

IMPACT® PLUS V2 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 1 and 2 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
- 10 nm retention for critical applications

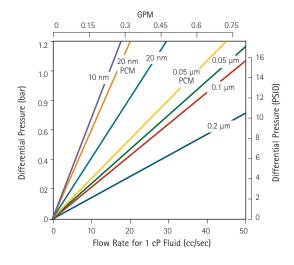
Features	Benefits	
Design optimized for use with the Impact ST manifold and IntelliGen dispense systems	Rapid filter changeout and ease of use to maximize equipment uptime	
Minimal chemical exposure, rapid connection design	Allows quick filter installation and minimizes downtime while limiting the handling 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 10 nm and 20 nm	Tightest membrane technology to meet critical linewidth processes	
New pleating technology	Impact Plus 10 nm, 20 nm and 20 nm PCM products incorporate more membrane within the same footprint as 0.05 μ m Impact Plus filters, providing the benefits of ultrafine retention without a flow or pressure drop penalty	
New asymmetric membrane technology	Tighter retention with lower pressure drop versus standard symmetric UPE membrane	

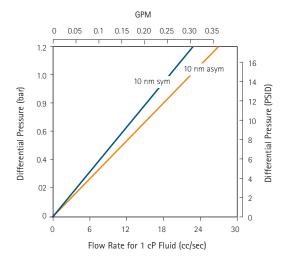
Specifications

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:	10 nm	1,400 cm² (1.5 ft.²)
	10 nm asymmetric	1,300 cm² (1.4 ft.²)
	20 nm	1,400 cm² (1.5 ft.²)
	20 nm PCM	1,400 cm² (1.5 ft.²)
	0.05 μm PCM	1,300 cm² (1.4 ft.²)
	All others	1,200 cm² (1.3 ft.²)
Holdup volume:	≤55 cc	
Flow rate @ 1 cPs 0.059 MPa (0.59 bar, 8.53 PSI)	10 nm symmetric	>12 cc/sec.
	10 nm asymmetric	>15 cc/sec.
	20 nm	>10 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

Impact Plus Disposable Filters **Part Number** AP X X 20 x x 1 0-Ring Pleating Style 0 = OM styleK = OF styleM = 10 nm, 20 nm and20 nm PCM 0 = all others Retention Rating T = 10 nmX = 20 nm $Z = 0.05 \ \mu m$ $V = 0.1 \ \mu m$ $G = 0.2 \ \mu m$ Membrane Type S = asymmetric M = PCMA = all othersImpact ST manifold:

DZUM044C1: OM style DZUM044E1: OF style

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