

# PhotoKleen™ DDF Filter Assembly



Data Sheet MEPKDDFENE

## Description

The PhotoKleen filter assembly is a compact capsule assembly designed for clean, simple and safe filter changeout.

It is well suited for applications that demand higher purity – such as developer, solvents and photoresist filtration – because it eliminates all polypropylene components. Use of the assembly in systems can improve overall performance.

The XP option is available for advanced lithography processes.

## Features & Benefits

- Low hold-up volume
- Vent at highest location
- Drain at lowest location
- Low Pressure drop
- Manufactured in a cleanroom environment
- O-ringless design
- Minimized organic extractables by XP option
- XP option guarantees low organic, metal and particle cleanliness for the most advanced processes.
- Faster start-up
- Minimize chemical wastes



## Specifications

### Materials of Construction

#### Components

#### Filter Medium

#### Support and Drainage

#### Shell, Core, Cage and End Caps

#### Materials

PE-Kleen filter : HDPE (high density polyethylene)  
P-Nylon filter : Asymmetric Nylon 6,6

HDPE (high density polyethylene)

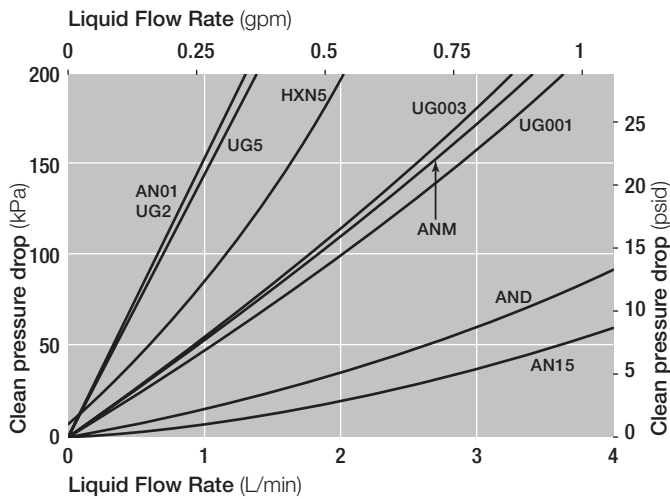
HDPE (high density polyethylene)

	PE-Kleen filter				P-Nylon filter						
	UG2	UG5	UG001	UG003	XN2L	HXN5	AN01	ANM	AND	AN15 <sup>1</sup>	
<b>Grade</b>	UG2	UG5	UG001	UG003	XN2L	HXN5	AN01	ANM	AND	AN15 <sup>1</sup>	
<b>Removal Ratings</b>	2 nm	5 nm	10 nm	30 nm	2 nm	5 nm	10 nm	20 nm	40 nm	0.15 μm	
<b>Filter Areas (cm<sup>2</sup>)</b>	<b>DDF1</b>	2,600	2,500	2,500	2,200	2,900	1,900	2,500	2,500	2,500	2,500
	<b>DDF2</b>	5,200	5,200	5,100	4,400	5,900	4,100	5,300	5,300	5,300	-
<b>Maximum Operating Temperature</b>	30 °C / 86 °F										
<b>Maximum Operating Pressure</b>	290 kPaG @ 30 °C / 42 psi @ 86 °F										
<b>Maximum Forward Differential Pressure</b>	290 kPa @ 30 °C / 42 psid @ 86 °F										

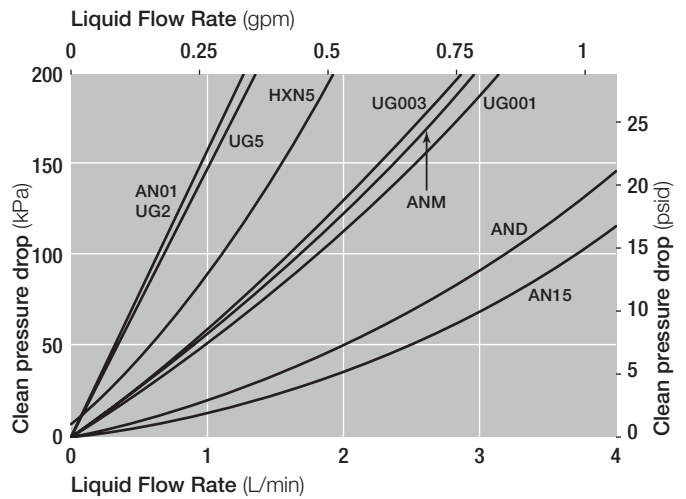
<sup>1</sup> Available for DDF1 configuration only.

# Typical Flow Characteristics - 1cP fluid, 20 °C

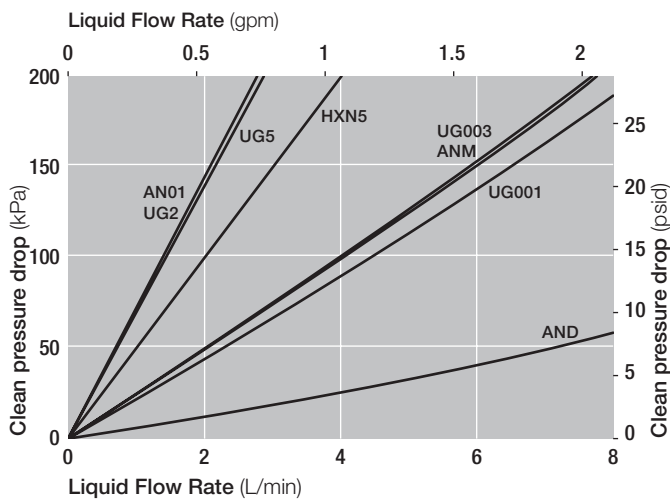
**DDF1\_NP44**



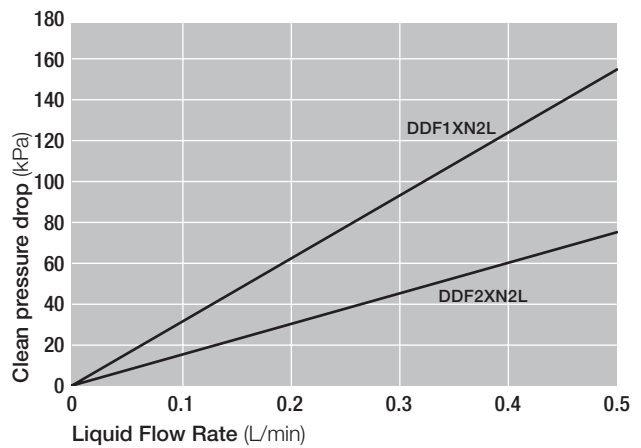
**DDF1\_FL44**



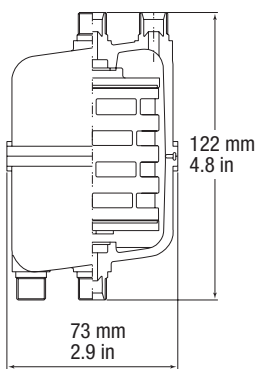
**DDF2\_FL64**



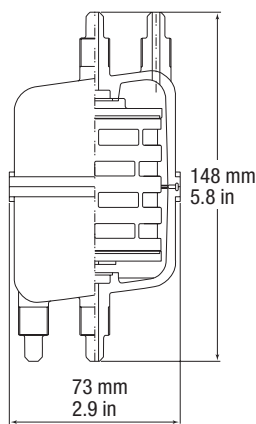
**DDF1 / DDF2\_FL64**



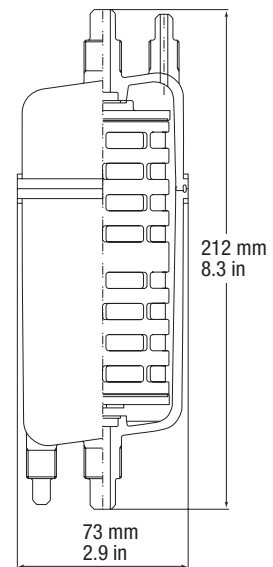
## Dimensions



**DDF1\_NP44**



**DDF1\_FL44**



**DDF2\_FL64**

## Part Numbers / Ordering Information<sup>2,3</sup>

DDF 1 2 E 3

**Table 1**

Code	Scale
1	Small volume
2	Middle volume

**Table 2**

Code	Medium	Removal Ratings
UG2	HDPE	2 nm
UG5	HDPE	5 nm
UG001	HDPE	10 nm
UG003	HDPE	30 nm
XN2L	Nylon 6,6	2 nm
HXN5	Nylon 6,6	5 nm
AN01	Nylon 6,6	10 nm
ANM	Nylon 6,6	20 nm
AND	Nylon 6,6	40 nm
AN15	Nylon 6,6	0.15 µm

**Table 3**

Code	Connections Inlet, Outlet / Vent, Drain
NP44	1/4 in Pillar <sup>4</sup> fitting / 1/4 in Pillar fitting
FL44	1/4 in flare style / 1/4 in flare style
FL64	3/8 in flare style / 1/4 in flare style

<sup>2</sup> Filter elements may not be available in all configurations. Contact your local Pall representative for availability.

<sup>3</sup> For XP option, add -XP to the end of a part number for 10 - 20nm removal ratings.  
(XP treatment is standard for 2 nm / 5 nm products)

<sup>4</sup> Pillar fitting is a trademark of Nippon Pillar Packing Co., Ltd.

**Caution:** For optimal filtration performance, it is recommended to replace your filters at-least once a year. Annual replacements will reduce the potential of any leakages that may result due to prolonged chemical exposure. Pall warrants its filters for a period of 1 year from the date of shipment.



**Microelectronics**

25 Harbor Park Drive  
Port Washington, NY 11050  
+1 516 484 3600 telephone  
+1 800 360 7255 toll free US

**Nihon Pall Ltd.**

6-5-1, Nishishinjuku,  
Shinjuku-ku  
Tokyo 163-1325 Japan  
+81 3 6901 5700 telephone  
+81 3 5322 2109 fax

Visit us on the Web at [www.pall.com/microelectronics](http://www.pall.com/microelectronics)  
Contact us at [www.pall.com/contact](http://www.pall.com/contact)

Pall Corporation has offices and plants throughout the world. To locate the Pall office or distributor nearest you, visit [www.pall.com/contact](http://www.pall.com/contact).

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

*IF APPLICABLE* 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.

© Copyright 2023, Pall Corporation. Pall, , and Ultipleat are trademarks of Pall Corporation. ® Indicates a trademark registered in the USA.