

# PhotoKleen™ EZD-3X Filter Capsules



Data Sheet MEEZD3XENg

## Description

The PhotoKleen™ EZD-3X filter is designed for small-volume dispense systems, which have the smallest footprint. The PhotoKleen™ EZD-3X filter has almost double the filter area (compared to the PhotoKleen™ EZD-3 filter) in the same capsule size. This allows for lower pressure drop during filtration or allows the installation of finer filtration at the same pressure drop. Two filter media types are available, Asymmetric Nylon 6,6 and HDPE. The naturally hydrophilic Nylon 6,6 membrane allows for spontaneous wettability, and its polarity has been shown to lower defectivity on the patterned wafers. The XP option is available for advanced lithography processes.

## Features & Benefits

- Double the filter area in the same size capsule (Ref. PhotoKleen™ EZD-3 filter)
- Easy change out style filter assembly
- Two membrane material types available
- Minimized hold-up volume, and top in / top out flow direction with side conduit for laminar filling
- Offers lower pressure drop for higher viscosity fluids
- Reduces tool down time by extending filter change outs
- Optimized media selection for target applications
- Minimized organic extractables by XP option for rapid start-up and reducing chemical wastes.
- XP option guarantees low organic, metal and particle cleanliness for the most advanced processes.



PhotoKleen™ EZD-3X filters are designed to fit into all PhotoKleen™ EZD-3 head manifolds

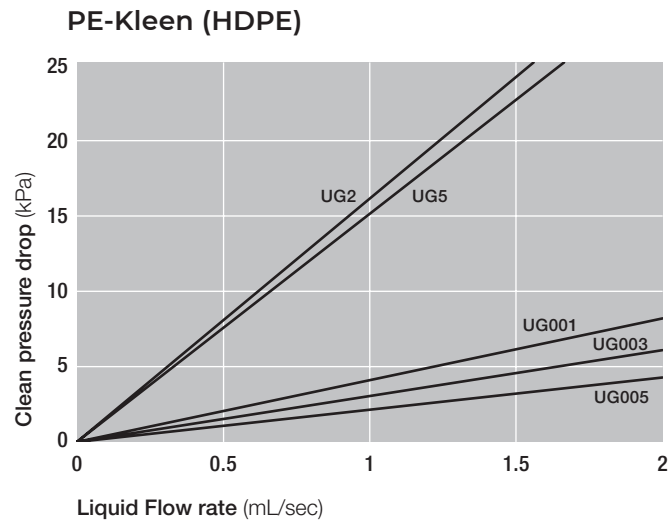
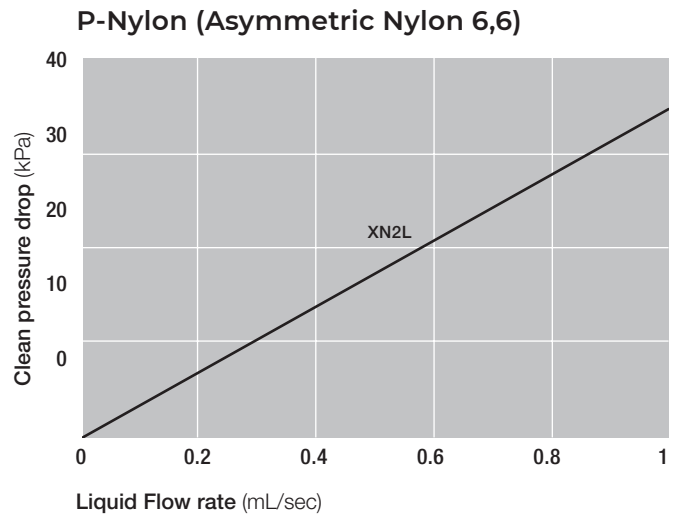
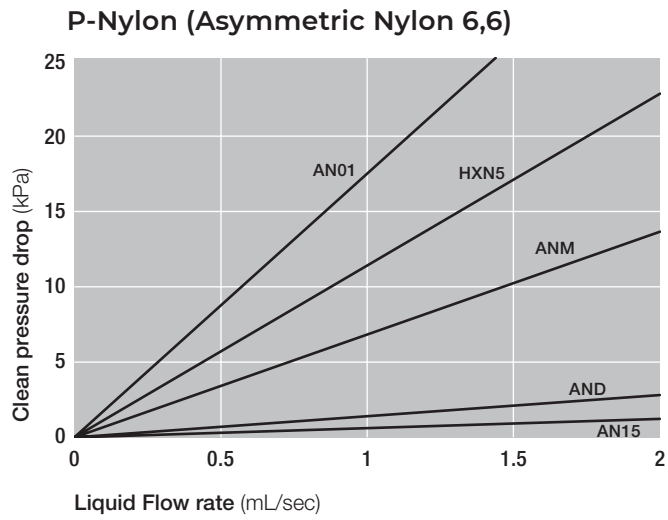
## Specifications

### Materials of Construction

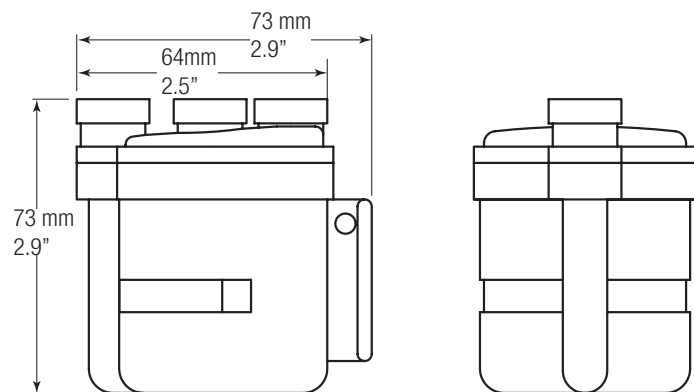
| Components               | Materials   |
|--------------------------|---|
| Filter Media             | P-Nylon : Hydrophilic Asymmetric Nylon 6,6<br>PE-Kleen : High Density Polyethylene (HDPE) |
| Support and Drainage     | High Density Polyethylene (HDPE)  |
| Core, Cage, and End Caps | High Density Polyethylene (HDPE)  |
| Housing                  | High Density Polyethylene (HDPE)  |
| O-ring                   | Perfluoroelastomer  |

|                               |   |                         |
|-------------------------------|---|-------------------------|
| Removal Ratings               | P-Nylon : 2 nm, 5 nm, 10 nm, 20 nm, 40 nm, 0.15 μm  |                         |
|                               | PE-Kleen : 2 nm, 5 nm, 10 nm, 30 nm, 50 nm  |                         |
| Filter Area                   | P-Nylon : 2 nm  | : 1,600 cm <sup>2</sup> |
|                               | 5 nm  | : 1,200 cm <sup>2</sup> |
|                               | 10, 20, 40 nm, 0.15 nm  | : 1,300 cm <sup>2</sup> |
|                               | PE-Kleen : 2, 5, 10, 30 nm  | : 1,400 cm <sup>2</sup> |
|                               | 50 nm   | : 1,500 cm <sup>2</sup> |
| Maximum Forward Differential  | P-Nylon : 0.27 MPa @ 20 °C / 39 psid @ 60 °F<br>PE-Kleen : 0.29 MPa @ 30 °C / 42 psid @ 86 °F |                         |
| Maximum Operating Temperature | 30 °C / 86 °F   |                         |
| Maximum Operating Pressure    | 0.29 MPaG @ 30 °C / 42 psig @ 86 °F   |                         |

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



## Dimensions<sup>1</sup>



<sup>1</sup> PhotoKleen™ EZD-3 head manifolds are compatible with PhotoKleen™ EZD-3X capsules.

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

PHD12 **1** EH11B

**Table 1**

| Code              | Filter Media        | Removal Ratings     |         |
|-------------------|---------------------|---------------------|---------|
| XN2L <sup>3</sup> | Asymmetric Nylon6,6 | 2 nm                |         |
| HXN5 <sup>3</sup> | Asymmetric Nylon6,6 | 5 nm                |         |
| AN01              | P-Nylon             | Asymmetric Nylon6,6 | 10 nm   |
| ANM               |                     | Asymmetric Nylon6,6 | 20 nm   |
| AND               |                     | Asymmetric Nylon6,6 | 40 nm   |
| AN15              |                     | Asymmetric Nylon6,6 | 0.15 µm |
| UG2               |                     | HDPE                | 2 nm    |
| UG5               | HDPE                | 5 nm                |         |
| UG001             | PE-Kleen            | HDPE                | 10 nm   |
| UG003             |                     | HDPE                | 30 nm   |
| UG005             |                     | HDPE                | 50 nm   |

<sup>2</sup> For XP option add -XP to end of part number for 10 nm / 20nm removal ratings.

<sup>3</sup> XP treatment is standard on 2 nm / 5 nm removal ratings.

**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.



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*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.

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