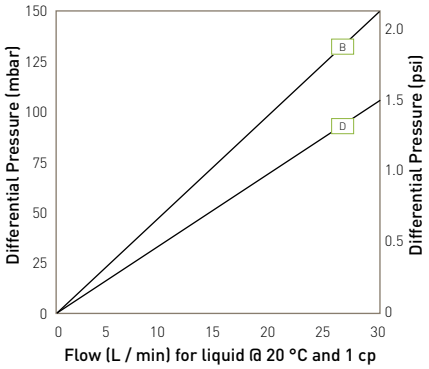
The filters will withstand harsh operational conditions and repeated cleaning, making them ideal for extended use in the bulk conditioning of products prior to membrane 'sterilisation' and pasteurisation. Their mechanical strength and wide chemical resistance also make them suitable for long-term contact with strong cleaning agents and detergents.

Note: PREPOR is a registered trademark of Parker domnick hunter

Features and Benefits

- Yeast and bacterial reduction to provide short term microbial stability
- Adjustment of filterability of bulk liquids after tank storage or transport
- Fine clarification to provide bright finished product
- Prolonged contact with hot water, steam and chemicals
- Prefiltration duty to extend the lifetime of downstream microporous filters

Performance Characteristics



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

10¨ Size (250 mm) Cartridge

Specifications

Materials of Construction

- Filtration Media: Polypropylene
- Upstream Support: Polypropylene
- Downstream Support: Polypropylene
- Inner Support Core: Polypropylene
- Outer Protection Cage: Polypropylene
- End Caps: Polypropylene
- End Cap 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, EC1935 / 2004 and current USP Plastics Class VI - 121 °C and ISO10993 equivalents.

Recommended Operating Conditions

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

Temperature °C	Temperature °F	Max. Forward dP (bar)	Max. Forward dP (psi)
20	68	5.0	72.5
40	104	4.0	58.0
60	140	3.0	43.5
80	176	2.0	29.0
90	194	1.0	14.5
>100 (steam)	>212 (steam)	0.3	4.0

Capsules may be operated up to a temperature of 40 °C (104 °F) at line pressures up to 5.0 barg (72.51 psig) for liquids and 4.0 barg (58.01 psig) in air / gas.

Effective Filtration Area (EFA)

10" (250 mm) 0.5 m^2 (5.38 ft^2)

Cleaning and Sterilisation

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

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

Retention Characteristics

The retention characteristics of PREPOR PP 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 F838-05.

Organism	Approx. Cell Size (µm)*	Typical Titre Reduction B	Typical Titre Reduction D
Serratia marcescens	0.5 - 0.8 x 0.9 - 2.0	10^2	-
Oenococcus oenos	0.5 - 0.7 x 0.7 - 1.2	10^2	-
Escherichia coli	1.1 - 1.5 x 2.0 - 6.0	10^2	-
Saccharomyces cerevisiae	1.0 (spherical buds)	10^4	10^2

Recommended Rinse Volume

Prior to use - 10 litres per 10" (250 mm) filter cartridge.

Ordering Information

Cartridges

PPP - [ ] [ ] N - [ ] [ ] [ ]

Code	Length (Nominal)
B	2.5" (65 mm)
A	5" (125 mm)
K	5" (125 mm)
1	10" (250 mm)
2	20" (500 mm)
3	30" (750 mm)
4	40" (1000 mm)

Retention Rating
B D

Code	Endcap (10")
B	dh DOE
C	BF / 226 Bayonet
G	Recess / 222
R	BF / 222 Bayonet

Code	Endcap (Demi)
T	TRUESEAL
Y	Demi Stub
Z	Demi A & B Std

Code	Format
A	10" Modular
D	Demi

Code	O-rings
E	EPDM
S	Silicone

Capsules

PPP - [ ] [ ] N - [ ] [ ] - [ ]

Code	Length (Nominal)
E	4.4" (113 mm)
B	5.5" (140 mm)
A	7.9" (200 mm)

Retention Rating
B D

Code	Inlet Connection
T	1" Tri-Clamp
N	1/2" NPT Male
H	1/2" Hosebarb
G	Stepped Hosebarb
M	1/4" NPT Male
V	3/8" NPT Female

Code	Outlet Connection
T	1" Tri-Clamp
N	1/2" NPT Male
H	1/2" Hosebarb
G	Stepped Hosebarb
M	1/4" NPT Male
V	3/8" NPT Female

Code	Vent / Drain Seals
S	Silicone

* Approx. values as in "Holt, J.G., Krieg, N.R., Sneath, P.H.A., Staley, J.T., Williams, S.T., 1994. Bergey's Manual of Determinative Bacteriology, Ninth Edition, Williams & Wilkins".
" Kurzmann, C.P., Fell, J.W., 1998 The Yeasts. A Taxonomic Study. Elsevier Science Publisher BV, Amsterdam, The Netherlands.

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