



## IMPACT® MINI DISPOSABLE FILTERS

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



# the solution for advanced process lithography chemical filtration

## Overview

### Ultra Low Volume for Cleanliness and Reduced Chemical Waste

The Impact® Mini filter's ultra low hold-up volume design reduces chemical waste and opportunities for nucleation sites that can lead to microbubble formation. Additionally, the Impact® Mini filter's low surface area design reduces chemical waste during filter installation by ensuring fast priming in advance photochemicals.

Lower surface area and elimination of a cage insures lower extractables and ultra cleanliness from the filter.

In combination with the IntelliGen® Mini dispense system, the Impact® Mini filter provides the best dispense and filter combination on the market.

### Less Handling, More Cleanliness and Safety

The Impact® Mini filter uses Entegris' patented Connectology® technology which allows it to quickly connect and seal with the IntelliGen® Mini system 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
- Designed for use with IntelliGen® Mini dispense systems

### 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 and 20 nm retention for critical applications

### Enabling Solutions

Entegris continues to develop products that address customers' process issues. Whether you are struggling with defects or trying to reduce your cost of ownership, Entegris provides you with enabling solutions.

The Impact® Mini filter has been designed to address today's high cost of advanced chemicals while reducing system downtime. By optimizing filtration area and hold-up volume to work with the IntelliGen® Mini two stage system, you can significantly reduce the amount of chemical and time needed when replacing filters.

The Impact® Mini filter has advanced features that already exist in our highly successful Impact® 2 series of disposable filters, including Connectology® and ultra clean technology, and comes in a wide range of retention ratings. Impact® Mini filters are the solution to enable yields in advance process.

Features	Benefits
Ultra low hold-up volume <15.0 cc	Minimizes chemical waste. Reduces opportunities for nucleation sites that can lead to microbubble formation.
Design optimized for use with the IntelliGen® Mini dispense system	Rapid filter changeout and ease of use to maximize equipment uptime. The Impact® Mini filter design takes advantage of the IntelliGen® Mini dispense system's advanced feature to minimize pressure fluctuation.
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
Available in retention ratings of 10 nm and 20 nm	Tight membrane technology to meet critical line-width processes

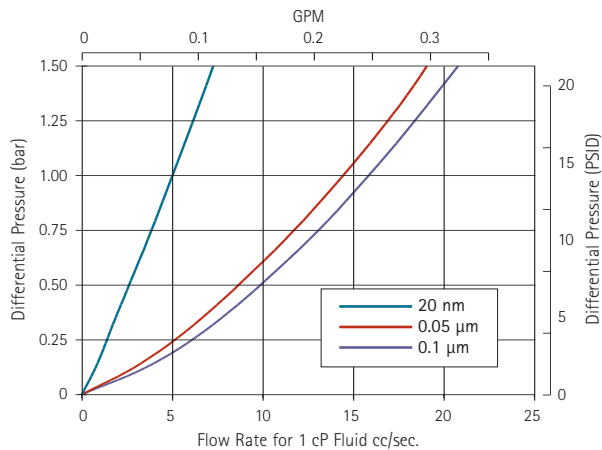
## Specifications

Materials:	Membrane:	Ultra-high molecular weight polyethylene (UHMWPE)
	Supports (upstream, downstream, and mold):	High-density polyethylene (HDPE)
	O-ring:	Kalrez® perfluoroelastomer, on filter
Maximum operating conditions:	Maximum inlet pressure:	0.34 MPa (3.4 bar, 50 PSI) at 25°C (77°F)
	Maximum forward/reverse differential pressure:	0.27 MPa (2.7 bar, 40 PSI) at 25°C (77°F)
	Maximum operating temperature:	40°C (104°F)
Membrane area:	250 cm <sup>2</sup> (0.269 ft. <sup>2</sup> )	
Hold-up volume:	<15 cc	
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.	

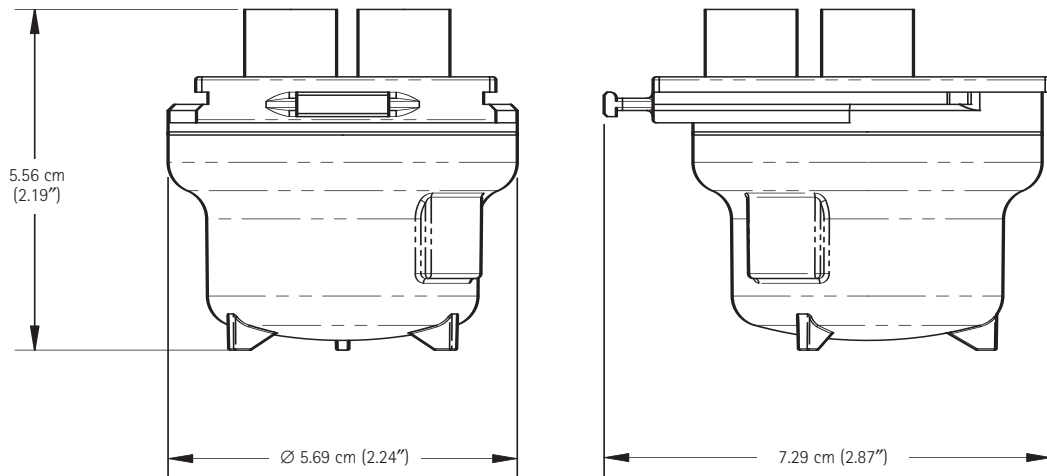
## Ordering Information

Part Number	Description
AMAX 200 K1	Impact® Mini Filter, 20 nm
AMAZ 200 K1	Impact® Mini Filter, 0.05 µm
AMAV 200 K1	Impact® Mini Filter, 0.1 µm

## Performance Data



## Dimensions



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## Terms and Conditions of Sale

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One or more U.S. patents including 6,068,770, 6,378,907, 7,021,667, 7,037,424 and patents pending.

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