

## Profile® UP Filter Cartridges for particle removal

Profile UP filter cartridges are pleated depth filters designed for high particle removal efficiency in food and beverage applications.

### Description

The filter cartridge combines the advantages of a continuously graded pore structure and unique laid-over pleat geometry to provide an increase in effective filtration area and service life.

Fewer cartridges are required for a given flow rate than for a traditional depth style cartridge. Thus, filter vessels are correspondingly smaller, resulting in lower capital and installation costs, as well as reduced operating costs.

### Features and Benefits

Features	Benefits
Fixed fiber matrix with no adhesives or surfactants	<ul style="list-style-type: none"> <li>• Consistent filtrate quality</li> <li>• Highly stable structure</li> <li>• Process reliability</li> </ul>
Media with laid-over pleat geometry	<ul style="list-style-type: none"> <li>• Lower capital and installation costs</li> <li>• Smaller assemblies</li> <li>• Lower operating costs</li> <li>• Longer service life</li> </ul>
Polypropylene filter construction	<ul style="list-style-type: none"> <li>• Broad chemical compatibility</li> </ul>

### Quality

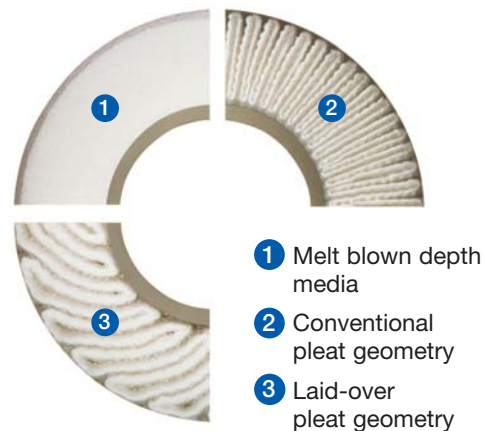
- Cartridges produced in a controlled environment
- Manufactured according to ISO 9001:2008 certified Quality Management System

### Food Contact Compliance

Please refer to the Pall website <http://www.pall.com/foodandbev> for a Declaration of Compliance to specific National Legislation and/or Regional Regulatory requirements for food contact use.



Profile UP Filter Cartridges



### Materials of Construction

Filter Medium	Pleated polypropylene
Support and Drainage	Polypropylene
Helical Wrap	Polypropylene non woven fabric
Cage, Core, Fin End and End Cap	Polypropylene
<i>AB style cartridges only</i>	
Adaptor	Polypropylene with a stainless steel reinforcing ring
O-ring Seal	Ethylene Propylene Rubber or Silicone Elastomer
<i>PUY style cartridges only</i>	
Gasket	Ethylene Propylene Rubber

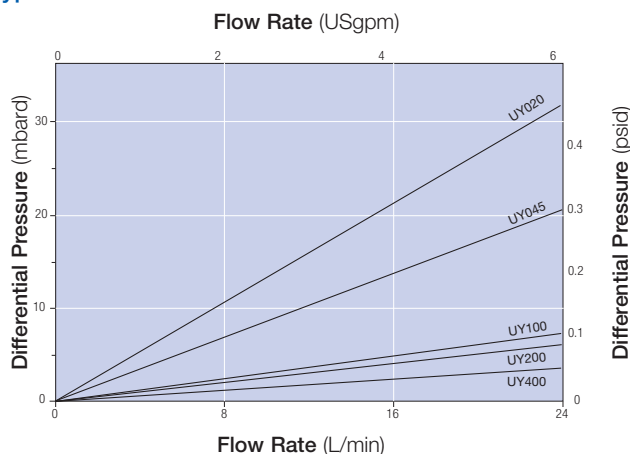
## Technical Information

### Operating Characteristics in Compatible Fluids<sup>1</sup>

Maximum Differential Pressure	Operating Temperature
4.1 bard (60 psid) (forward)	<30 °C (86 °F)
3.4 bard (50 psid) (forward)	<50 °C (122 °F)
2 bard (29 psid) (forward)	<70 °C (158 °F)
1 bard (14.5 psid) (forward)	<80 °C (176 °F)
1 bard (14.5 psid) (reverse)	<20 °C (68 °F)

<sup>1</sup>Compatible fluids are defined as those which do not swell, soften or attack any of the filter components.

### Typical Flow Rates<sup>2</sup>



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

### Liquid Removal Rating

Grade	Rating ( $\mu\text{m}$ ) at 99.98% Efficiency ( $\beta$ -5000)	Rating ( $\mu\text{m}$ ) at 90% Efficiency ( $\beta$ -10)
UY020	2.0*	<1.0
UY045	4.5	1.2
UY100	10	4.3
UY200	20	11
UY400	40	18

Profile UP filter cartridge liquid retention ratings are based on modified OSU-F2 test.

\*The UY020 grade has a 99% removal efficiency ( $\beta$ -100).

### Sterilization and Sanitization<sup>3</sup>

Method	Temperature
<i>In-situ</i> Steam Sterilization	125 °C (257 °F)
<i>In-situ</i> Hot Water Sanitization	80 °C (176 °F)

<sup>3</sup>For applications requiring Sterilization or Sanitization Pall recommends the use of the Code 7 adaptors to ensure filter sealing after cooling. Cartridges should be cooled to system operating temperature prior to use.

### Ordering Information

This information is a guide to the part number structure and possible options. For availability of specific options and housing details, please contact Pall.

Element Part Number: AB W   
 PUY W J

Table 1: Nominal Length

Code	Length
1	254 mm (10")
2	508 mm (20")
3	762 mm (30")
4	1016 mm (40")

Table 2: Removal Rating\*

Code	Removal Rating
UY020	2.0
UY045	4.5
UY100	10
UY200	20
UY400	40

\*Liquid removal rating specifics are detailed in the Liquid Removal Rating Table

Table 3: Adaptor

Code	Description
3	SOE - single open end with flat closed end and external 222 O-rings
7	SOE - single open end with fin end; 2 locking tabs and external 226 O-rings
8	SOE - single open end with fin end and external 222 O-rings

(Code 3, 7 and 8 may be available in selected grades, confirm code availability with your Pall representative.)

Table 4: O-ring Seal Material

Code	Description
H4	Silicone Elastomer
J	Ethylene Propylene Rubber



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Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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