PhotoKleen[™]EZD-3XL Filter Assembly



Data Sheet MEEZD3XLENi

Description

The PhotoKleen[™] EZD-3XL filter is designed for smallvolume dispense systems to meet the requirements of advanced high through-put track systems. The PhotoKleen[™] EZD-3XL filter has almost double the filter area (compared to the PhotoKleen[™] EZD-3X filter), allowing for lower pressure drop during filtration. Two filter media – Asymmetric Nylon 6,6 and HDPE – are available. The naturally hydrophilic Nylon 6,6 membrane allows for spontaneous wettability, and offers lower defectivity on patterned wafers. The XP option is available for advanced lithography processes.

Features & Benefits

- Double the filter area compared to PhotoKleen[™] EZD-3X filter capsule
- Easy change out capsule style filter assembly
- Two membrane material types available
- Minimized hold-up volume, and top in / top out flow direction
- Offers lower pressure drop for higher viscosity fluids
- Reduces tool down time by extending filter change-outs
- Offers suitable membranes for target applications
- Minimized organic extractables by XP option for rapid start-up and reducing chemical waste
- XP option guarantees low organic, metal and particle cleanliness for the most advanced processes.

Specifications

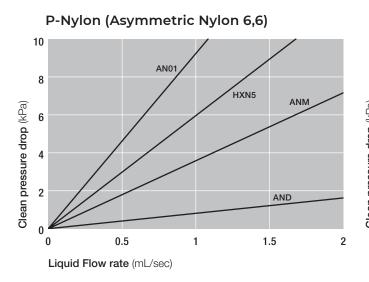
Materials of Construction

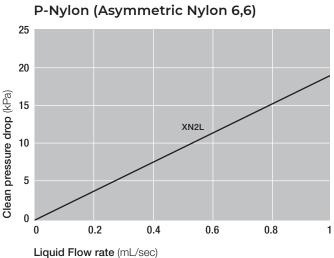
| Components | Materials | |
|-----------------------------|-------------------------------------------------------------------------------------------|--|
| Filter Media | P-Nylon : Hydrophilic Asymmetric Nylon 6,6 PE-Kleen : High Density Polyethylene (HDPE) | |
| Support and Drainage | High Density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



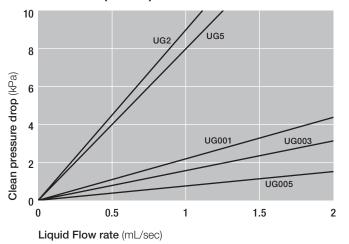
| Removal Ratings | P-Nylon :2 nm, 5 nm, 10 nm, 30 nm, 40 nm PE-Kleen:2 nm, 5 nm, 10 nm, 30 nm, 50 nm | |
|----------------------------------|-------------------------------------------------------------------------------------------------------------|--|
| Filter Area | P-Nylon :2 nm :3,200 cm ² 5 nm :2,100 cm ² 10, 20, 40 nm :2,500 cm ² | |
| | PE-Kleen : 2, 5, 10, 30 nm : 2,800 cm ² 50 nm : 2,900 cm ² | |
| Maximum Forward Differential | P-Nylon : 0.27 MPa @ 20 °C / 39 psid @ 60 °F 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

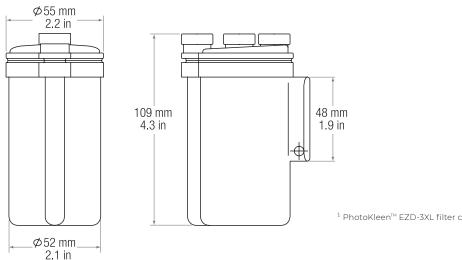




PE-Kleen (HDPE)



Dimensions¹



¹ PhotoKleen™ EZD-3XL filter capsule requires PhotoKleen EZD-3XL head manifold

Part Numbers / Ordering Information²

PHD13 1 EH11B

| Code | Filter Media | | Removal Ratings | |
|-------------------|--------------|---------------------|-----------------|--|
| XN2L ³ | | Asymmetric Nylon6,6 | 2 nm | |
| HXN5 ³ | | 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 | |
| UG2 | | HDPE | 2 nm | |
| UG5 | | HDPE | 5 nm | |
| UG001 | PE-Kleen | HDPE | 10 nm | |
| UG003 | | HDPE | 30 nm | |
| UG005 | | HDPE | 50 nm | |

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

 3 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.

Specifications (Head Manifold)

Materials of Construction

| Materials |
|-------------|
| PFA / HDPE |
| PFA / PCTFE |
| SUS304 |
| SUS304 |
| |

Connections

| Connections | | |
|--------------------------------|----------------------------|------------------|
| Туре | Inlet / Outlet | Vent |
| Flowell ⁴ 60 series | ¼" (6.35 x 4.3 mm) Fitting | 4 x 3 mm Fitting |
| | 5 x 3 mm Fitting | 5 x 3 mm Fitting |

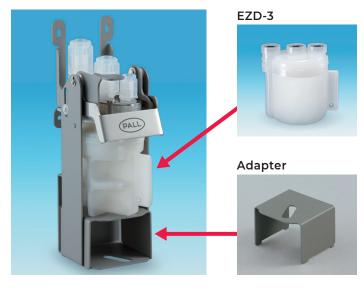
⁴ Flowell is a trademark of Flowell Co.,Ltd.

Part Numbers / Ordering Infomation (Head Manifold)

| Part Number | Inlet / Outlet | Vent |
|-------------------|-----------------------------------------------------|-----------------------------|
| PHF13GFS44MWLTA-A | ¹ ⁄4" (6.35 x 4.3 mm) Flowell 60 Fitting | 4 x 3 mm Flowell 60 Fitting |
| PHF13GFS55MLTA | 5 x 3 mm Flowell 60 Fitting | 5 x 3 mm Flowell 60 Fitting |

Optional Parts

| Product Name | Part Numer | Notes |
|---------------|----------------|-----------------------------------------------------------------------------------------------------------------------------|
| Adapter | PTH9101 | For the placement of other capsules PhotoKleen EZD-3 PhotoKleen EZD-3X Dummy Capsules (PHDC12H11B, PHDC12H11B-XP+) |
| Dummy Capsule | PHDC12H11B | O-ring : Perfluoroelastomer |
| | PHDC12H11B-XP+ | O-ring : Perfluoroelastomer, Special Clean Product |



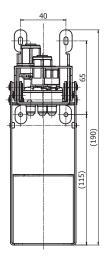


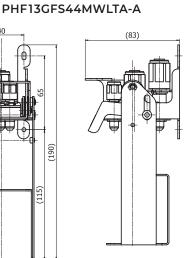




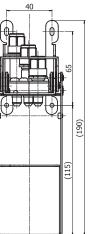
To place the PhotoKleen EZD-3, PhotoKleen EZD-3X, and Dummy Capsules, the adapter (optional part) is required. Please insert the adapter under the manifold and place capsules on it.

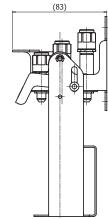
Dimensions





PHF13GFS55MLTA







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