

## Ultipleat® PK Filter



### Description

Pall® Ultipleat PK filter cartridges are designed for high flow rate, aqueous applications required on 7G and 8G liquid crystal display (LCD) processes. These filters can handle flow rates in excess of 200 L/min, thereby reducing the system footprint and change-out costs. Ultipleat PK filters are available in four filter media types; polypropylene, highly asymmetric hydrophilic polysulfone, hydrophilic polyethersulfone and PTFE, providing a choice of removal ratings from 0.1 µm to 40 µm.

- Ideally suited for most LCD wet processing applications, such as substrate cleaning, etching, stripping and DI water flushing
- Broad choice of membranes and removal ratings for ease of filter selection
- Unique, Ultipleat filter construction allows for high flow rates
- Compact design makes for efficient filter change-outs, thus reducing equipment down-time

### Specifications

#### Materials

- Media options: (I) Polypropylene, (II) highly asymmetric hydrophilic polysulfone, (III) hydrophilic polyethersulfone, or (IV) PTFE
- Support and drainage: Polypropylene
- Core: Polypropylene
- End caps: Polypropylene
- Sealing options: (I) Ethylene propylene (EP) U-cup, (II) fluoroelastomer U-cup or (III) FEP encapsulated fluoroelastomer or (IV) Kalrez<sup>1</sup> O-ring

#### Removal Ratings

- Polypropylene:  
2 µm, 4.5 µm, 10 µm, 20 µm, 30 µm, 40 µm
- Highly asymmetric hydrophilic polysulfone:  
0.1 µm, 0.2 µm, 0.45 µm
- Hydrophilic polyethersulfone:  
1.2 µm
- PTFE:  
1 µm, 3 µm, 10 µm

#### Operating Conditions

- Maximum Operating Temperature:  
80°C/176°F
- Maximum Differential Pressure:  
0.41 MPa @ 20°C/60 psid @ 68°F,  
0.34 MPa @ 50°C/50 psid @ 122°F,  
0.31 MPa @ 80°C/45 psid @ 176°F

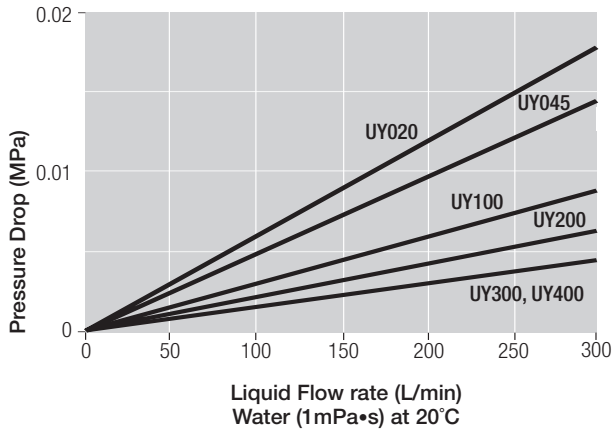
#### Housing Reference

- Ultipleat PK housing:  
Part Number:  
UPKTV-1GU32J (PVC components)
- Please contact your Pall representative for information on our stainless steel housings

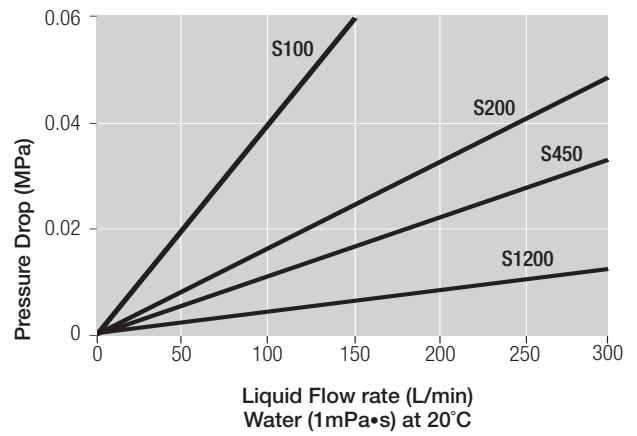
<sup>1</sup>Kalrez is a trademark of Dupont Dow Elastomers.

## Pressure Drop vs. Liquid Flow Rate<sup>2</sup>

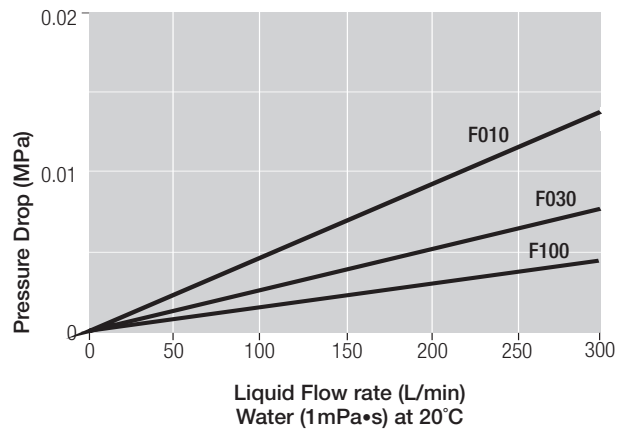
### Polypropylene



### Polysulfone and Polyethersulfone

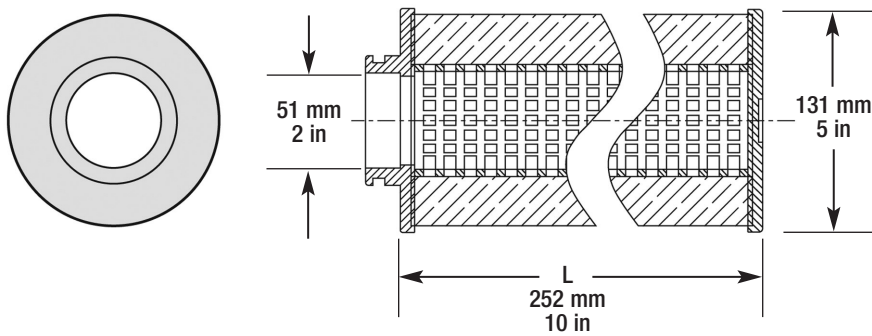


### PTFE



<sup>2</sup>For liquids with viscosity differing from water, multiply the pressure drop by the viscosity in mPa•s.

## Dimensions



## Part Numbers/Ordering Information<sup>3</sup>

Part Number	Removal Rating (µm)	Sealing Material <sup>4</sup>	Core Materials
<b>Polypropylene Media<sup>3</sup></b>			
UPK510UY020JU	2	EP U-cup	Polypropylene
UPK510UY045JU	4.5	EP U-cup	Polypropylene
UPK510UY100JU	10	EP U-cup	Polypropylene
UPK510UY200JU	20	EP U-cup	Polypropylene
UPK510UY300JU	30	EP U-cup	Polypropylene
UPK510UY400JU	40	EP U-cup	Polypropylene
<b>Highly Asymmetric Hydrophilic Polysulfone Media</b>			
UPK510S100JU	0.1	EP U-cup	Polypropylene
UPK510S200JU	0.2	EP U-cup	Polypropylene
UPK510S450JU	0.45	EP U-cup	Polypropylene
<b>Hydrophilic Polyethersulfone Media</b>			
UPK510S1200JU	1.2	EP U-cup	Polypropylene
<b>PTFE Media</b>			
UPK510F010H1	1	FEP encapsulated fluoroelastomer	Polypropylene
UPK510F030H1	3	FEP encapsulated fluoroelastome	Polypropylene
UPK510F100H1	10	FEP encapsulated fluoroelastome	Polypropylene

<sup>3</sup>For flushing debris from the system upon initial startup, a special filter cartridge is available; part number UPK510UYFJ.

<sup>4</sup>Kalrez o-ring material is also available.

Specifications and availability: The information provided in this literature was reviewed for accuracy at the time of publication. Product availability may be subject to change without notice. For current information, consult your local Pall distributor or contact Pall Corporation directly.



**Pall Corporation**  
25 Harbor Park Drive  
Port Washington, New York 11050  
1.800.360.7255 (toll free in USA only)  
1.516.484.5400 Phone  
1.516.625.3610 Fax

**Pall Europe Ltd.**  
Europa House  
Havant Street  
Portsmouth, Hampshire  
PO1 3PD  
023 92 303303 Phone  
023 92 302506 Fax

**Nihon Pall Ltd**  
6-8-1, Nishishinjuku, Shinjuku-ku,  
Tokyo 163-6017 Japan  
81.3.6901.5710 Phone  
81.3.5322.2109 Fax

**Pall Korea Ltd.**  
4th Floor Il-dong Bldg. 968-5  
Daechi-3dong, Gangnamgu  
Seoul, 135-736 Korea  
82.2.560.7858 Phone  
82.2.560.7890 Fax


**Pall Filter(Beijing)Co.,Ltd.**  
**Shanghai Office**  
1008-1014, 10/F, Tower A  
City Center of Shanghai, No. 100  
Zunyi Road, Changning District  
Shanghai 200051 P.R. China  
86.21.6237.1988 Phone  
86.21.6237.2088 Fax

**Pall Filtration Pte Ltd.**  
17 Changi Business Park Central 1  
#06-01/04, Honeywell Building  
Singapore, 486073  
+65 6389 6500 Phone  
+65 6388 8688 Alternate Phone  
+65 6389 6501 Fax

**Pall Singapore Taiwan Branch  
Holding Co. Pte Ltd.**  
**Hsin Chu Customer Service Office**  
No. 11, Lane 596, Sec 2  
Jiansing Road,  
Sin-Fong Township,  
Hsin-chu County, Taiwan 304  
886.3.5590718 Phone  
886.3.5590728 Fax

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