

# PROPLEAT PP Food and Beverage

Filter Cartridges



PROPLEAT PP filters have been developed to bridge the gap between meltblown depth filters and absolute rated pleated media filters for liquid clarification.

Their continuous length and all polypropylene construction results in a robust yet economical design that maximizes the effective filtration area and provides wide chemical compatibility, coupled with low extractable levels.

All PROPLEAT PP cartridges exhibit 99% efficiency at their given retention rating, providing consistent and economical clarification in a diverse range of applications.

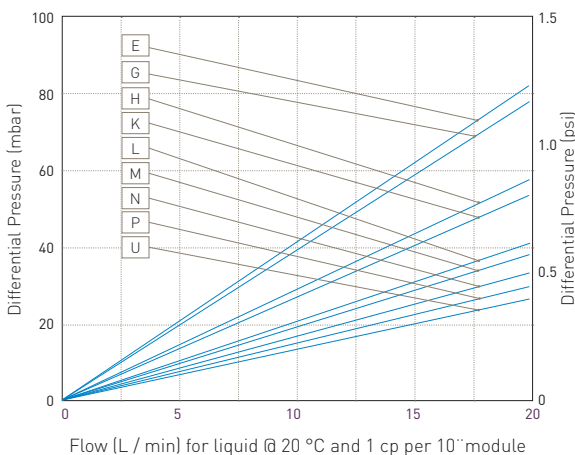
## Features

- A wide range of retention ratings
- Continuous length thermally bonded polypropylene sleeve and core
- Elevated temperature option available for hot water sanitization and steam sterilization

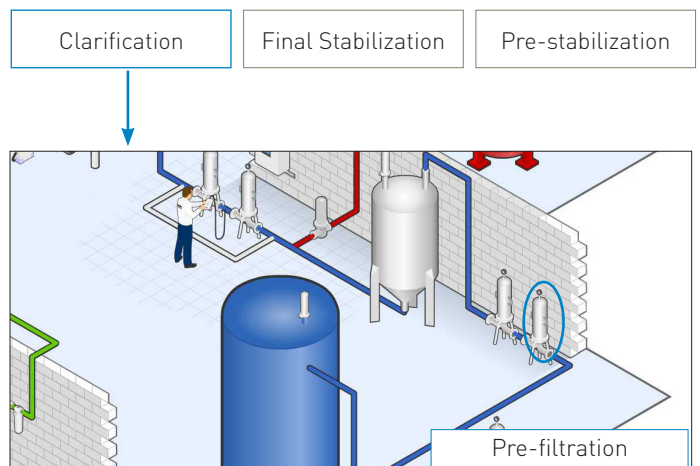
## Benefits

- Flexibility to excel in a wide range of clarification applications
- Strong, robust construction to provide stable retention in diverse process conditions
- Ability to be cleaned and sterilized in-situ

## Performance Characteristics



## Filtration Stage



## 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\*

\* Not available in B and L End Cap variants

- Standard o-rings / Gaskets: Silicone / EPDM

### Effective Filtration Area (EFA)

10" ( 250 mm) Up to 0.6 m<sup>2</sup> (6.5 ft<sup>2</sup>)

### Cleaning and Sterilization

PROPLEAT PP cartridges can be repeatedly steam sterilized in-situ or autoclaved at up to 121 °C (250 °F). They can be sanitized with hot water at up to 90 °C (194 °F) and are compatible with a wide range of chemicals.

### Minimum Box Quantities

All cartridges supplied in boxes of 6.

### Dimensions

- Nominal outside diameter:
  - 2.8" (70 mm) C,D,E,R Style
  - 2.5" (64 mm) B,L Style
- Nominal inside diameter:
  - 1.1" (28 mm)

### Food Contact Compliance

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



### Retention Characteristics

The retention characteristics of PROPLEAT PP filter cartridges have been determined by a single-pass technique using suspensions of ISO 12103 Pt. 1 A2 Fine and A4 Course test dust in water.

Media Code	99% approximate ratings at lower efficiencies		
	β Ratio	100	95%
E	0.8	0.7	0.6
G	1.0	0.9	0.7
H	3.5	2.3	1.0
K	4.8	3.8	2.8
L	7.2	6.0	4.5
M	10.0	8.0	6.0
N	12.0	9.0	7.0
P	18.0	13.0	10.0
U	40.0	30.0	25.0

### Standard Lengths (DOE seal to seal)

Length	B Style	L Style
1	9 7/8" (250 mm)	9 7/8" (250 mm)
2	19 1/2" (498 mm)	20" (508 mm)
3	29 3/8" (746 mm)	30 1/8" (766 mm)
4	39 1/8" (994 mm)	40" (1014 mm)

### 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

### Recommended Rinse Volume

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

## Ordering information

Code	Length (Nominal)	Retention Rating	Code	End Cap (10 inch)	Code	O-rings	Code	Option
PRPP			N					
1	10" (250 mm)	E	B	dh DOE	S	Silicone	S*	Hot water / steam option
2	20" (500 mm)	G	C	BF / 226 Bayonet	E	EPDM		
3	30" (750 mm)	H	D	Fin / 222				
4	40" (1000 mm)	K	E	Flat Top / 222				
		L	L	Extended DOE				
		M	R	BF / 222 Bayonet				
		N						
		P						
		U						

\*Not available in B and L End Caps

VSH & HSL  
HOUSING RANGE  
AVAILABLE