PEPLYN PLUS Filter Cartridges

- liquid filters
- polypropylene





PEPLYN PLUS liquid filter cartridges are utilised for the clarification and prefiltration of a wide range of products in the pharmaceutical, beverage, ultrapure water and fine chemical industries.

The all polypropylene construction ensures a broad range of chemical compatibility making PEPLYN PLUS cartridges particularly suitable for the filtration of aggressive and viscous chemicals and solvents. They do not suffer from hydrolysis in aggressive solutions which would result in the contamination of the process fluid.

Extensive research has resulted in filter media with continuously graded fibre density giving progressively finer particulate retention through the depth of the media. This combined with optimised media pleating density gives PEPLYN PLUS cartridges exceptional lifetime performance.

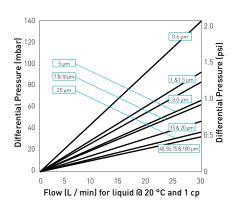
Features and Benefits

- Micron rating range from 0.6 to 100 micron
- Pleated media for high flow rates and long life
- Graded density for excellent particle retention
- Wide range of end caps to provide retrofitting of existing systems
- All polypropylene construction



Note: PEPLYN 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

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

10" Size (250 mm) Cartridge

B Size (65 mm) Cartridge

Specifications

Materials of Construction

FILLI ation Media:	Potypropyterie
Upstream Support:	Polypropylene
Downstream Support:	Polypropylene
■ Inner Support Core:	Polypropylene
Outer Protection Cage:	Polypropylene
■ End Caps:	Polypropylene
■ End Cap Insert:	316L Stainless Steel
■ Standard o-rings/gaskets:	Silicone / EPDM
■ Capsule Body:	Polypropylene
■ Capsule Vent Seals:	Silicone
Filling Bell:	Polycarbonate

Food and Biological Safety

Syringe Filter Body:

Materials conform to the relevant requirements of 21CFR Part 177, EC1935 / 2004 and current USP Plastics Class VI - 121 °C and ISO10993 equivalents.

Polypropylene

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 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) 0.79 m² (8.50 ft²)

Cleaning and Sterilisation

PEPLYN PLUS 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 PEPLYN PLUS have been determined by a single-pass technique using suspensions of ISO 12103 Part 1 A2 Fine and A4 Course test dust in water.

	Media Code	Micro >99.99% 10000	n Rating a 99.98% 5000	t Various E 99.90% 1000	fficiencies 99% 100	90% 10
Γ	.60	0.60	0.57	0.54	0.32	0.20
	1.0	1.00	0.95	0.90	0.70	0.50
	1.5	1.50	1.40	1.10	0.80	0.60
	003	3.00	2.80	1.80	1.00	0.70
	005	5.00	4.70	4.50	3.50	1.00
	007	7.00	6.70	6.30	4.50	2.50
	010	10.00	8.00	7.00	4.80	2.80
	015	15.00	12.00	10.00	7.20	4.50
	020	20.00	16.00	14.00	10.00	6.00
	025	25.00	20.00	17.00	12.00	7.00

Recommended Rinse Volume

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

Pharmaceutical Validation

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

