

# HDC® II Filter Cartridges

## High Dirt Retention All-polypropylene Prefilters



Pall **HDC II** all-polypropylene filter cartridges incorporate proprietary **HDC II** tapered pore polypropylene depth media. The single open-ended (SOE) AB filter cartridge style features a high-area pleated modular element construction designed to fit in sanitary filter housings.

**HDC II** filter cartridges are well-suited for a broad range of fine particle and prefiltration applications where purity, economy and reliability are critical. Typical applications include biologicals, pharmaceuticals, fermentation feeds and intermediates, and vaccines.

### Features and Benefits

- All-polypropylene construction
- Resin-free, melt-sealed
- Constant density tapered pores
- High-capacity for long-life
- Fixed pore, non-shedding
- Low protein binding
- Low extractables
- Broad chemical compatibilities
- Autoclavable and steamable in situ
- Manufactured for use in conformance with cGMP
- ISO 9000 Certified Quality System
- Pharmaceutical P optimized grades with Certificate of Test provided
- FDA-listed materials per 21 CFR

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

### Quality and Bio-Safety

#### Biological Tests

- Meets USP Biological Reactivity Test, 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.

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## Technical Specifications

### Materials of Construction

<b>Medium</b>	Polypropylene
<b>Support and Drainage Layers</b>	Polypropylene
<b>Core, Cage and End Caps</b>	Polypropylene
<b>P Grade Code 7 Adapters</b>	Polypropylene with encapsulated stainless steel ring
<b>O-ring</b>	Silicone <sup>(1)</sup>

<sup>(1)</sup> Other polymers available

### Removal Ratings (Liquid)<sup>(2)</sup>

70 µm, 40 µm, 20 µm, 10 µm, 6 µm, 4.5 µm, 2.5 µm, 1.2 µm, 0.6 µm<sup>(3)</sup>

<sup>(2)</sup> > 99.98% by modified OSU-F2 test. 0.6 to 20 µm in water, 40 and 70 µm in oil.

<sup>(3)</sup> Extrapolated value.

### Nominal Dimensions

<b>Lengths</b>	10 in. (254 mm), 20 in. (508 mm), 30 in. (762 mm), 40 in. (1016 mm)
<b>Diameter</b>	70 mm (2.75 in.)

### Operating Conditions

<b>Maximum Differential Pressure and Temperature<sup>(4)</sup></b>	5.5 bard (80 psid) to 50 °C (122 °F) 4.1 bard (60 psid) to 80 °C (176 °F)
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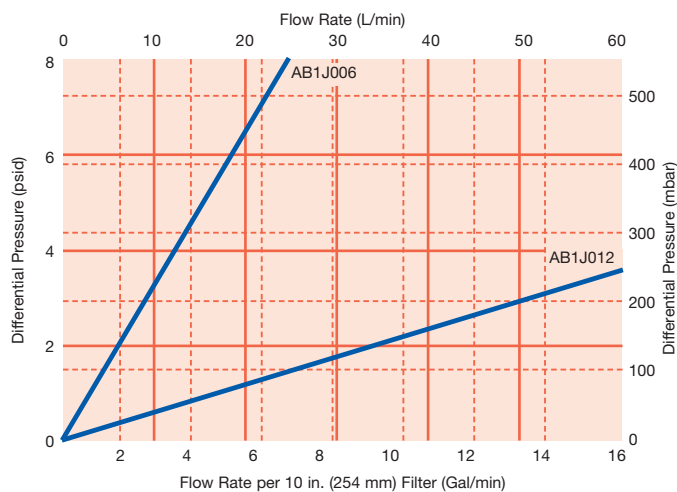
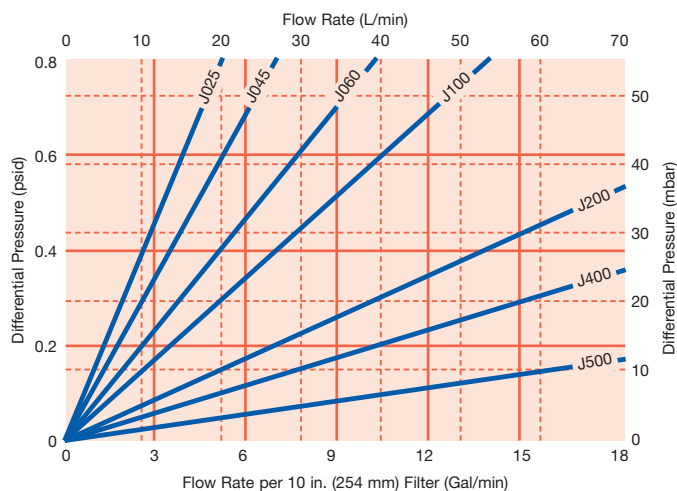
<sup>(4)</sup> Using compatible fluids.

### Autoclaving and Steaming in situ<sup>(5)</sup>

<b>Maximum Steam Temperature</b>	140 °C (284 °F)
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<sup>(5)</sup> Filters should be qualified in actual use. Contact Pall for recommended procedures.

### Typical Liquid Flow Rates<sup>(6)</sup>



<sup>(6)</sup> Typical initial media ΔP 10 in. (254 mm) element; water at 20 °C (68 °F); viscosity 1 cP. For assistance in filter assembly sizing and housing selection, contact your local Pall representative.

### Ordering Information

Code	Nominal Length	Code	Removal Rating	Nominal Filter Area <sup>(7)</sup>	Cartridge Style	Code	Filter Grade	Code	Gasket Option
1	10 in. (254 mm)	J006	0.6 µm	0.63 m <sup>2</sup> (6.7 ft <sup>2</sup> )	7 Double 226 O-ring with bayonet lock and fin end <sup>(8)</sup>	P	Pharmaceutical*	H4	Silicone
2	20 in. (508 mm)	J012	1.2 µm	0.70 m <sup>2</sup> (7.5 ft <sup>2</sup> )		Omit	General Use	Other materials available on request.	
3	30 in. (762 mm)	J025	2.5 µm	0.88 m <sup>2</sup> (9.5 ft <sup>2</sup> )		* 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.			
4	40 in. (1016 mm)	J045	4.5 µm	0.88 m <sup>2</sup> (9.5 ft <sup>2</sup> )					
		J060	6 µm	0.42 m <sup>2</sup> (4.5 ft <sup>2</sup> )					
		J100	10 µm	0.55 m <sup>2</sup> (6.0 ft <sup>2</sup> )					
		J200	20 µm	0.55 m <sup>2</sup> (6.0 ft <sup>2</sup> )					
		J400	40 µm	0.38 m <sup>2</sup> (4.0 ft <sup>2</sup> )					
		J700	70 µm	0.38 m <sup>2</sup> (4.0 ft <sup>2</sup> )					

<sup>(7)</sup> Per 10 in. (254 mm) element.