



# PREPOR GF Filter Cartridges

- liquid filters
- glass microfibre

PREPOR GF liquid filter cartridges are utilized for the clarification, stabilization and bioburden reduction of aqueous solutions, media and biologicals.

These filters have a high dirt holding capacity and exhibit exceptional flow performance compared to polypropylene filters. The hydrophilic nature of PREPOR GF filter cartridges also makes them more suitable for gravity fed systems.

PREPOR GF utilizes a glass microfibre filter medium encased within an upstream polypropylene mesh and a downstream non-woven filter support material. PREPOR GF filter cartridges are dimensionally stable with no media migration. The pleat pack is supported by an inner polypropylene core and outer polypropylene cage, heat bonded to polypropylene end caps.

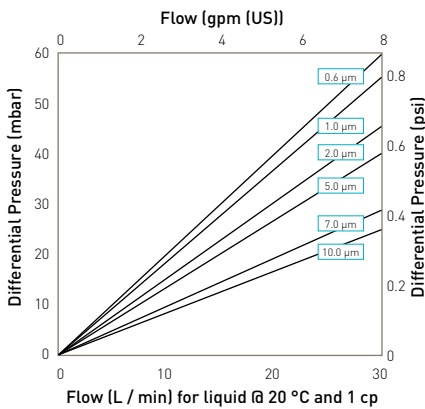
## Features and Benefits

- Micron rating range from 0.6 to 10 micron
- High capacity filter media giving microbial retention
- Wide range of end caps to allow retrofitting of existing systems
- Heat bonded construction
- High filtration area



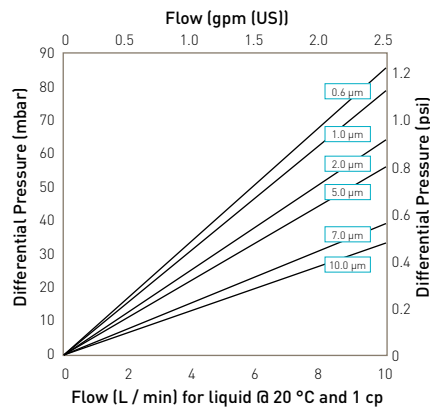
Note: PREPOR is a registered trademark of Parker domnick hunter

## Performance Characteristics



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

10" Size (250 mm) Cartridge



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

B Size (65 mm) Cartridge

## Specifications

### Materials of Construction

- Filtration Membrane: Glass Microfibre
- 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\*
  - \*Not available in B & L endcap variants
- Standard o-rings/gaskets: Silicone / EPDM
- Capsule Body: Polypropylene
- Capsule Vent Seals: Silicone
- Filling Bell: Polycarbonate
- Syringe Filter Body: Polypropylene

### 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		Max. Forward dP	
°C	°F	(bar)	(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 can be operated up to a temperature of 40 °C (104 °F) at line pressures up to 5.0 barg (72.51 psig) for liquids.

### Effective Filtration Area (EFA)

10" (250 mm) Up to 0.6 m<sup>2</sup> (6.3 ft<sup>2</sup>)

### Cleaning and Sterilization

PREPOR GF cartridges can be repeatedly steam sterilized in situ or autoclaved at up to 121 °C (249.8 °F). They can be sanitized 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 121 °C (249.8 °F).

### Retention Characteristics

The retention characteristics of PREPOR GF have been determined through controlled laboratory tests challenging with a standard aqueous suspension of ACFTD (AC Fine Test Dust) using on-line laser particle counters.

Efficiency β Ratio	Micron Rating at Various Efficiencies					
	>99.99%	99.98%	99.90%	99%	95%	90%
0.6 & 0.8 μm	0.60	0.50	0.46	0.33	0.25	0.22
1.0 & 1.5 μm	1.0	0.80	0.60	0.52	0.42	0.35
2.0 μm	1.5	1.2	0.93	0.77	0.63	0.47
5.0 μm	2.0	1.6	1.5	1.2	0.82	0.73
7.0 μm	5.0	4.3	3.6	2.9	2.3	2.0
10.0 μm	10.0	9.2	7.9	5.9	4.4	4.0

### Pharmaceutical Validation

A full validation guide is available upon request from Laboratory Services Group (LSG).

## Ordering Information

### Cartridges

**ZCGF** [ ] - [ ] [ ] - [ ] [ ]

Code   Length (Nominal)	Code   Micron	Code   Endcap (10")	Code   Variant	Code   O-rings
B* 2.5" (65 mm)	.60 0.6 μm	B* dh DOE	P Pharmaceutical	E EPDM
A* 5" (125 mm)	.80 0.8 μm	C BF / 226 Bayonet	S* Steam Sterilizable	P PTFE Encapsulated Silicone
K 5" (125 mm)	1.0 1.0 μm	D Fin / 222	/ None	S* Silicone
1 10" (250 mm)	1.5 1.5 μm	E Flat Top / 222		V Viton
2 20" (500 mm)	002 2.0 μm	G Recess / 222		
3 30" (750 mm)	005 5.0 μm	H UF Retrofit		
4 40" (1000 mm)	007 7.0 μm	J SOE (no o-ring)		
	010 10.0 μm	L* dh DOE		
		N Internal 213		
		R BF / 222 Bayonet		

\* Supplied in packs of 3.

\* For detailed operational procedures and advice on cleaning and sterilization, please contact the Technical Support Group through your usual Parker-donnick hunter contact.

\* Silicone o-ring supplied as standard without having to specify the 'S' code.

**Code | Endcap (Demi)**

SK Retrofit
T TRUESEAL
Y Demi Stub
Z Demi A & B Std

\* EPDM gaskets supplied as standard

### Capsules

**ZEGF** [ ] - [ ] [ ] - [ ] [ ] - [ ] [ ] - [ ] [ ]

Code   Length (Nominal)	Code   Micron	Code   Inlet Connection	Code   Outlet Connection	Code   Variant	Code   Grade	Code   Pack N°	Code   Accessory
E 4.4" (113 mm)	.60 0.6 μm	T 1" Tri-Clamp	T 1" Tri-Clamp	P Pharmaceutical	N Non-Sterile	3 Pack of 3	FB Filling Bell
B 5.5" (140 mm)	.80 0.8 μm	N 1/2" NPT Male	N 1/2" NPT Male				
A 7.9" (200 mm)	1.0 1.0 μm	H 1/2" Hosebarb	H 1/2" Hosebarb				G & H connections only
	1.5 1.5 μm	G Stepped Hosebarb	G Stepped Hosebarb				
	002 2.0 μm	M 1/4" NPT Male	M 1/4" NPT Male				
	005 5.0 μm	Q Walther QC	Q Walther QC				
	007 7.0 μm	R Grommel / QC	R Grommel / QC				
	010 10.0 μm	V 3/8" NPT Female	V 3/8" NPT Female				

### Syringe Filters

**ZSGF** [ ] - [ ] [ ] - [ ] [ ] - [ ] [ ]

Code   Diameter	Code   Micron	Code   Micron	Code   Inlet / Outlet Connection	Code   Inlet / Outlet Connection	Code   Variant	Code   Grade	Code   Options
025 25 mm	.60 0.6 μm	002 2.0 μm	F Female Luer Lock	F Female Luer Lock	P Pharmaceutical	N Non-sterile	S Standard
050 50 mm	.80 0.8 μm	005 5.0 μm	G Stepped Hosebarb	G Stepped Hosebarb			
	1.0 1.0 μm	007 7.0 μm					
	1.5 1.5 μm	010 10.0 μm					

**Code | Pack N°**

025 25 per box

Parker donnick hunter has a continuous policy of product development and although the Company reserves the right to change specifications, it attempts to keep customers informed of any alterations. This publication is for general information only and customers are requested to contact our Process Filtration Sales Department for detailed information and advice on a products suitability for specific applications. All products are sold subject to the company's Standard conditions of sale.

PROSEP FILTER SYSTEMS LTD  
Unit G19  
River Bank Way  
Lowfields Business Park  
Elland  
West Yorkshire  
HX5 9DN

**Tel: 01422 377367**

**Fax: 01422 377369**

Email: [enquiries@prosep.co.uk](mailto:enquiries@prosep.co.uk)

[www.prosep.co.uk](http://www.prosep.co.uk)

**Map and Directions to Prosep Filters Limited**



Leave M62 at Junction 24.

At roundabout adjacent to Cedar Court Hotel take 2nd exit onto dual carriageway (A629), signposted Halifax.

Take 1st exit slip road.

At roundabout at end of sliproad, take 3rd exit off.

This is the entrance to Lowfields Business Park.

Proceed straight over 1st roundabout.

At next roundabout take 2nd exit onto River Bank Way - Prosep Filters can be found on the left after the S-bend.

[Link to Google Maps](#)