

**Microelectronics** 

# **Ultipleat® P-Nylon Filter**



# Description

The Ultipleat P-Nylon filter is recommended specifically for bulk filtration of photoresists, solvents, TMAH-based developers and other chemicals, that are compatible with nylon 6,6 and High Density Polyethylene (HDPE). The filter design incorporates the latest advance in Pall filtration technology: the crescent shaped Ultipleat® filter configuration.

- Naturally hydrophilic
- · Quick venting
- Wide range of configurations
- High flow rates
- Integrity testable
- · Low extractables
- Manufactured in a cleanroom
  environment
- 100% integrity tested

## **Specifications**

#### Materials

- Medium: Hydrophilic nylon 6,6
- Core, cage, and end caps: High Density Polyethylene (HDPE)
- Support and drainage: High Density Polyethylene (HDPE)
- O-ring options: Viton<sup>1</sup> and Teflon<sup>1</sup> encapsulated Viton

#### **Removal Ratings**

• 0.1 µm, 40 nm, 20 nm

#### Filter Areas

- 0.1 µm UNI: 0.93 m<sup>2</sup> / 10 ft<sup>2</sup> per 10 in
- 40 nm UND: 1.2 m<sup>2</sup> / 13 ft<sup>2</sup> per 10 in
- 20 nm UNM: 1.4 m<sup>2</sup> / 15 ft<sup>2</sup> per 10 in

### Configurations

- Nominal length: 254 mm / 10 in, 508 mm / 20 in, 762 mm / 30 in, and 1016 mm / 40 in
- Diameter: 70 mm / 2.75 in
- O-ring size / end caps: Code 3: 222 double O-ring / flat end Code 8: 222 double O-ring / finned end Code 7: 226 double O-ring bayonet

lock / finned end MR Code 3: 222 double O-ring / flat

end designed to retrofit Code 0 elements

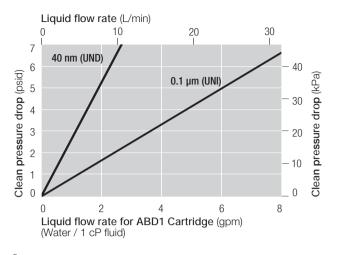
#### **Operating Conditions**

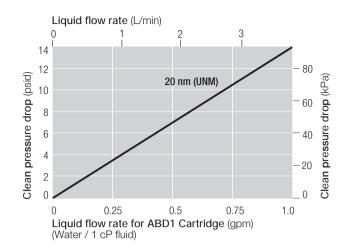
- Maximum operating temperature: 50°C / 120°F
- Maximum forward / reverse differential pressure:
   275 kPa @ 20°C / 40 psid @ 68°F

#### **Recommended Applications**

- Anti-reflective coatings
- Up to 3% TMAH-based developers
- i-line, 248 nm, and 193 nm photoresists
- Solvents
  - <sup>1</sup> Viton and Teflon are registered trademarks of E. I. du Pont de Nemours and Company

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





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

# Part Numbers / Ordering Information

| Part<br>Number <sup>3</sup> | Removal<br>Rating | Nominal<br>Length (mm / in) | Configuration<br>Code | O-Ring<br>Material⁴       |
|-----------------------------|-------------------|-----------------------------|-----------------------|---------------------------|
| ABD1UNI3EH1                 | 0.1 µm            | 254 / 10                    | 3                     | Teflon encapsulated Viton |
| ABD1UNI8EH1                 | 0.1 μm            | 254 / 10                    | 8                     | Teflon encapsulated Viton |
| MRD1UNI3EH1                 | 0.1 μm            | 254 / 10                    | 3                     | Teflon encapsulated Viton |
| ABD1UND3EH1                 | 40 nm             | 254 / 10                    | 3                     | Teflon encapsulated Viton |
| ABD1UND8EH1                 | 40 nm             | 254 / 10                    | 8                     | Teflon encapsulated Viton |
| ABD1UNM3EH1                 | 20 nm             | 254 / 10                    | 3                     | Teflon encapsulated Viton |
| ABD1UNM8EH1                 | 20 nm             | 254 / 10                    | 8                     | Teflon encapsulated Viton |

 $^{\rm 3}$  The above filter configurations are also available in 508 mm / 20 in, 762 mm / 30 in, and 1016 mm / 40 in lengths. These can be ordered by changing the fourth digit

in the part number to a 2, 3, or 4 respectively. 4 Other O-ring materials are available.

Unit conversion: 1 bar = 100 kilopascals



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