

# Profile® Filter Cartridges with Ultipleat® Construction

## Advanced Technology, Unsurpassed Performance



**Profile** Filters with **Ultipleat** construction are an upgrade from pleated depth filter technology pioneered by Pall, and incorporate a revolutionary new crescent-shaped pleat geometry which enables a 30% increase in effective filtration area.

The crescent-shaped pleat construction, which is unique to Pall, combined with **Profile** depth filter medium provides a very low clean pressure drop and an unsurpassed service life.

### Process Improvements

- **Reduced operating costs and downtime** resulting from the crescent-shaped pleat construction allows optimization of filter area, giving unsurpassed service life — thus reducing the frequency of changeout and providing substantial savings in the costs of maintenance and consumables
- **Consistent and reliable performance** is a benefit of the absolute and 100% efficient removal rating along with the fixed pore structure that prevents both unloading of contaminants and media migration
- **Excellent chemical compatibility and ease of disposal** due to the all-polypropylene construction which leads to lower filter inventories and allows complete incineration\* of the spent cartridge.

**Note:** In the Code 7 style there is a metal insert in the adapter.

\* Consult local and national regulations

**Note:** These filters are also available in **Kleenpak** Nova capsule format.

### Applications

**Profile** Filters with **Ultipleat** construction have advantages in the filtration of viscous liquids or for high flow-rates when there may be significant sizing and economic benefits.

### Quality and Bio-Safety

#### Biological Tests

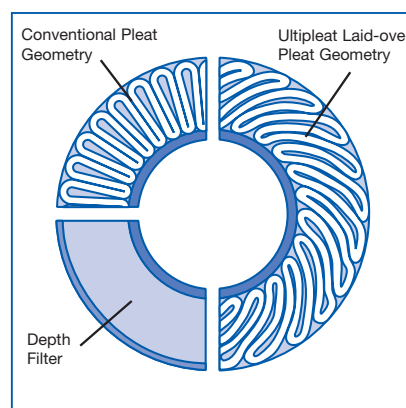
- Meets USP Biological Reactivity, In Vivo, for Class VI-121 °C plastics

#### Effluent Quality Tests\*

- Meets Cleanliness per USP Particulates in Injectables
- Non-Fiber-Releasing
- Non-Pyrogenic per USP Bacterial Endotoxins (< 0.25 EU/mL)
- Meets Total Organic Carbon and Water Conductivity per USP Purified Water, pH per USP Sterile Purified Water

\* Per lot sample soak or rinse-up flush aliquots.

Diagrammatic Comparison of Various Filter Constructions



# Profile Filter Cartridges with Ultipleat Construction

## Technical Specifications

### Operating Conditions in Compatible<sup>(1)</sup> Liquids

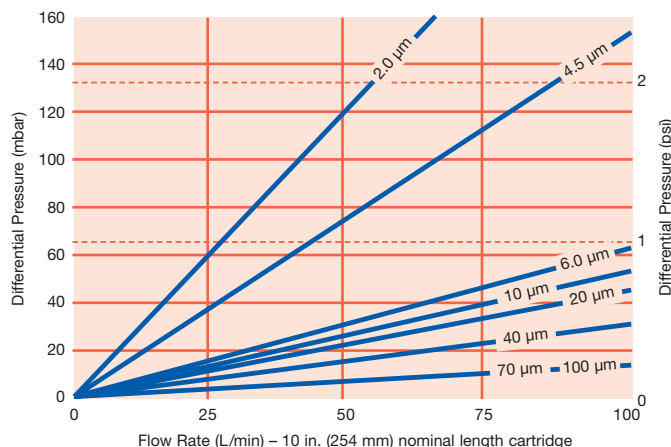
<b>Maximum Differential Pressure</b>	4.1 bar (60 psi)	3.4 bar (49 psi)	2.0 bar (29 psi)	1.0 bar (15 psi)
<b>Operating Temperatures</b>	30 °C (86 °F)	50 °C (122 °F)	70 °C (158 °F)	80 °C (176 °F)

<sup>(1)</sup> Fluids which do not soften, swell, or adversely affect the filter or materials of construction.

### Steam-sterilization

Up to 140 °C (284 °F) for AB style filter elements

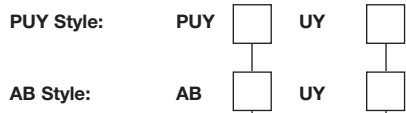
### Typical Liquid Flow Rates<sup>(2)</sup>



<sup>(2)</sup> Typical initial clean media ΔP 10 in. (254 mm) element, water at 20 °C (68 °F), viscosity 1 cP. For assistance with filter assembly, sizing and housing selection, contact your local Pall representative.

## Ordering Information

**PUY Style** Double open ended 63mm (2.5in) diameter cartridge with gaskets both end. Cartridge sealed with tie rod and seal nut.



Code	Nominal Length	Code	Removal Rating <sup>(3)</sup>	Cartridge Style	Code	Filter Grade	Code	Seal Options
1	10 in. (254 mm)	020	2.0 μm (extrapolated value)	Double 226 O-ring with bayonet lock and fin end	P	Pharmaceutical*	J	Ethylene propylene (Standard)
2	20 in. (508 mm)	045	4.5 μm		Omit	General Use	H4	Silicone
3	30 in. (762 mm)	060	6.0 μm				H13	Buna-N
4	40 in. (1016 mm)	100	10 μm					
		200	20 μm					
		400	40 μm					
		700	70 μm					
		1000	100 μm					

\* Pall pharmaceutical-grade filters are designed for use in conformance with CGMP in Manufacturing, Processing, Packing or Holding of Drugs (21CFR210) and CGMP for finished Pharmaceuticals (21CFR211.72) including batch release certificate and full traceability.

<sup>(3)</sup> Absolute rating in this publication means the value in microns at which the modified OSU-F2 Test gives a Beta Value of ≥ 5000 (> 99.98% removal efficiency).