



## IMPACT® PLUS DISPOSABLE FILTERS

*Rapid changeout UPE membrane filters for point-of-use photochemical filtration, including photoresists and solvents*



# rapid filter change for photochemicals

## Overview

### Less Handling, More Cleanliness and Safety

The Impact® Plus filter quickly connects and seals with the Impact® ST manifold and IntelliGen® dispense systems to provide rapid filter changeout while eliminating the handling of the filter element. This unique design reduces potential exposure to hazardous chemicals during installation and disposal and promotes a safer working environment.

### Superior Design

- Compact design provides easy installation in a low holdup volume design

- Designed for use with IntelliGen® dispense systems and Impact® ST manifolds

### Superior Manufacturing

- Manufactured in a world-class, ISO 9001 Quality Systems Standard facility
- Manufactured, tested and packaged in a cleanroom to ensure product cleanliness

### Superior Performance and Retention

- Unique and patented features minimize on-wafer defects
- 0.01 µm retention for critical applications

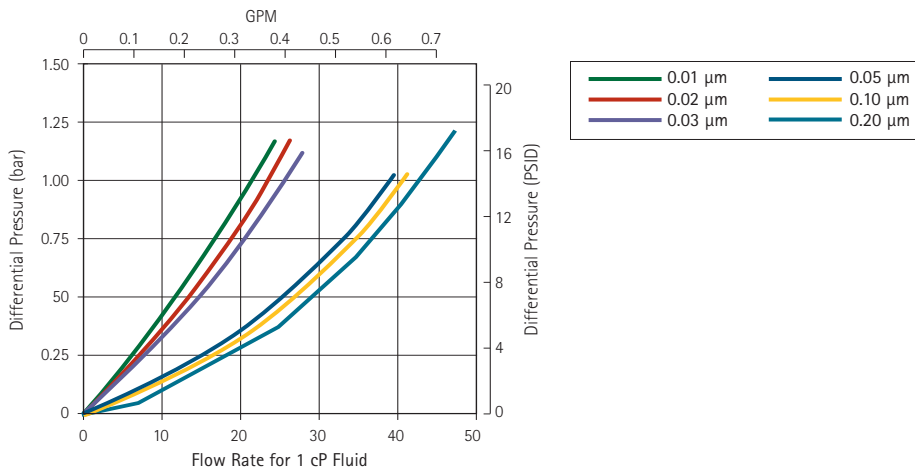
Features	Benefits
Design optimized for use with the Impact® ST manifold and IntelliGen® dispense systems	Rapid filter changeout and ease of use to maximize equipment uptime
Minimal chemical exposure, rapid connection design	Allows quick filter installation and minimizes downtime while limiting the handling of hazardous chemicals during the installation and disposal processes, thereby promoting a more healthy workplace
UPE membrane	No prewetting required: spontaneously wets in photoresist, chemically compatible with low extractables
Unique configuration of the housing and membrane	Ensures superior bubble venting and microbubble prevention to lower defects caused by bubbles and microbubbles
Compact design incorporating low holdup volume and high membrane area	Low holdup volume minimizes priming and chemical waste, reducing startup costs. High membrane area allows processes to run at lower differential pressures, minimizing on-wafer defects
Available in retention ratings of 0.01 µm and 0.02 µm	Tightest membrane technology to meet critical line width processes
New 0.01 µm pleating technology	Impact® Plus 0.01 µm products incorporate 40% more membrane within the same footprint as 0.03 µm and 0.05 µm Impact® Plus filters, providing the benefits of ultrafine retention without a flow or pressure drop penalty

# Specifications

Materials:	Membrane	Ultra-high molecular-weight polyethylene (UHMWPE)
	Supports and molded components	High-density polyethylene (HDPE)
Dimensions:	Height:	90 mm (3.54")
	Width:	71.9 mm (2.83")
	Depth:	95.5 mm (3.76")
Maximum operating conditions:	Maximum inlet pressure	0.34 MPa (3.4 bar, 50 PSI) @ 25°C (77°F)
	Maximum forward/reverse differential pressure:	0.27 MPa (2.7 bar, 40 psi) @ 25°C (77°F)
	Maximum operating temperature:	40°C (104°F)
Membrane area:	0.01 μm	1,390 cm <sup>2</sup> (1.5 ft. <sup>2</sup> )
	0.02 μm	1,300 cm <sup>2</sup> (1.4 ft. <sup>2</sup> )
	All others	1,000 cm <sup>2</sup> (1.08 ft. <sup>2</sup> )
Holdup volume:	≤55 cc	
Flow rate @ 1 cPs 0.059 MPa (0.59 bar, 8.53 PSI)	0.02 μm	>10 cc/sec.
	0.03 μm	>8.33 cc/sec.
	0.05 μm	>13.33 cc/sec.
	0.10 μm	>18.33 cc/sec.
Compatibility:	PGMEA, PGME, NMP, ethyl lactate, MMP and cyclohexanone. Not recommended for use with photochemicals containing aromatic hydrocarbons.	
	Wettability: Spontaneously wets in butyl acetate, PGMEA, PGME, ethyl lactate, MMP, ECA, NMP and other photochemical solvents.	

# Performance Data

## Flow Rate



## Ordering Information

Description	Retention Rating	Part Number
Impact® Plus Filter	0.01 µm	AWAT P0M 01
Impact® Plus Filter	0.02 µm	AWAX P00 01
Impact® Plus Filter	0.03 µm	AWAY P00 01
Impact® Plus Filter	0.05 µm	AWAZ P0 001
Impact® Plus Filter	0.10 µm	AWAV P0 001
Impact® Plus Filter	0.20 µm	AWAG P0 001
Impact® ST Manifold	—	DZUM 044 C1

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