

Panelgard™ 1-2-3 UPE and PDP Disposable Filters

Advanced filtration for point-of-use flat panel and photolithography applications

Panelgard™ UPE 1-2-3 disposable point-of-use (POU) filters enable effective small to mid-volume process fluid filtration. The UPE membrane eliminates the need for prewetting, optimizes membrane capabilities and ensures maximum flow for photoresist POU applications in flat panel display applications.

Panelgard 1-2-3 PDP filters provide critical particle removal performance for pigment-dispersed color resist. The nonwoven, all-polypropylene media construction is well suited for color-resist POU applications in flat panel display manufacturing applications, and the self-contained filter structure minimizes contamination. Panelgard's compact, stable design facilitates installation or retrofits into existing tools. Filter changeouts occur in less than a minute with minimal dripping, and without the need for any tools or draining.



FEATURES & BENEFITS

Membranes/construction to match your specific application needs

Panelgard 1-2-3 UPE: UPE membrane eliminates prewetting and flushing. Saves time at changeout, increases equipment uptime, reduces chemical usage and provides better, more consistent performance.

Panelgard 1-2-3 PDP: All-polypropylene filter for compatibility and appropriate particle removal performance for pigment-dispersed color resist.

Quick changeout design

Self-contained, compact unit, requires no tools to change filter. Provides rapid filter changeout in less than one minute.

Unique connection design

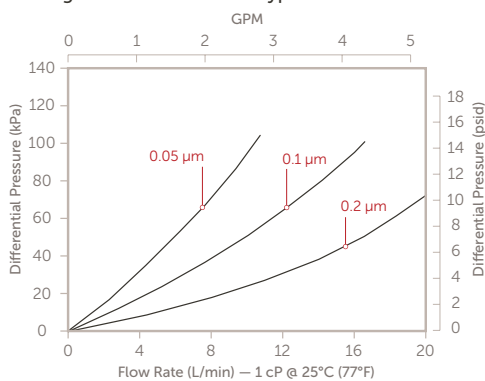
Ensures rapid startup with minimal exposure to process chemicals for a safer filter change. Minimal hold-up volume decreases chemical waste at changeout.

SPECIFICATIONS

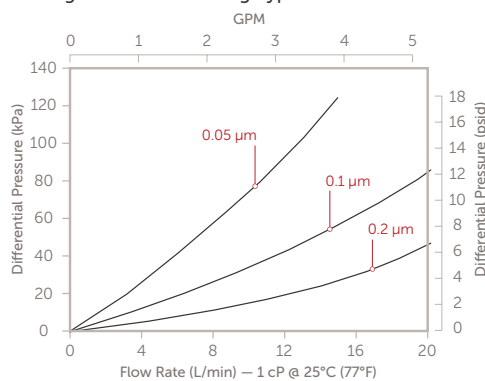
		PANELGARD 1-2-3 UPE FILTERS	PANELGARD 1-2-3 PDP POLYPROPYLENE FILTERS
Materials	Membrane	Patented hydrophobic ultra-high molecular weight polyethylene (UPE)	Polypropylene
	Supports	High-density polyethylene (HDPE)	Polypropylene
	O-ring	Perfluoroelastomer	Perfluoroelastomer, EPDM
	Shell	Polypropylene	Polypropylene
Connections	See ordering information		
Membrane area	Short	1600 cm ² (248 in ²)	1.2 μm, 2.5 μm 1300 cm ² (201.5 in ²) 5.0 μm 1700 cm ² (263.5 in ²)
	Long	3000 cm ² (465 in ²)	1.2 μm, 2.5 μm 2300 cm ² (356.5 in ²) 5.0 μm 3000 cm ² (263.5 in ²)
Maximum operating conditions	Maximum inlet pressure	0.39 MPa (3.9 bar, 56.6 psi) @ 25°C (77°F)	0.39 MPa (3.9 bar, 56.6 psi) @ 25°C (77°F)
	Maximum forward/reverse differential pressure	0.27 MPa (2.7 bar, 39.2 psi) @ 25°C (77°F)	0.27 MPa (2.7 bar, 39.2 psi) @ 25°C (77°F)
	Maximum operating temperature	40°C (104°F)	40°C (104°F)

PERFORMANCE DATA

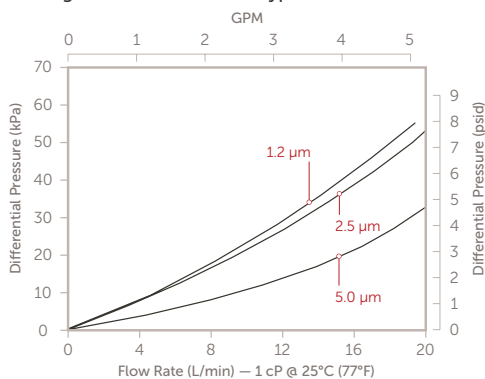
Panelgard 1-2-3 UPE Short Type Filters



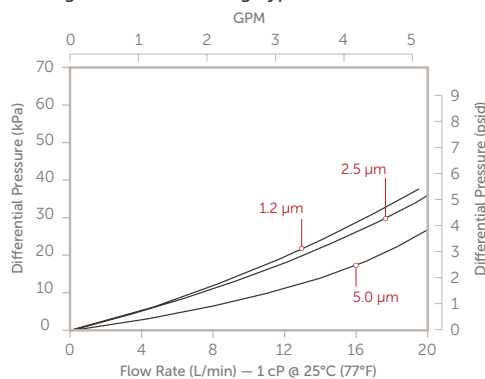
Panelgard 1-2-3 UPE Long Type Filters



Panelgard 1-2-3 PDP Short Type Filters



Panelgard 1-2-3 PDP Long Type Filters



ORDERING INFORMATION

Panelgard 1-2-3 UPE Filters

Part number		
Short type	Long type	Retention rating
AFUZ OSP M1	AFUZ OLP M1	0.05 µm
AFUV OSP M1	AFUV OLP M1	0.1 µm
AFUG OSP M1	AFUG OLP M1	0.2 µm

Panelgard 1-2-3 PDP Filters

Part number				
Perfluoroelastomer o-ring		EPDM o-ring		Retention rating
Short type	Long type	Short type	Long type	
APD 06S PM1	APD 06L PM1	APD 06S EM1	APD 06L EM1	0.6 µm
APD 12S PM1	APD 12L PM1	APD 12S EM1	APD 12L EM	1.2 µm
APD 25S PM1	APD 25L PM1	APD 25S EM1	APD 25L EM1	2.5 µm
APD 50S PM1	APD 50L PM1	APD 50S EM1	APD 50L EM1	5.0 µm

Optimizer® ST2 Manifolds

STANDARD TUBE

Part number	Inlet/outlet	Vent
AMVT44201	12.70 mm	6.35 mm
AMVT33201	9.53 mm	6.35 mm
AMVT22201	6.35 mm	6.35 mm
AMVT88401	8.00 mm	4.00 mm
AMVT66401	6.00 mm	4.00 mm

THIN TUBE

Part number	Inlet/outlet	Vent
AMVT442NT	12.70 mm	6.35 mm
AMVT332NT	9.53 mm	6.35 mm
AMVT222NT	6.35 mm	6.35 mm

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit entegris.com and select the Contact Us link to find the customer service center nearest you.

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