



## Profile® Star Filter Cartridges

### Description

To keep pace with advancing technologies, Pall continues its tradition of filtration innovations with the Profile Star filter: a state-of-the-art concept for pleated polypropylene filters. The proven and successful Pall technique of varying the fiber diameter produces a pore-size gradient from coarse (upstream) to fine (downstream) while maintaining constant high void-volume throughout the depth of the filter medium. Profile Star filters offer longer life than many competitive pleated filters. Due to their proprietary construction, Profile Star filters deliver the benefits of both traditional pleated polypropylene and depth style filters — the ideal combination. The pressure drop and flow capability is comparable to competitive pleated polypropylene filters while also providing excellent removal of soft contaminants, such as gels, because of the depth of the medium. Profile Star filters are available in absolute removal ratings from 1.0 µm to 90 µm and in four nominal cartridge lengths:

- ▶ 254 mm (10 in.)
- ▶ 508 mm (20 in.)
- ▶ 762 mm (30 in.)
- ▶ 1016 mm (40 in.)



Their all-polypropylene construction makes them compatible with an extremely wide range of fluids. Cartridges are available in a P grade which is optimized for pharmaceutical applications.

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

### Features and Benefits

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#### Pleated High-area

- ▶ Extraordinarily high dirt-holding capacity
- ▶ Long service life
- ▶ High flow-rates
- ▶ Excellent gel removal capability

#### Fixed Pore Structure

- ▶ No solids unloading under variations in flow or pressure differential
- ▶ Fibers will not migrate or become dislodged and contaminate process fluid

#### All-polypropylene Construction

- ▶ Extremely good chemical compatibility with a wide range of fluids
- ▶ Very low extractables
- ▶ No surfactants or binder resins are used during manufacture
- ▶ Continuous construction without side seam
- ▶ Media melt-sealed to solid components to ensure maximum integrity

### Quality and Bio-Safety

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#### 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.

### Specifications

#### Materials of Construction

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Filter Medium, Cage, Core, End Caps and Adapters	Polypropylene
O-rings	Silicone or Ethylene Propylene (EPDM) as standard

## Maximum Operating Differential Pressures and Temperatures in Compatible Liquids<sup>1</sup>

Maximum Operating Temperature	50 °C	80 °C
Maximum Differential Pressure	5.0 bar (72 psi)	3.4 bar (49 psi)

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

## Steam-sterilizing Temperature (in situ or Autoclave)

125 °C

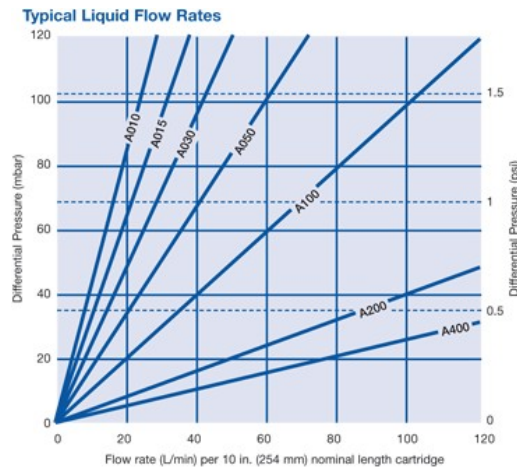
## Cartridge Style

AB Code 3 P grade and AB Code 7

## Maximum Recommended Cumulative Steam Life at 125 °C

10 hours

## Typical Flow Rates



**Note:** Differential pressures are for liquids with a viscosity of 1 cP. Differential pressures for liquids at other viscosities can be conservatively estimated by multiplying the indicated differential pressure by the viscosity in cP. For cartridges of 20 in. (508 mm), 30 in. (762 mm) and 40 in. (1016 mm) nominal length, divide the differential pressure by 2, 3 and 4 respectively. To obtain the total pressure drop of a complete filter assembly the housing pressure drop must be added. Please refer to the relevant housing literature or contact Pall

## Ordering Information

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<b>MCY 1000 Style</b> Double open-ended 70 mm (2.75 in.) diameter element with gaskets on both ends. Sealing is assured by using a tie rod and seal nut.												
<b>MCY 1000</b>												
<b>Code</b>	<b>Nominal Length</b>	<b>Code</b>	<b>Removal Rating<sup>a</sup></b>	<b>Code</b>	<b>Filter Grade</b>	<b>Code</b>	<b>Gasket Option</b>	<b>Cartridge Sealing Arrangements</b>				
1	10 in. (254 mm)	A010	1.0 µm <sup>b</sup>	P	Pharmaceutical <sup>*</sup>	H4	Silicone	MCY1000 Style	AB Style (Other materials are available on request)			
2	20 in. (508 mm)	A015	1.5 µm <sup>b</sup>	Omit	General Use	J	Ethylene propylene	70 mm diameter	70 mm diameter			
3	30 in. (762 mm)	A030	3 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.						70 mm diameter		
4	40 in. (1016 mm)	A050	5 µm							Flat gasket	Code 7	Code 3
		A100	10 µm							Double O-ring seal		
		A200	20 µm									
		A400	40 µm									
<b>AB Style</b> Single open-ended element with double O-rings at one end.												
<b>AB</b>												
<b>Code</b>	<b>Nominal Length</b>	<b>Code</b>	<b>Removal Rating<sup>a</sup></b>	<b>Code</b>	<b>Cartridge Style</b>	<b>Code</b>	<b>Filter Grade</b>	<b>Code</b>	<b>Gasket Option</b>			
1	10 in. (254 mm)	A010	1.0 µm <sup>b</sup>	3	Double 222 O-ring with flat end 70 mm (2.75 in.) diameter	P	Pharmaceutical <sup>*</sup>	H4	Silicone			
2	20 in. (508 mm)	A015	1.5 µm	7	Double 226 O-ring with bayonet lock and fin end, 70 mm (2.75 in.) diameter	Omit	General Use	J	Ethylene propylene			
3	30 in. (762 mm)	A030	3 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.								
4	40 in. (1016 mm)	A050	5 µm									
		A100	10 µm									
		A200	20 µm									
		A400	40 µm									
<sup>a</sup> Absolute rating in this publication means the value in microns at which the modified OSU-F2 test gives a Beta value of > 5000. <sup>b</sup> Extrapolated value.												

If the above table does not display clearly in your browser, you may download it [here](#) for easier viewing.

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## Contact Information

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