

PROCLEAR PP Filter Cartridges

- liquid filters
- polypropylene media

PROCLEAR PP cartridge filters are designed for a wide range of prefiltration duties within the production of pharmaceuticals and are particularly suited to applications where chemical compatibility is an issue.

The optimum pleat configuration and graded density polypropylene media used in PROCLEAR PP cartridge filters ensure the filters have the highest possible throughput to blockage resulting in long service service life.

The PROCLEAR PP range of cartridge filters is fully supported by a comprehensive validation guide to simplify its specification into new and existing processes.

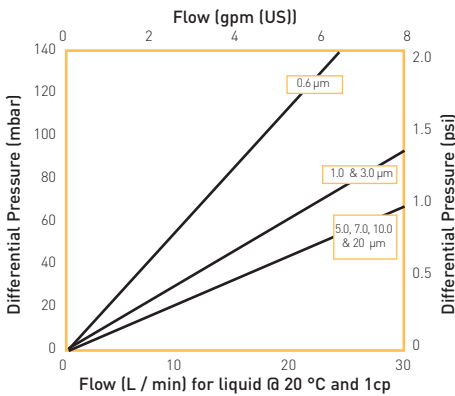


Note: PROCLEAR is a registered trademark of Parker domnick hunter

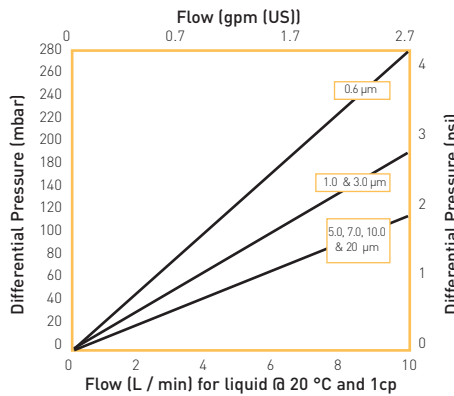
Features and Benefits

- Graded density polypropylene media for high capacity
- All polypropylene construction
- Extremely robust to withstand aggressive conditions

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 (125 mm) cartridge

PROCLEAR PP Filter Cartridges

Specifications

Materials of Construction

- Filtration Membrane: Polypropylene
- Upstream Support: Polypropylene
- Downstream Support: Polypropylene
- Inner Support Core: Polypropylene
- Outer Protection Cage: Polypropylene
- End Caps: Polypropylene
- End Caps Insert: 316L Stainless Steel
- Standard o-rings / gaskets: Silicone

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	Maximum Forward DP (bar)	Maximum 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

Effective Filtration Area (EFA)

10" (250 mm)	up to 0.57 m ² (6.1 ft ²)
K Size	up to 0.28 m ² (3.0 ft ²)
A Size	up to 0.20 m ² (2.2 ft ²)
B Size	up to 0.10 m ² (1.1 ft ²)
E Size	up to 0.05 m ² (0.6 ft ²)

Cleaning and Sterilisation

PROCLEAR PP cartridges can be repeatedly steam sterilised in situ or autoclaved for 30 cycles at up to 130 °C (266 °F). They can be sanitised with hot water at up to 90 °C (194 °F) and are compatible with a wide range of chemicals.

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

Biological Safety

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

Non-Volatile Extractables (NVE)

Total NVEs extracted in the first 5 litre flush of purified water for a 10" cartridge are <6 mg.

Oxidisable Substances

PROCLEAR PP filter cartridges meet current USP and EP quality standards for sterile purified water for oxidisable substances following a <1 litre water flush.

TOC / Conductivity

The filtrate quality from a 10" PROCLEAR PP conforms to the requirements of current USP <643> (TOC) and USP <645> (conductivity) within the first 200 ml flush of purified water.

Endotoxins

Aqueous extracts from the 10" PROCLEAR PP contain < 0.125 EU / ml when tested in accordance with the Limulus Amoebocyte Lysate test.

Quality Standards

Pharmaceutical grade products are manufactured in accordance with cGMP and 100% flushed with pharmaceutical purified water. A sample of each lot is tested to demonstrate conformity to validated claims.

Pharmaceutical Validation

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

Ordering Information

Code Length (Nominal)	Code Micron	Code Endcap	Code Variant	Code O-rings ¹
B 2.5" (65 mm)	96 0.6 µm	B dh DOE	P Pharmaceutical	E EPDM ²
A 5" (125 mm)	01 1.0 µm	C BF / 226 Bayonet		S Silicone
K 5" (125 mm)	03 3.0 µm	G Recess / 222		V Viton™ ³
1 10" (250 mm)	05 5.0 µm	R BF / 222 Bayonet		
2 20" (500 mm)	07 7.0 µm	SK Retrofit		
3 30" (750 mm)	10 10.0 µm	T TRUESEAL		
4 40" (1000 mm)	20 20.0 µm	Y DEMI Stub		
		Z DEMI A&B Std		

Ratings based on efficiencies of > or = 99.98% using internal test procedure SOP018 based on ASTM F795-88 1993.

¹ Silicone o-ring supplied as standard without having to specify the 'S' code
² EPDM - Ethylene Propylene Diene Monomer Rubber
³ Viton™ is a registered trademark of DuPont Dow Corporation

Other Available Formats

